EPA WORK ASSIGNMENT NUMBER: 103-RICO-02GP
EPA CONTRACT NUMBER: 68-W-98-214
TETRA TECH FW, INC.
RAC II PROGRAM

REMEDIAL INVESTIGATION REPORT
FOR
OU-2 REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
LITTLE VALLEY SUPERFUND SITE
CATTARAUGUS COUNTY, NEW YORK

JANUARY 2005

VOLUME II OF II

NOTICE

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APPENDIX D

ANALYTICAL DATA RESULTS

APPENDIX D - ANALYTICAL DATA RESULTS

APPENDIX D - ANALYTICAL DATA RESULTS

APPENDIX D - ANALYTICAL DATA RESULTS

TABLE D-1
ABBREVIATIONS AND QUALIFIERS UTILIZED IN RESULT TABLES

Abbreviation	Definition
BIA	Bush Industries Area.
CCA	Cattaraugus Cutlery Area.
CLP	Contract Laboratory Program.
D	Duplicate sample.
FB	Field Blank.
1ST	First Street Area.
GEO	Geoprobe (direct push) sample.
GTA	Great Triangle Area.
GW	Groundwater (SimulProbe Sample).
ID	Identification.
KW	King Window Area.
LV	Little Valley Superfund Site.
mg/kg	milligrams per kilogram.
mg/L	milligrams per liter.
MW	Monitoring Well Location.
9LF	Ninth Street Landfill Area.
ND	Not Detected.
ppb	parts per billion (ug/kg or ug/L).
ppm	parts per million (mg/kg or mg/L).
PW	Production Well Location.
PZ	Piezometer Location.
QA	Quality Assurance.
QC	Quality Control.
RRAA	Railroad Avenue Area.
SB	Soil Boring Location.
SD	Sediment Location.
SW	Surface Water Location.
TCE	Trichloroethene.
TICs	Tentatively Identified Compounds.
ug/kg	micrograms per kilogram.
ug/L	micrograms per liter.
WSA	Whig Street Area.

TABLE D-1

ABBREVIATIONS AND QUALIFIERS UTILIZED IN RESULT TABLES

Qualifier	Definition
U	Compound not detected at detection limits.
--	No Tentatively Identified Compounds (TICs) identified in sample.
J	Compound value is estimated.
L	Compound value is estimated; biased low.
K	Compound value is estimated; biased high.
R	Compound value is rejected and deemed unusable.
B (organics)	Compound was also present in an associated blank sample.
B (inorganics)	Analyte value is less than the required method detection limit but greater
E	Compound concentration exceeds the calibration range.
D	Compound value reported is from a dilution analysis.
N	Presumptive evidence exists for the presence of compound.
NA	Not analyzed/not available.

TABLE D-2
Results of Field Gas Chromatography Screening (1998)
Little Valley Superfund Site

Sample ID	Concentration of TCE (ppb)	Matrix	Sample Date	Sample Sent to CLP Lab	Comments
Ninth Street Landfill Area					
LVSB9LF1-0	ND	Soil	06/24/98	X	
LVSB9LF1-2	ND	Soil	06/24/98		
LVSB9LF1-4	ND	Soil	06/24/98		
LVSB9LF1-8	ND	Soil	06/24/98		
LVSB9LF1-10	ND	Soil	06/24/98		
LVSB9LF1-15	ND	Soil	06/24/98		
LVSB9LF1-20	ND	Soil	06/24/98	X	
LVSB9LF1-25	ND	Soil	06/24/98		
LVSB9LF1-30	ND	Soil	06/24/98		
LVSB9LF1-35	ND	Soil	06/24/98	X	
LVSB9FL1-40	ND	Soil	06/25/98	X	
LVSB9FL1-45	ND	Soil	06/25/98		
LVSB9FL1-50	ND	Soil	06/25/98	X	
LVSB9FL1-60	ND	Soil	06/25/98	X	
LVSB9FL1-60GW	ND	Groundwater	06/25/98		
LVSB9FL1-66	ND	Soil	06/25/98	X	
LVSB9FL1-66GW	ND	Groundwater	06/25/98	X	Unidentified peaks detected.
LVSB9LF1-70	ND	Soil	06/26/98	X	
LVSB9LF1-70GW	ND	Groundwater	06/26/98	X	Unidentified peak detected.
LVSB9LF2-0	ND	Soil	06/29/98	X	
LVSB9LF2-2	ND	Soil	06/29/98	X	Unidentified peak detected.
LVSB9LF2-6	ND	Soil	06/29/98		
LVSB9LF2-8	ND	Soil	06/29/98		
LVSB9LF2-18	ND	Soil	06/29/98	X	
LVSB9LF2-23	ND	Soil	06/29/98		
LVSB9LF2-28	ND	Soil	06/29/98		
LVSB9LF2-33	ND	Soil	06/29/98	X	
LVSB9LF2-38	ND	Soil	06/29/98		
LVSB9LF2-43	ND	Soil	06/29/98		

TABLE D-2
Results of Field Gas Chromatography Screening (1998)
Little Valley Superfund Site

Sample ID	Concentration of TCE (ppb)	Matrix	Sample Date	Sample Sent to CLP Lab	Comments
LVSB9LF2-48	ND	Soil	06/29/98	X	
LVSB9LF2-53	ND	Soil	06/29/98	X	Unidentified peak detected.
LVSB9LF2-58	ND	Soil	06/30/98	X	Unidentified peak detected.
LVSB9LF2-63	ND	Soil	06/30/98	X	
LVSB9LF2-68	ND	Soil	06/30/98		
LVSB9LF2-73	ND	Soil	06/30/98		
LVSB9LF2-78	ND	Soil	06/30/98	X	
PZ23D	ND	Groundwater	06/25/98		
Bush Industries Area					
LVSBBIA1-0	ND	Soil	06/23/98	X	
LVSBBIA1-2	ND	Soil	06/23/98		
LVSBBIA1-4	ND	Soil	06/23/98		
LVSBBIA1-6	ND	Soil	06/23/98		
LVSBBIA1-8	ND	Soil	06/23/98		
LVSBBIA1-15	ND	Soil	06/23/98	X	
LVSBBIA1-20	ND	Soil	06/23/98		
LVSBBIA1-27	ND	Soil	06/23/98		
LVSBBIA1-30	ND	Soil	06/23/98	X	
LVSBBIA1-35	ND	Soil	06/24/98		Unidentified peak detected.
LVSBBIA1-35GW	ND	Groundwater	06/24/98		
LVSBBIA1-38	ND	Soil	06/24/98		
LVSBBIA1-40	ND	Soil	06/24/98	X	
LVSBBIA1-43	ND	Soil	06/24/98		
LVSBBIA1-45	ND	Soil	06/24/98		
LVSBBIA1-45GW	ND	Groundwater	06/24/98	X	
LVSBBIA1-45GWD	ND	Groundwater	06/24/98		Duplicate.
LVSBBIA1-50	ND	Soil	06/24/98	X	
LVSBBIA1-50GW	ND	Groundwater	06/24/98	X	
LVSBBIA1-55GW	ND	Groundwater	06/24/98	X	
LVSBBIA1-60GW	ND	Groundwater	06/17/98		

TABLE D-2
Results of Field Gas Chromatography Screening (1998)
Little Valley Superfund Site

Sample ID	Concentration of TCE (ppb)	Matrix	Sample Date	Sample Sent to CLP Lab	Comments
LVSBBIA2-0	ND	Soil	06/18/98	X	
LVSBBIA2-2	ND	Soil	06/18/98		
LVSBBIA2-4	ND	Soil	06/18/98		
LVSBBIA2-6	ND	Soil	06/18/98		
LVSBBIA2-8	ND	Soil	06/18/98	X	
LVSBBIA2-14	ND	Soil	06/18/98		
LVSBBIA2-22	ND	Soil	06/18/98	X	
LVSBBIA2-30	ND	Soil	06/19/98		
LVSBBIA2-37	ND	Soil	06/19/98		
LVSBBIA2-40	ND	Soil	06/19/98		
LVSBBIA2-45	ND	Soil	06/19/98	X	
LVSBBIA2-45GW	ND	Groundwater	06/19/98	X	
LVSBBIA2-50	ND	Soil	06/22/98	X	
LVSBBIA2-50GW	ND	Groundwater	06/22/98		
LVSBBIA2-50GWD	ND	Groundwater	06/22/98		Duplicate.
LVSBBIA2-55	ND	Soil	06/22/98		
LVSBBIA2-57	ND	Soil	06/22/98	X	
LVSBBIA2-57GW	ND	Groundwater	06/22/98	X	Unidentified peak detected at 10.2 ppb.
LVSBBIA2-60	ND	Soil	06/23/98	X	
LVSBBIA2-60GW	ND	Groundwater	06/23/98	X	
LVSBBIA3-0	ND	Soil	06/16/98	X	
LVSBBIA3-2	ND	Soil	06/16/98		
LVSBBIA3-8	ND	Soil	06/16/98	X	
LVSBBIA3-10	ND	Soil	06/16/98		
LVSBBIA3-12	ND	Soil	06/16/98		
LVSBBIA3-14	ND	Soil	06/16/98		
LVSBBIA3-16	ND	Soil	06/16/98		
LVSBBIA3-18	ND	Soil	06/16/98	X	
LVSBBIA3-20	ND	Soil	06/16/98		
LVSBBIA3-22	ND	Soil	06/16/98		

TABLE D-2
Results of Field Gas Chromatography Screening (1998)
Little Valley Superfund Site

Sample ID	Concentration of TCE (ppb)	Matrix	Sample Date	Sample Sent to CLP Lab	Comments
LVSBBIA3-24	ND	Soil	06/16/98		
LVSBBIA3-26	ND	Soil	06/16/98		
LVSBBIA3-28	ND	Soil	06/16/98	X	
LVSBBIA3-30	ND	Soil	06/16/98		
LVSBBIA3-32	ND	Soil	06/16/98		
LVSBBIA3-34	ND	Soil	06/16/98		
LVSBBIA3-36	ND	Soil	06/16/98		
LVSBBIA3-38	ND	Soil	06/17/98		
LVSBBIA3-40	ND	Soil	06/17/98		
LVSBBIA3-42	ND	Soil	06/17/98	X	
LVSBBIA3-44	ND	Soil	06/17/98		
LVSBBIA3-46	ND	Soil	06/17/98		
LVSBBIA3-48	ND	Soil	06/17/98		
LVSBBIA3-50	ND	Soil	06/17/98	X	
LVSBBIA3-50GW	ND	Groundwater	06/17/98	X	
LVSBBIA3-52	ND	Soil	06/17/98		
LVSBBIA3-52GW	ND	Groundwater	06/17/98		
LVSBBIA3-54	ND	Soil	06/17/98		
LVSBBIA4-0	ND	Soil	07/06/98	X	
LVSBBIA4-2	ND	Soil	07/06/98		
LVSBBIA4-4	ND	Soil	07/06/98		
LVSBBIA4-6	ND	Soil	07/06/98		
LVSBBIA4-8	ND	Soil	07/06/98		
LVSBBIA4-15	ND	Soil	07/06/98	X	
LVSBBIA4-20	ND	Soil	07/06/98		
LVSBBIA4-25	ND	Soil	07/06/98		
LVSBBIA4-30	ND	Soil	07/06/98	X	
LVSBBIA4-35	ND	Soil	07/06/98		
LVSBBIA4-40	ND	Soil	07/06/98	X	
LVSBBIA4-45	ND	Soil	07/06/98		

TABLE D-2
Results of Field Gas Chromatography Screening (1998)
Little Valley Superfund Site

Sample ID	Concentration of TCE (ppb)	Matrix	Sample Date	Sample Sent to CLP Lab	Comments
LVSBBIA4-50	ND	Soil	07/06/98	X	
LVSBBIA4-50GW	ND	Groundwater	07/06/98		
LVSBBIA4-55	ND	Soil	07/07/98		
LVSBBIA4-60	ND	Soil	07/07/98	X	
LVSBBIA4-62	ND	Soil	07/07/98		
LVSBBIA4-70	ND	Soil	07/07/98		
LVSBBIA4-75	ND	Soil	07/07/98		
LVSBBIA4-80	ND	Soil	07/07/98	X	
LVSBBIA5-0	ND	Soil	07/08/98	X	
LVSBBIA5-2	ND	Soil	07/08/98		
LVSBBIA5-4	ND	Soil	07/08/98		
LVSBBIA5-8	ND	Soil	07/08/98		
LVSBBIA5-15	ND	Soil	07/08/98	X	
LVSBBIA5-20	ND	Soil	07/08/98		
LVSBBIA5-25	ND	Soil	07/08/98		
LVSBBIA5-30	ND	Soil	07/08/98	X	
LVSBBIA5-35	ND	Soil	07/08/98		
LVSBBIA5-40	ND	Soil	07/08/98	X	
LVSBBIA5-40GW	ND	Groundwater	07/08/98	X	
LVSBBIA5-45	ND	Soil	07/08/98		
LVSBBIA5-47	ND	Soil	07/08/98	X	
LVSBBIA5-47GW	ND	Groundwater	07/08/98	X	
LVSBBIA5-50	ND	Soil	07/09/98		
LVSBBIA5-55	ND	Soil	07/09/98		
LVSBBIA5-60	ND	Soil	07/09/98	X	
LVSBBIA-57	ND	Soil	06/22/98		
Cattaraugus Cutlery Area					
LVSBCCA1-0	ND	Soil	06/17/98	X	
LVSBCCA1-2	ND	Soil	06/17/98		
LVSBCCA1-4	ND	Soil	06/17/98		

TABLE D-2
Results of Field Gas Chromatography Screening (1998)
Little Valley Superfund Site

Sample ID	Concentration of TCE (ppb)	Matrix	Sample Date	Sample Sent to CLP Lab	Comments
LVSBCCA1-6	ND	Soil	06/17/98	X	Unidentified peak detected.
LVSBCCA1-6D	ND	Soil	06/17/98		Duplicate.
LVSBCCA1-8	ND	Soil	06/17/98	X	
LVSBCCA1-13	ND	Soil	06/17/98	X	Unidentified peak detected.
LVSBCCA1-18	ND	Soil	06/17/98	X	
LVSBCCA1-23	19.6	Soil	06/17/98	X	
LVSBCCA1-28	ND	Soil	06/17/98	X	Unidentified peak detected.
LVSBCCA1-30	ND	Soil	06/17/98	X	Unidentified peak detected.
LVSBCCA1-30GW	ND	Groundwater	06/17/98	X	Unidentified peak detected.
LVSBCCA1-35	ND	Soil	06/18/98	X	Unidentified peak detected.
LVSBCCA1-35GW	ND	Groundwater	06/18/98		Unidentified peak detected.
LVSBCCA2-0	ND	Soil	06/16/98	X	
LVSBCCA2-2	ND	Soil	06/16/98		
LVSBCCA2-4	ND	Soil	06/16/98		
LVSBCCA2-6	51.7	Soil	06/16/98	X	
LVSBCCA2-6GW	13	Groundwater	06/16/98	X	
LVSBCCA2-8	ND	Soil	06/16/98		Unidentified peak detected.
LVSBCCA2-10	25.1	Soil	06/16/98	X	
LVSBCCA2-12	24.6	Soil	06/16/98	X	
LVSBCCA2-14	70	Soil	06/16/98	X	
LVSBCCA2-16	54.7	Soil	06/16/98	X	
LVSBCCA2-18	40	Soil	06/16/98	X	
LVSBCCA2-20	34	Soil	06/16/98	X	
LVSBCCA2-22	ND	Soil	06/16/98		
LVSBCCA2-25	ND	Soil	06/16/98		
LVSBCCA2-30	ND	Soil	06/16/98	X	Unidentified peak detected at 9.8 ppb.
LVSBCCA2-32	ND	Soil	06/16/98	X	Unidentified peak detected.
LVSBCCA2-32GW	ND	Groundwater	06/16/98		Unidentified peak detected.
LVSBCCA2-34	ND	Soil	06/16/98		
LVSBCCA2-36	ND	Soil	06/16/98		

TABLE D-2
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Little Valley Superfund Site

Sample ID	Concentration of TCE (ppb)	Matrix	Sample Date	Sample Sent to CLP Lab	Comments
LVSBCCA2-38	ND	Soil	06/16/98	X	
LVSBCCA2-38GW	ND	Groundwater	06/16/98		
LVSBCCA3-0	ND	Soil	07/01/98	X	
LVSBCCA3-2	ND	Soil	07/01/98	X	
LVSBCCA3-4	ND	Soil	07/01/98		
LVSBCCA3-6	ND	Soil	07/01/98		
LVSBCCA3-8	ND	Soil	07/01/98		
LVSBCCA3-13	41.3	Soil	07/01/98	X	
LVSBCCA3-18	81.9	Soil	07/01/98	X	
LVSBCCA3-23	66.5	Soil	07/01/98	X	
LVSBCCA3-28	33.8	Soil	07/01/98	X	
LVSBCCA3-28GW	ND	Groundwater	07/01/98		Split spoon.
LVSBCCA3-33	ND	Soil	07/01/98		Unidentified peak detected.
LVSBCCA3-33GW	ND	Groundwater	07/01/98	X	Unidentified peak detected.
LVSBCCA3-33SIM	ND	Groundwater	07/01/98		SimulProbe; unidentified peak detected.
LVSBCCA3-40	ND	Soil	07/02/98	X	
LVSBCCA3-40GW	ND	Groundwater	07/02/98		
LVSDCCA1-01	ND	Sediment	06/17/98	X	
LVSWCCA1-01	ND	Surface Water	06/17/98		
PZ17	ND	Groundwater	06/25/98		
PZ20D	ND	Groundwater	06/25/98		
King Window Area					
KWPW	ND	Groundwater	06/25/98		
LVSBKWA1-0	ND	Soil	06/12/98	X	
LVSBKWA1-2	ND	Soil	06/12/98		
LVSBKWA1-4	ND	Soil	06/12/98		
LVSBKWA1-6	ND	Soil	06/12/98		
LVSBKWA1-8	ND	Soil	06/12/98		
LVSBKWA1-10	ND	Soil	06/12/98	X	
LVSBKWA1-12	ND	Soil	06/12/98		

TABLE D-2
Results of Field Gas Chromatography Screening (1998)
Little Valley Superfund Site

Sample ID	Concentration of TCE (ppb)	Matrix	Sample Date	Sample Sent to CLP Lab	Comments
LVSBKWA1-14	ND	Soil	06/12/98		
LVSBKWA1-16	ND	Soil	06/12/98		
LVSBKWA1-18	ND	Soil	06/12/98	X	
LVSBKWA1-20	ND	Soil	06/12/98		
LVSBKWA1-22	ND	Soil	06/12/98		
LVSBKWA1-24	ND	Soil	06/12/98	X	
LVSBKWA1-24GW	ND	Groundwater	06/12/98		
LVSBKWA1-28	ND	Soil	06/15/98	X	
LVSBKWA1-30	ND	Soil	06/15/98	X	
LVSBKWA1-30GW	ND	Groundwater	06/15/98		
First Street Area					
LVSB1ST1-0-2	ND	Soil	06/10/98	X	
LVSB1ST1-2-4	ND	Soil	06/10/98		
LVSB1ST1-4-6	ND	Soil	06/10/98		
LVSB1ST1-6-8	ND	Soil	06/10/98		
LVSB1ST1-8-10	ND	Soil	06/10/98	X	
LVSB1ST1-10-12	ND	Soil	06/10/98		
LVSB1ST1-14-16	ND	Soil	06/10/98	X	
LVSB1ST1-14-16D	ND	Soil	06/10/98		Duplicate.
LVSB1ST1-16-18	ND	Soil	06/10/98		
LVSB1ST1-20-22	ND	Soil	06/10/98		
LVSB1ST1-20GW	ND	Groundwater	06/10/98		
LVSB1ST1-25-27	ND	Soil	06/10/98	X	
LVSB1ST1-25GW	ND	Groundwater	06/10/98	X	
LVSB1ST1-28-30	ND	Soil	06/10/98		
LVSB1ST1-30-32	ND	Soil	06/10/98		
LVSB1ST1-30GW	ND	Groundwater	06/10/98		
LVSB1ST1-33-35	ND	Soil	06/10/98		
LVSB1ST1-38-40	ND	Soil	06/10/98		
LVSB1ST1-43-45	ND	Soil	06/11/98		

TABLE D-2
Results of Field Gas Chromatography Screening (1998)
Little Valley Superfund Site

Sample ID	Concentration of TCE (ppb)	Matrix	Sample Date	Sample Sent to CLP Lab	Comments
LVSB1ST1-45-47	ND	Soil	06/11/98	X	
LVSB1ST1-45GW	ND	Groundwater	06/11/98		
PZ11	ND	Groundwater	06/25/98		
Great Triangle Area					
LVSBGTA1-0	ND	Soil	06/29/98	X	
LVSBGTA1-2	ND	Soil	06/29/98		
LVSBGTA1-4	ND	Soil	06/29/98		
LVSBGTA1-6	ND	Soil	06/29/98		
LVSBGTA1-8	ND	Soil	06/29/98	X	
LVSBGTA1-14	ND	Soil	06/30/98		
LVSBGTA1-19	ND	Soil	06/30/98	X	
LVSBGTA1-24	ND	Soil	06/30/98		
LVSBGTA1-29	ND	Soil	06/30/98	X	Unidentified peak detected.
LVSBGTA1-34	ND	Soil	06/30/98		
LVSBGTA1-39	ND	Soil	06/30/98		
LVSBGTA1-44	ND	Soil	06/30/98		
LVSBGTA1-49	ND	Soil	06/30/98	X	
LVSBGTA1-54	ND	Soil	06/30/98		
LVSBGTA1-59	ND	Soil	07/01/98		
LVSBGTA1-64	ND	Soil	07/01/98		
LVSBGTA1-69	ND	Soil	07/01/98	X	
LVSBGTA1-74	ND	Soil	07/01/98	X	
LVSBGTA1-79	ND	Soil	07/01/98	X	
LVSBGTA1-79GW	ND	Groundwater	07/01/98	X	
LVSBGTA1-79GWD	ND	Groundwater	07/01/98		Duplicate.
LVSBGTA1-84	ND	Soil	07/01/98	X	
LVSBGTA1-84GW	ND	Groundwater	07/01/98	X	
LVSBGTA1-94	ND	Soil	07/01/98	X	
LVSBGTA1-99	ND	Soil	07/02/98	X	Unidentified peak detected.
LVSBGTA1-99GW	ND	Groundwater	07/02/98		

TABLE D-2
Results of Field Gas Chromatography Screening (1998)
Little Valley Superfund Site

Sample ID	Concentration of TCE (ppb)	Matrix	Sample Date	Sample Sent to CLP Lab	Comments
LVSBGTA2-0	ND	Soil	06/25/98	X	
LVSBGTA2-2	ND	Soil	06/25/98		
LVSBGTA2-4	ND	Soil	06/25/98		
LVSBGTA2-6	ND	Soil	06/25/98		
LVSBGTA2-8	ND	Soil	06/25/98	X	
LVSBGTA2-15	ND	Soil	06/25/98		
LVSBGTA2-20	ND	Soil	06/25/98		
LVSBGTA2-22	ND	Soil	06/25/98	X	
LVSBGTA2-22GW	ND	Groundwater	06/25/98	X	
LVSBGTA2-30	ND	Soil	06/25/98	X	
LVSBGTA2-30GW	ND	Groundwater	06/25/98	X	
LVSBGTA2-30GWD	ND	Groundwater	06/25/98		Duplicate.
LVSBGTA2-35	ND	Soil	06/25/98	X	
LVSBGTA2-35GW	ND	Groundwater	06/25/98	X	
Whig Street Area					
LVSBWSA1-0	ND	Soil	06/29/98	X	
LVSBWSA1-2	ND	Soil	06/29/98		
LVSBWSA1-4	ND	Soil	06/29/98		
LVSBWSA1-6	ND	Soil	06/29/98		
LVSBWSA1-8	ND	Soil	06/29/98	X	
LVSBWSA1-15	ND	Soil	06/29/98		
LVSBWSA1-20	ND	Soil	06/29/98	X	
LVSBWSA1-25	ND	Soil	06/29/98		
LVSBWSA1-30	ND	Soil	06/29/98		
LVSBWSA1-30GW	ND	Groundwater	06/29/98	X	
LVSBWSA1-35GW	ND	Groundwater	06/29/98	X	
Other					
PZ9	ND	Groundwater	06/25/98		
QA/QC Samples					
Field Blank	ND	Aqueous	06/17/98	X	Field blank.

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Results of Field Gas Chromatography Screening (1998)
Little Valley Superfund Site

Sample ID	Concentration of TCE (ppb)	Matrix	Sample Date	Sample Sent to CLP Lab	Comments
LVSBGW061998	ND	Aqueous	06/19/98	X	Field blank.
LVSB062298	ND	Aqueous	06/22/98	X	Field blank; unidentified peak detected at 11.3 ppb.
LVSBGW062498	ND	Aqueous	06/24/98	X	Field blank.
Field Blank	ND	Aqueous	06/24/98	X	Field blank.
Rinsate Blank	ND	Aqueous	06/25/98	X	Field blank.
LVSB9LF1-70Rinsate	ND	Aqueous	06/26/98	X	Field blank.
LVFBSB062998	ND	Aqueous	06/29/98	X	Field blank; unidentified peak detected.
LVSB9LF2-FB	ND	Aqueous	06/30/98	X	Field blank.
LVSB070198	ND	Aqueous	07/01/98	X	Field blank.
LVFBSBGW070698	ND	Aqueous	07/06/98	X	Field blank.
LVFBSB070698	ND	Aqueous	07/06/98	X	Field blank.
LVFBSBGW070898	ND	Aqueous	07/08/98	X	Field blank.
LVFBSB070898	ND	Aqueous	07/08/98	X	Field blank.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area
Location	SB9LF1	SB9LF1	SB9LF1	SB9LF1
TtFW Sample I.D.	LV-SB9LF1-00	LV-SB9LF1-20	LV-SB9LF1-35	LV-SB9LF1-40
Sampling Date	06/24/1998	06/24/1998	06/24/1998	06/26/1998
Depth	0'-2'	20'-22'	35'-37'	40'-42'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	11 U	11 U
Bromomethane	11 U	11 U	11 U	11 U
Vinyl chloride	11 U	11 U	11 U	11 U
Chloroethane	11 U	11 U	11 U	11 U
Methylene chloride	11 U	11 U	11 U	11 U
Acetone	11 U	11 U	6 J	28 U
Carbon disulfide	11 U	11 U	11 U	11 U
1,1-Dichloroethene	11 U	11 U	11 U	11 U
1,1-Dichloroethane	11 U	11 U	11 U	11 U
1,2-Dichloroethene (total)	11 U	11 U	11 U	11 U
Chloroform	11 U	11 U	11 U	11 U
1,2-Dichloroethane	11 U	11 U	11 U	11 U
2-Butanone	11 U	11 U	11 U	11 U
1,1,1-Trichloroethane	11 U	11 U	11 U	11 U
Carbon Tetrachloride	11 U	11 U	11 U	11 U
Bromodichloromethane	11 U	11 U	11 U	11 U
1,2-Dichloropropane	11 U	11 U	11 U	11 U
cis-1,3-Dichloropropene	11 U	11 U	11 U	11 U
Trichloroethene	11 U	11 U	11 U	11 U
Dibromochloromethane	11 U	11 U	11 U	11 U
1,1,2-Trichloroethane	11 U	11 U	11 U	11 U
Benzene	11 U	11 U	11 U	11 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	11 U
Bromoform	11 U	11 U	11 U	11 U

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area
Location	SB9LF1	SB9LF1	SB9LF1	SB9LF1
TtFW Sample I.D.	LV-SB9LF1-00	LV-SB9LF1-20	LV-SB9LF1-35	LV-SB9LF1-40
Sampling Date	06/24/1998	06/24/1998	06/24/1998	06/26/1998
Depth	0'-2'	20'-22'	35'-37'	40'-42'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	11 UJ	11 UJ	11 UJ	11 UJ
2-Hexanone	11 UJ	11 UJ	11 UJ	11 UJ
Tetrachloroethene	11 U	11 U	11 U	11 U
1,1,2,2-Tetrachloroethane	11 U	11 U	11 U	11 U
Toluene	11 U	11 U	11 U	11 U
Chlorobenzene	11 U	11 U	11 U	11 U
Ethylbenzene	11 U	11 U	11 U	11 U
Styrene	11 U	11 U	11 U	11 U
Xylenes (total)	11 U	11 U	11 U	11 U
Total Volatile TICs	--	--	--	--

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area
Location	SB9LF1	SB9LF1	SB9LF1	SB9LF1
TtFW Sample I.D.	LV-SB9LF1-50	LV-SB9LF1-60	LV-SB9LF1-66	LV-SB9LF1-70
Sampling Date	06/26/98	06/25/1998	06/25/1998	06/26/1998
Depth	50'-52'	60'-62'	66'-68'	70'-72'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	12 U	11 U	11 U	12 U
Bromomethane	12 U	11 U	11 U	12 U
Vinyl chloride	12 U	11 U	11 U	12 U
Chloroethane	12 U	11 U	11 U	12 U
Methylene chloride	12 U	11 U	11 U	12 U
Acetone	12 U	11 U	11 U	12 U
Carbon disulfide	12 U	11 U	11 U	12 U
1,1-Dichloroethene	12 U	11 U	11 U	12 U
1,1-Dichloroethane	12 U	11 U	11 U	12 U
1,2-Dichloroethene (total)	12 U	11 U	11 U	12 U
Chloroform	12 U	11 U	11 U	12 U
1,2-Dichloroethane	12 U	11 U	11 U	12 U
2-Butanone	12 U	11 U	11 U	12 U
1,1,1-Trichloroethane	12 U	11 U	11 U	12 U
Carbon Tetrachloride	12 U	11 U	11 U	12 U
Bromodichloromethane	12 U	11 U	11 U	12 U
1,2-Dichloropropane	12 U	11 U	11 U	12 U
cis-1,3-Dichloropropene	12 U	11 U	11 U	12 U
Trichloroethene	12 U	11 U	11 U	12 U
Dibromochloromethane	12 U	11 U	11 U	12 U
1,1,2-Trichloroethane	12 U	11 U	11 U	12 U
Benzene	12 U	11 U	11 U	12 U
trans-1,3-Dichloropropene	12 U	11 U	11 U	12 U
Bromoform	12 U	11 U	11 U	12 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area
Location	SB9LF1	SB9LF1	SB9LF1	SB9LF1
TtFW Sample I.D.	LV-SB9LF1-50	LV-SB9LF1-60	LV-SB9LF1-66	LV-SB9LF1-70
Sampling Date	06/26/98	06/25/1998	06/25/1998	06/26/1998
Depth	50'-52'	60'-62'	66'-68'	70'-72'
Units	ug/kg	ug/kg	ug/kg	ug/kg
-Methyl-2-pentanone	12 UJ	11 UJ	11 UJ	12 UJ
-Hexanone	12 UJ	11 UJ	11 UJ	12 UJ
etrachloroethene	12 U	11 U	11 U	12 U
,1,2,2-Tetrachloroethane	12 U	11 U	11 U	12 U
oluene	12 U	11 U	11 U	12 U
hlorobenzene	12 U	11 U	11 U	12 U
thylbenzene	12 U	11 U	11 U	12 U
tyrene	12 U	11 U	11 U	12 U
ylenes (total)	12 U	11 U	11 U	4 J
otal Volatile TICs	--	--	--	13 J

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area
Location	SB9LF2	SB9LF2	SB9LF2	SB9LF2
TtFW Sample I.D.	LV-SB9LF2-00	LV-SB9LF2-02	LV-SB9LF2-18	LV-SB9LF2-33
Sampling Date	06/29/1998	06/29/1998	06/29/1998	06/29/1998
Depth	0'-2'	2'-4'	18'-20'	33'-35'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	87 UJ	14 U	11 U
Bromomethane	11 U	87 UJ	14 U	11 U
Vinyl chloride	11 U	87 UJ	14 U	11 U
Chloroethane	11 U	87 UJ	14 U	11 U
Methylene chloride	11 U	120 UJ	14 U	11 U
Acetone	11 UJ	750 UJ	17 UJ	11 UJ
Carbon disulfide	11 UJ	87 UJ	14 UJ	11 UJ
1,1-Dichloroethene	11 U	87 UJ	14 U	11 U
1,1-Dichloroethane	11 U	87 UJ	14 U	11 U
1,2-Dichloroethene (total)	11 U	87 UJ	14 U	11 U
Chloroform	11 U	87 UJ	14 U	11 U
1,2-Dichloroethane	11 U	87 UJ	14 U	11 U
2-Butanone	11 UJ	230 J	14 UJ	11 UJ
1,1,1-Trichloroethane	11 U	87 UJ	14 U	11 U
Carbon Tetrachloride	11 U	87 UJ	14 U	11 U
Bromodichloromethane	11 U	87 UJ	14 U	11 U
1,2-Dichloropropane	11 U	87 UJ	14 U	11 U
cis-1,3-Dichloropropene	11 U	87 UJ	14 U	11 U
Trichloroethene	11 U	87 UJ	14 U	11 U
Dibromochloromethane	11 U	87 UJ	14 U	11 U
1,1,2-Trichloroethane	11 U	87 UJ	14 U	11 U
Benzene	11 U	87 UJ	14 U	11 U
trans-1,3-Dichloropropene	11 U	87 UJ	14 U	11 U
Bromoform	11 U	87 UJ	14 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area
Location	SB9LF2	SB9LF2	SB9LF2	SB9LF2
TtFW Sample I.D.	LV-SB9LF2-00	LV-SB9LF2-02	LV-SB9LF2-18	LV-SB9LF2-33
Sampling Date	06/29/1998	06/29/1998	06/29/1998	06/29/1998
Depth	0'-2'	2'-4'	18'-20'	33'-35'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	11 UJ	87 UJ	14 UJ	11 UJ
2-Hexanone	11 UJ	87 UJ	14 UJ	11 UJ
Tetrachloroethene	11 U	87 UJ	14 U	11 U
1,1,2,2-Tetrachloroethane	11 U	87 UJ	14 U	11 U
Toluene	11 U	270 J	14 U	11 U
Chlorobenzene	11 U	87 UJ	14 U	11 U
Ethylbenzene	11 U	87 UJ	14 U	11 U
Styrene	11 U	87 UJ	14 U	11 U
Xylenes (total)	11 U	87 UJ	14 U	11 U
Total Volatile TICs	25 J	121 J	--	--

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area
Location	SB9LF2	SB9LF2	SB9LF2	SB9LF2
TtFW Sample I.D.	LV-SB9LF2-48	LV-SB9LF2-53	LV-SB9LF2-58	LV-SB9LF2-63
Sampling Date	06/29/1998	06/29/1998	06/30/1998	06/30/1998
Depth	48'-50'	53'-55'	58'-60'	63'-65'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	12 U	11 U	11 U	11 U
Bromomethane	12 U	11 UJ	11 UJ	11 U
Vinyl chloride	12 U	11 U	11 U	11 U
Chloroethane	12 U	11 U	11 U	11 U
Methylene chloride	12 U	15 U	11 U	11 U
Acetone	12 UJ	11 UJ	11 UJ	11 UJ
Carbon disulfide	12 UJ	11 U	11 U	11 U
1,1-Dichloroethene	12 U	11 U	11 U	11 U
1,1-Dichloroethane	12 U	11 U	11 U	11 U
1,2-Dichloroethene (total)	12 U	11 U	11 U	11 U
Chloroform	12 U	11 U	11 U	11 U
1,2-Dichloroethane	12 U	11 U	11 U	11 U
2-Butanone	12 UJ	11 UJ	11 UJ	11 U
1,1,1-Trichloroethane	12 U	11 U	11 U	11 U
Carbon Tetrachloride	12 U	11 U	11 U	11 U
Bromodichloromethane	12 U	11 U	11 U	11 U
1,2-Dichloropropane	12 U	11 U	11 U	11 U
cis-1,3-Dichloropropene	12 U	11 U	11 U	11 U
Trichloroethene	12 U	2 J	4 J	11 UJ
Dibromochloromethane	12 U	11 U	11 U	11 U
1,1,2-Trichloroethane	12 U	11 U	11 U	11 U
Benzene	12 U	11 U	11 U	11 U
trans-1,3-Dichloropropene	12 U	11 U	11 U	11 U
Bromoform	12 U	11 U	11 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area
Location	SB9LF2	SB9LF2	SB9LF2	SB9LF2
TtFW Sample I.D.	LV-SB9LF2-48	LV-SB9LF2-53	LV-SB9LF2-58	LV-SB9LF2-63
Sampling Date	06/29/1998	06/29/1998	06/30/1998	06/30/1998
Depth	48'-50'	53'-55'	58'-60'	63'-65'
Units	ug/kg	ug/kg	ug/kg	ug/kg
-Methyl-2-pentanone	12 UJ	11 UJ	11 UJ	11 U
-Hexanone	12 UJ	11 UJ	11 UJ	11 U
etrachloroethene	12 U	11 U	11 U	11 U
,1,2,2-Tetrachloroethane	12 U	11 UJ	11 UJ	11 U
oluene	12 U	11 U	11 U	11 U
hlorobenzene	12 U	11 U	11 U	11 U
thylbenzene	12 U	11 U	11 U	11 U
tyrene	12 U	11 U	11 U	11 U
ylenes (total)	12 U	11 U	11 U	11 U
otal Volatile TICs	--	--	--	--

ee Table D-1 f bbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SB9LF2	SBBIA1	SBBIA1	SBBIA1
TtFW Sample I.D.	LV-SB9LF2-78	LV-SBBIA1-00	LV-SBBIA1-15	LV-SBBIA1-30
Sampling Date	06/30/1998	06/24/1998	06/24/1998	06/24/1998
Depth	78'-80'	0'-2'	15'-17'	30'-32'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	12 U	13 U	12 UJ	11 UJ
Bromomethane	12 U	13 U	12 U	11 U
Vinyl chloride	12 U	13 U	12 U	11 U
Chloroethane	12 U	13 U	12 U	11 U
Methylene chloride	12 U	13 U	22 U	19 U
Acetone	12 UJ	13 U	12 U	11 U
Carbon disulfide	12 U	13 U	12 U	11 U
1,1-Dichloroethene	12 U	13 U	12 U	11 U
1,1-Dichloroethane	12 U	13 U	12 U	11 U
1,2-Dichloroethene (total)	12 U	13 U	12 U	11 U
Chloroform	12 U	13 U	12 U	11 U
1,2-Dichloroethane	12 U	13 U	12 U	11 U
2-Butanone	12 U	13 U	12 U	11 U
1,1,1-Trichloroethane	12 U	13 U	12 U	11 U
Carbon Tetrachloride	12 U	13 U	12 U	11 U
Bromodichloromethane	12 U	13 U	12 U	11 U
1,2-Dichloropropane	12 U	13 U	12 U	11 U
cis-1,3-Dichloropropene	12 U	13 U	12 U	11 U
Trichloroethene	12 UJ	13 U	12 U	11 U
Dibromochloromethane	12 U	13 U	12 U	11 U
1,1,2-Trichloroethane	12 U	13 U	12 U	11 U
Benzene	12 U	13 U	12 U	11 U
trans-1,3-Dichloropropene	12 U	13 U	12 U	11 U
Bromoform	12 U	13 U	12 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SB9LF2	SBBIA1	SBBIA1	SBBIA1
TtFW Sample I.D.	LV-SB9LF2-78	LV-SBBIA1-00	LV-SBBIA1-15	LV-SBBIA1-30
Sampling Date	06/30/1998	06/24/1998	06/24/1998	06/24/1998
Depth	78'-80'	0'-2'	15'-17'	30'-32'
Units	ug/kg	ug/kg	ug/kg	ug/kg
I-Methyl-2-pentanone	12 U	13 UJ	12 U	11 U
?-Hexanone	12 U	13 UJ	12 UJ	11 UJ
Tetrachloroethene	12 U	13 U	12 U	11 U
I,1,2,2-Tetrachloroethane	12 U	13 U	12 U	11 U
Toluene	12 U	13 U	12 U	11 U
Chlorobenzene	12 U	13 U	12 U	11 U
Ethylbenzene	12 U	13 U	12 U	11 U
Styrene	12 U	13 U	12 U	11 U
Xylenes (total)	12 U	13 U	12 U	11 U
Total Volatile TICs	--	--	--	--

ee Table D-1 f abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA1	SBBIA1	SBBIA1	SBBIA2
TtFW Sample I.D.	LV-SBBIA1-40	LV-SBBIA1-50	LV-SBBIA1-55	LV-SBBIA2-00
Sampling Date	06/24/1998	06/24/1998	06/24/1998	06/18/1998
Depth	40'-42'	50'-52'	~55'	0'-2'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 UJ	11 UJ	12 UJ	12 UJ
Bromomethane	11 U	11 U	12 U	12 UJ
Vinyl chloride	11 U	11 U	12 U	12 UJ
Chloroethane	11 U	11 U	12 U	12 UJ
Methylene chloride	23 U	18 U	21 U	12 UJ
Acetone	11 U	11 U	12 U	12 UJ
Carbon disulfide	11 U	11 U	12 U	12 UJ
1,1-Dichloroethene	11 U	11 U	12 U	12 UJ
1,1-Dichloroethane	11 U	11 U	12 U	12 UJ
1,2-Dichloroethene (total)	11 U	11 U	12 U	12 UJ
Chloroform	11 U	11 U	12 U	12 UJ
1,2-Dichloroethane	11 U	11 U	12 U	12 UJ
2-Butanone	11 U	11 U	12 U	12 UJ
1,1,1-Trichloroethane	11 U	11 U	12 U	12 UJ
Carbon Tetrachloride	11 U	11 U	12 U	12 UJ
Bromodichloromethane	11 U	11 U	12 U	12 UJ
1,2-Dichloropropane	11 U	11 U	12 U	12 UJ
cis-1,3-Dichloropropene	11 U	11 U	12 U	12 UJ
Trichloroethene	11 U	11 U	12 U	12 UJ
Dibromochloromethane	11 U	11 U	12 U	12 UJ
1,1,2-Trichloroethane	11 U	11 U	12 U	12 UJ
Benzene	11 U	11 U	12 U	12 UJ
trans-1,3-Dichloropropene	11 U	11 U	12 U	12 UJ
Bromoform	11 U	11 U	12 U	12 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA1	SBBIA1	SBBIA1	SBBIA2
TtFW Sample I.D.	LV-SBBIA1-40	LV-SBBIA1-50	LV-SBBIA1-55	LV-SBBIA2-00
Sampling Date	06/24/1998	06/24/1998	06/24/1998	06/18/1998
Depth	40'-42'	50'-52'	~55'	0'-2'
Units	ug/kg	ug/kg	ug/kg	ug/kg
-Methyl-2-pentanone	11 U	11 U	12 U	12 UJ
-Hexanone	11 UJ	11 UJ	12 UJ	12 UJ
etrachloroethene	11 U	11 U	12 U	12 UJ
,1,2,2-Tetrachloroethane	11 U	11 U	12 U	12 UJ
oluene	11 U	11 U	12 U	12 UJ
hlorobenzene	11 U	11 U	12 U	12 UJ
thylbenzene	11 U	11 U	12 U	12 UJ
tyrene	11 U	11 U	12 U	12 UJ
ylenes (total)	11 U	11 U	12 U	12 UJ
otal Volatile TICs	--	--	--	R

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA2	SBBIA2	SBBIA2	SBBIA2
TtFW Sample I.D.	LV-SBBIA2-08	LV-SBBIA2-22	LV-SBBIA2-45	LV-SBBIA2-50
Sampling Date	06/18/1998	06/18/1998	06/19/1998	06/22/1998
Depth	8'-10'	22'-24'	45'-47'	50'-52'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 UJ	11 UJ	12 UJ	11 U
Bromomethane	11 UJ	11 UJ	12 UJ	11 U
Vinyl chloride	11 UJ	11 UJ	12 UJ	11 U
Chloroethane	11 UJ	11 UJ	12 UJ	11 U
Methylene chloride	11 UJ	11 UJ	12 UJ	11 U
Acetone	11 UJ	11 UJ	12 UJ	11 U
Carbon disulfide	11 UJ	11 UJ	12 UJ	11 U
1,1-Dichloroethene	11 UJ	11 UJ	12 UJ	11 U
1,1-Dichloroethane	11 UJ	11 UJ	12 UJ	11 U
1,2-Dichloroethene (total)	11 UJ	11 UJ	12 UJ	11 U
Chloroform	11 UJ	11 UJ	12 UJ	11 U
1,2-Dichloroethane	11 UJ	11 UJ	12 UJ	11 U
2-Butanone	11 UJ	11 UJ	12 UJ	11 U
1,1,1-Trichloroethane	11 UJ	11 UJ	12 UJ	11 U
Carbon Tetrachloride	11 UJ	11 UJ	12 UJ	11 U
Bromodichloromethane	11 UJ	11 UJ	12 UJ	11 U
1,2-Dichloropropane	11 UJ	11 UJ	12 UJ	11 U
cis-1,3-Dichloropropene	11 UJ	11 UJ	12 UJ	11 U
Trichloroethene	11 UJ	11 UJ	12 UJ	1 J
Dibromochloromethane	11 UJ	11 UJ	12 UJ	11 U
1,1,2-Trichloroethane	11 UJ	11 UJ	12 UJ	11 U
Benzene	11 UJ	11 UJ	12 UJ	11 U
trans-1,3-Dichloropropene	11 UJ	11 UJ	12 UJ	11 U
Bromoform	11 UJ	11 UJ	12 UJ	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA2	SBBIA2	SBBIA2	SBBIA2
TtFW Sample I.D.	LV-SBBIA2-08	LV-SBBIA2-22	LV-SBBIA2-45	LV-SBBIA2-50
Sampling Date	06/18/1998	06/18/1998	06/19/1998	06/22/1998
Depth	8'-10'	22'-24'	45'-47'	50'-52'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	11 UJ	11 UJ	12 UJ	11 UJ
2-Hexanone	11 UJ	11 UJ	12 UJ	11 UJ
Tetrachloroethene	11 UJ	11 UJ	12 UJ	11 U
1,1,2,2-Tetrachloroethane	11 UJ	11 UJ	12 UJ	11 U
Toluene	11 UJ	11 UJ	12 UJ	11 U
Chlorobenzene	11 UJ	11 UJ	12 UJ	11 U
Ethylbenzene	11 UJ	11 UJ	12 UJ	11 U
Styrene	11 UJ	11 UJ	12 UJ	11 U
Xylenes (total)	11 UJ	11 UJ	12 UJ	11 U
Total Volatile TICs	--	R	R	--

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA2	SBBIA2	SBBIA3	SBBIA3
TtFW Sample I.D.	LV-SBBIA2-57	LV-SBBIA2-60	LV-SBBIA3-00	LV-SBBIA3-08
Sampling Date	06/22/1998	06/23/1998	06/16/1998	06/16/1998
Depth	57'-59'	60'-62'	0'-2'	8'-10'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	11 U	11 U
Bromomethane	11 U	11 U	11 U	11 U
Vinyl chloride	11 U	11 U	11 U	11 U
Chloroethane	11 U	11 U	11 U	11 U
Methylene chloride	11 U	11 U	11 U	11 U
Acetone	11 U	11 U	11 U	11 U
Carbon disulfide	11 U	11 U	11 U	11 U
1,1-Dichloroethene	11 U	11 U	11 U	11 U
1,1-Dichloroethane	11 U	11 U	11 U	11 U
1,2-Dichloroethene (total)	11 U	11 U	11 U	11 U
Chloroform	11 U	11 U	11 U	11 U
1,2-Dichloroethane	11 U	11 U	11 U	11 U
2-Butanone	11 U	11 U	11 U	5 J
1,1,1-Trichloroethane	11 U	11 U	11 U	11 U
Carbon Tetrachloride	11 U	11 U	11 U	11 U
Bromodichloromethane	11 U	11 U	11 U	11 U
1,2-Dichloropropane	11 U	11 U	11 U	11 U
cis-1,3-Dichloropropene	11 U	11 U	11 U	11 U
Trichloroethene	11 U	11 U	11 U	11 U
Dibromochloromethane	11 U	11 U	11 U	11 U
1,1,2-Trichloroethane	11 U	11 U	11 U	11 U
Benzene	11 U	11 U	11 U	11 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	11 U
Bromoform	11 U	11 U	11 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA2	SBBIA2	SBBIA3	SBBIA3
TtFW Sample I.D.	LV-SBBIA2-57	LV-SBBIA2-60	LV-SBBIA3-00	LV-SBBIA3-08
Sampling Date	06/22/1998	06/23/1998	06/16/1998	06/16/1998
Depth	57'-59'	60'-62'	0'-2'	8'-10'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	11 UJ	11 UJ	11 U	11 U
2-Hexanone	11 UJ	11 UJ	11 U	2 J
Tetrachloroethene	11 U	11 U	11 U	11 U
1,1,2,2-Tetrachloroethane	11 U	11 U	11 U	11 U
Toluene	11 U	11 U	11 U	11 U
Chlorobenzene	11 U	11 U	11 U	11 U
Ethylbenzene	11 U	11 U	11 U	11 U
Styrene	11 U	11 U	11 U	11 U
Xylenes (total)	11 U	11 U	11 U	11 U
Total Volatile TICs	--	--	R	R

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA3	SBBIA3	SBBIA3	SBBIA3
TtFW Sample I.D.	LV-SBBIA3-09 Duplicate of SBBIA3-08	LV-SBBIA3-18	LV-SBBIA3-28	LV-SBBIA3-42
Sampling Date	06/16/1998	06/16/1998	06/16/1998	06/17/1998
Depth	8'-10'	18'-20'	28'-30'	42'-44'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	10 U	10 U	10 UJ
Bromomethane	11 U	10 U	10 U	10 UJ
Vinyl chloride	11 U	10 U	10 U	10 UJ
Chloroethane	11 U	10 U	10 U	10 UJ
Methylene chloride	11 U	10 U	10 U	10 UJ
Acetone	11 U	10 U	10 U	10 UJ
Carbon disulfide	11 U	10 U	10 U	10 UJ
1,1-Dichloroethene	11 U	10 U	10 U	10 UJ
1,1-Dichloroethane	11 U	10 U	10 U	10 UJ
1,2-Dichloroethene (total)	11 U	10 U	10 U	10 UJ
Chloroform	11 U	10 U	10 U	10 UJ
1,2-Dichloroethane	11 U	10 U	10 U	10 UJ
2-Butanone	11 U	10 U	10 U	10 UJ
1,1,1-Trichloroethane	11 U	10 U	10 U	10 UJ
Carbon Tetrachloride	11 U	10 U	10 U	10 UJ
Bromodichloromethane	11 U	10 U	10 U	10 UJ
1,2-Dichloropropane	11 U	10 U	10 U	10 UJ
cis-1,3-Dichloropropene	11 U	10 U	10 U	10 UJ
Trichloroethene	11 U	10 U	10 U	10 UJ
Dibromochloromethane	11 U	10 U	10 U	10 UJ
1,1,2-Trichloroethane	11 U	10 U	10 U	10 UJ
Benzene	11 U	10 U	10 U	10 UJ
trans-1,3-Dichloropropene	11 U	10 U	10 U	10 UJ
Bromoform	11 U	10 U	10 U	10 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA3	SBBIA3	SBBIA3	SBBIA3
TtFW Sample I.D.	LV-SBBIA3-09 Duplicate of SBBIA3-08	LV-SBBIA3-18	LV-SBBIA3-28	LV-SBBIA3-42
Sampling Date	06/16/1998	06/16/1998	06/16/1998	06/17/1998
Depth	8'-10'	18'-20'	28'-30'	42'-44'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	11 U	10 U	10 U	10 UJ
2-Hexanone	11 U	10 U	10 U	10 UJ
Tetrachloroethene	11 U	10 U	10 U	10 UJ
1,1,2,2-Tetrachloroethane	11 U	10 U	10 U	10 UJ
Toluene	11 U	10 U	10 U	10 UJ
Chlorobenzene	11 U	10 U	10 U	10 UJ
Ethylbenzene	11 U	10 U	10 U	10 UJ
Styrene	11 U	10 U	10 U	10 UJ
Xylenes (total)	11 U	10 U	10 U	10 UJ
Total Volatile TICs	--	R	R	R

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA3	SBBIA3	SBBIA4	SBBIA4
TtFW Sample I.D.	LV-SBBIA3-50	LV-SBBIA3-51 Duplicate of SBBIA3-50	LV-SBBIA4-00	LV-SBBIA4-01 Duplicate of SBBIA4-00
Sampling Date	06/17/1998	06/17/1998	07/06/1998	07/06/1998
Depth	50'-52'	50'-52'	0'-2'	0'-2'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 UJ	11 UJ	12 U	12 U
Bromomethane	11 UJ	11 UJ	12 U	12 U
Vinyl chloride	11 UJ	11 UJ	12 U	12 U
Chloroethane	11 UJ	11 UJ	12 U	12 U
Methylene chloride	11 UJ	11 UJ	4 J	3 J
Acetone	11 UJ	4 J	12 U	12 U
Carbon disulfide	11 UJ	11 UJ	12 U	12 U
1,1-Dichloroethene	11 UJ	11 UJ	12 U	12 U
1,1-Dichloroethane	11 UJ	11 UJ	12 U	12 U
1,2-Dichloroethene (total)	11 UJ	11 UJ	12 U	12 U
Chloroform	11 UJ	11 UJ	12 U	12 U
1,2-Dichloroethane	11 UJ	11 UJ	12 U	12 U
2-Butanone	11 UJ	11 UJ	12 U	12 U
1,1,1-Trichloroethane	11 UJ	11 UJ	12 U	12 U
Carbon Tetrachloride	11 UJ	11 UJ	12 U	12 U
Bromodichloromethane	11 UJ	11 UJ	12 U	12 U
1,2-Dichloropropane	11 UJ	11 UJ	12 UJ	12 UJ
cis-1,3-Dichloropropene	11 UJ	11 UJ	12 U	12 U
Trichloroethene	11 UJ	11 UJ	12 U	12 U
Dibromochloromethane	11 UJ	11 UJ	12 U	12 U
1,1,2-Trichloroethane	11 UJ	11 UJ	12 U	12 U
Benzene	11 UJ	11 UJ	12 U	12 U
trans-1,3-Dichloropropene	11 UJ	11 UJ	12 U	12 U
Bromoform	11 UJ	11 UJ	12 U	12 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA3	SBBIA3	SBBIA4	SBBIA4
TtFW Sample I.D.	LV-SBBIA3-50	LV-SBBIA3-51 Duplicate of SBBIA3-50	LV-SBBIA4-00	LV-SBBIA4-01 Duplicate of SBBIA4-00
Sampling Date	06/17/1998	06/17/1998	07/06/1998	07/06/1998
Depth	50'-52'	50'-52'	0'-2'	0'-2'
Units	ug/kg	ug/kg	ug/kg	ug/kg
-Methyl-2-pentanone	11 UJ	11 UJ	12 U	12 U
-Hexanone	11 UJ	11 UJ	12 U	12 U
etrachloroethene	11 UJ	11 UJ	12 U	12 U
,1,2,2-Tetrachloroethane	11 UJ	11 UJ	12 U	12 U
oluene	11 UJ	11 UJ	12 U	12 U
hlorobenzene	11 UJ	11 UJ	12 U	12 U
thylbenzene	11 UJ	11 UJ	12 U	12 U
tyrene	11 UJ	11 UJ	12 U	12 U
ylenes (total)	11 UJ	11 UJ	12 U	12 U
otal Volatile TICs	R	R	--	--

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA4	SBBIA4	SBBIA4	SBBIA4
TtFW Sample I.D.	LV-SBBIA4-15	LV-SBBIA4-30	LV-SBBIA4-40	LV-SBBIA4-50
Sampling Date	07/06/1998	07/06/1998	07/06/1998	07/06/1998
Depth	15'-17'	30'-32'	40'-42'	50'-52'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	11 U	14 U
Bromomethane	11 U	11 U	11 U	14 U
Vinyl chloride	11 U	11 U	11 U	14 U
Chloroethane	11 U	11 U	11 U	14 U
Methylene chloride	2 J	3 J	3 J	3 J
Acetone	11 U	11 U	11 U	14 U
Carbon disulfide	11 U	11 U	11 U	14 U
1,1-Dichloroethene	11 U	11 U	11 U	14 U
1,1-Dichloroethane	11 U	11 U	11 U	14 U
1,2-Dichloroethene (total)	11 U	11 U	11 U	14 U
Chloroform	11 U	11 U	11 U	14 U
1,2-Dichloroethane	11 U	11 U	11 U	14 U
2-Butanone	11 U	11 U	11 U	14 U
1,1,1-Trichloroethane	11 U	11 U	11 U	14 U
Carbon Tetrachloride	11 U	11 U	11 U	14 U
Bromodichloromethane	11 U	11 U	11 U	14 U
1,2-Dichloropropane	11 UJ	11 UJ	11 UJ	14 UJ
cis-1,3-Dichloropropene	11 U	11 U	11 U	14 U
Trichloroethene	11 U	11 U	11 U	14 U
Dibromochloromethane	11 U	11 U	11 U	14 U
1,1,2-Trichloroethane	11 U	11 U	11 U	14 U
Benzene	11 U	11 U	11 U	14 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	14 U
Bromoform	11 U	11 U	11 U	14 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA4	SBBIA4	SBBIA4	SBBIA4
TtFW Sample I.D.	LV-SBBIA4-15	LV-SBBIA4-30	LV-SBBIA4-40	LV-SBBIA4-50
Sampling Date	07/06/1998	07/06/1998	07/06/1998	07/06/1998
Depth	15'-17'	30'-32'	40'-42'	50'-52'
Units	ug/kg	ug/kg	ug/kg	ug/kg
-Methyl-2-pentanone	11 U	11 U	11 U	14 U
-Hexanone	11 U	11 U	11 U	14 U
etrachloroethene	11 U	11 U	11 U	14 U
,1,2,2-Tetrachloroethane	11 U	11 U	11 U	14 U
oluene	11 U	11 U	11 U	14 U
hlorobenzene	11 U	11 U	11 U	14 U
thylbenzene	11 U	11 U	11 U	14 U
tyrene	11 U	11 U	11 U	14 U
ylenes (total)	11 U	11 U	11 U	14 U
otal Volatile TICs	--	--	--	--

e Table D-1 f bbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA4	SBBIA4	SBBIA5	SBBIA5
TtFW Sample I.D.	LV-SBBIA4-60	LV-SBBIA4-80	LV-SBBIA5-00	LV-SBBIA5-15
Sampling Date	07/07/1998	07/07/1998	07/08/1998	07/08/1998
Depth	60'-62'	80'-82'	0'-2'	15'-17'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	14 U	11 U	12 U	11 U
Bromomethane	14 U	11 U	12 U	11 U
Vinyl chloride	14 U	11 U	12 U	11 U
Chloroethane	14 U	11 U	12 U	11 U
Methylene chloride	14 U	11 U	3 J	11 U
Acetone	14 UJ	11 UJ	12 UJ	11 UJ
Carbon disulfide	14 U	11 U	12 U	11 U
1,1-Dichloroethene	14 U	11 U	12 U	11 U
1,1-Dichloroethane	14 U	11 U	12 U	11 U
1,2-Dichloroethene (total)	14 U	11 U	12 U	11 U
Chloroform	14 U	11 U	12 U	11 U
1,2-Dichloroethane	14 U	11 U	12 U	11 U
2-Butanone	14 U	11 U	12 U	11 U
1,1,1-Trichloroethane	14 U	11 U	12 U	11 U
Carbon Tetrachloride	14 U	11 U	12 U	11 U
Bromodichloromethane	14 U	11 U	12 U	11 U
1,2-Dichloropropane	14 U	11 U	12 U	11 U
cis-1,3-Dichloropropene	14 U	11 U	12 U	11 U
Trichloroethene	14 U	11 U	12 U	11 U
Dibromochloromethane	14 U	11 U	12 U	11 U
1,1,2-Trichloroethane	14 U	11 U	12 U	11 U
Benzene	14 U	11 U	12 U	11 U
trans-1,3-Dichloropropene	14 U	11 U	12 U	11 U
Bromoform	14 U	11 U	12 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA4	SBBIA4	SBBIA5	SBBIA5
TtFW Sample I.D.	LV-SBBIA4-60	LV-SBBIA4-80	LV-SBBIA5-00	LV-SBBIA5-15
Sampling Date	07/07/1998	07/07/1998	07/08/1998	07/08/1998
Depth	60'-62'	80'-82'	0'-2'	15'-17'
Units	ug/kg	ug/kg	ug/kg	ug/kg
-Methyl-2-pentanone	14 U	11 U	12 U	11 U
-Hexanone	14 U	11 U	12 U	11 U
etrachloroethene	14 U	11 U	12 U	11 U
,1,2,2-Tetrachloroethane	14 U	11 U	12 U	11 U
oluene	14 U	11 U	12 U	11 U
hlorobenzene	14 U	11 U	12 U	11 U
thylbenzene	14 U	11 U	12 U	11 U
tyrene	14 U	11 U	12 U	11 U
ylenes (total)	14 U	11 U	12 U	11 U
otal Volatile TICs	--	--	R	--

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA5	SBBIA5	SBBIA5	SBBIA5
TtFW Sample I.D.	LV-SBBIA5-30	LV-SBBIA5-40	LV-SBBIA5-47	LV-SBBIA5-60
Sampling Date	07/08/1998	07/08/1998	07/08/1998	07/08/1998
Depth	30'-32'	40'-42'	47'-49'	60'-62'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	12 U	11 U	11 U
Bromomethane	11 U	12 U	11 U	11 U
Vinyl chloride	11 U	12 U	11 U	11 U
Chloroethane	11 U	12 U	11 U	11 U
Methylene chloride	2 J	12 U	2 J	2 J
Acetone	11 UJ	12 UJ	11 UJ	11 UJ
Carbon disulfide	11 U	12 U	11 U	11 U
1,1-Dichloroethene	11 U	12 U	11 U	11 U
1,1-Dichloroethane	11 U	12 U	11 U	11 U
1,2-Dichloroethene (total)	11 U	12 U	11 U	11 U
Chloroform	11 U	12 U	11 U	11 U
1,2-Dichloroethane	11 U	12 U	11 U	11 U
2-Butanone	11 U	12 U	11 U	11 U
1,1,1-Trichloroethane	11 U	12 U	11 U	11 U
Carbon Tetrachloride	11 U	12 U	11 U	11 U
Bromodichloromethane	11 U	12 U	11 U	11 U
1,2-Dichloropropane	11 U	12 U	11 U	11 U
cis-1,3-Dichloropropene	11 U	12 U	11 U	11 U
Trichloroethene	11 U	12 U	11 U	11 U
Dibromochloromethane	11 U	12 U	11 U	11 U
1,1,2-Trichloroethane	11 U	12 U	11 U	11 U
Benzene	11 U	12 U	11 U	11 U
trans-1,3-Dichloropropene	11 U	12 U	11 U	11 U
Bromoform	11 U	12 U	11 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	SBBIA5	SBBIA5	SBBIA5	SBBIA5
TtFW Sample I.D.	LV-SBBIA5-30	LV-SBBIA5-40	LV-SBBIA5-47	LV-SBBIA5-60
Sampling Date	07/08/1998	07/08/1998	07/08/1998	07/08/1998
Depth	30'-32'	40'-42'	47'-49'	60'-62'
Units	ug/kg	ug/kg	ug/kg	ug/kg
-Methyl-2-pentanone	11 U	12 U	11 U	11 U
-Hexanone	11 U	12 U	11 U	11 U
etrachloroethene	11 U	12 U	11 U	11 U
,1,2,2-Tetrachloroethane	11 U	12 U	11 U	11 U
oluene	11 U	12 U	11 U	11 U
hlorobenzene	11 U	12 U	11 U	11 U
thylbenzene	11 U	12 U	11 U	11 U
tyrene	11 U	12 U	11 U	11 U
ylenes (total)	11 U	12 U	11 U	11 U
otal Volatile TICs	--	R	--	--

e Table D-1 fo bbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SBCCA1	SBCCA1	SBCCA1	SBCCA1
TtFW Sample I.D.	LV-SBCCA1-00	LV-SBCCA1-06	LV-SBCCA1-08	LV-SBCCA1-13
Sampling Date	06/17/1998	06/17/1998	06/17/1998	06/17/1998
Depth	0'-2'	6'-8'	8'-10'	13'-15'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	12 UJ	11 UJ	11 UJ	13 UJ
Bromomethane	12 UJ	11 UJ	11 UJ	13 UJ
Vinyl chloride	12 UJ	11 UJ	11 UJ	13 UJ
Chloroethane	12 UJ	11 UJ	11 UJ	13 UJ
Methylene chloride	12 UJ	11 UJ	11 UJ	13 UJ
Acetone	12 UJ	11 UJ	11 UJ	3 J
Carbon disulfide	12 UJ	11 UJ	11 UJ	13 UJ
1,1-Dichloroethene	12 UJ	11 UJ	11 UJ	13 UJ
1,1-Dichloroethane	12 UJ	11 UJ	11 UJ	13 UJ
1,2-Dichloroethene (total)	12 UJ	11 UJ	11 UJ	13 UJ
Chloroform	12 UJ	11 UJ	11 UJ	13 UJ
1,2-Dichloroethane	12 UJ	11 UJ	11 UJ	13 UJ
2-Butanone	12 UJ	11 UJ	11 UJ	13 UJ
1,1,1-Trichloroethane	12 UJ	11 UJ	11 UJ	13 UJ
Carbon Tetrachloride	12 UJ	11 UJ	11 UJ	13 UJ
Bromodichloromethane	12 UJ	11 UJ	11 UJ	13 UJ
1,2-Dichloropropane	12 UJ	11 UJ	11 UJ	13 UJ
cis-1,3-Dichloropropene	12 UJ	11 UJ	11 UJ	13 UJ
Trichloroethene	12 UJ	11 UJ	11 UJ	13 UJ
Dibromochloromethane	12 UJ	11 UJ	11 UJ	13 UJ
1,1,2-Trichloroethane	12 UJ	11 UJ	11 UJ	13 UJ
Benzene	12 UJ	11 UJ	11 UJ	13 UJ
trans-1,3-Dichloropropene	12 UJ	11 UJ	11 UJ	13 UJ
Bromoform	12 UJ	11 UJ	11 UJ	13 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SBCCA1	SBCCA1	SBCCA1	SBCCA1
TtFW Sample I.D.	LV-SBCCA1-00	LV-SBCCA1-06	LV-SBCCA1-08	LV-SBCCA1-13
Sampling Date	06/17/1998	06/17/1998	06/17/1998	06/17/1998
Depth	0'-2'	6'-8'	8'-10'	13'-15'
Units	ug/kg	ug/kg	ug/kg	ug/kg
-Methyl-2-pentanone	12 UJ	11 UJ	11 UJ	13 UJ
-Hexanone	12 UJ	11 UJ	11 UJ	13 UJ
etrachloroethene	12 UJ	11 UJ	11 UJ	13 UJ
,1,2,2-Tetrachloroethane	12 UJ	11 UJ	11 UJ	13 UJ
oluene	12 UJ	11 UJ	11 UJ	13 UJ
hlorobenzene	12 UJ	11 UJ	11 UJ	13 UJ
thylbenzene	12 UJ	11 UJ	11 UJ	13 UJ
tyrene	12 UJ	11 UJ	11 UJ	13 UJ
ylenes (total)	12 UJ	11 UJ	11 UJ	13 UJ
otal Volatile TICs	R	R	R	--

e Table D-1 f bbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SBCCA1	SBCCA1	SBCCA1	SBCCA1
TtFW Sample I.D.	LV-SBCCA1-18	LV-SBCCA1-23	LV-SBCCA1-28	LV-SBCCA1-30
Sampling Date	06/17/1998	06/17/1998	06/17/1998	06/17/1998
Depth	18'-20'	23'-25'	28'-30'	30'-32'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 UJ	11 UJ	11 UJ	13 UJ
Bromomethane	11 UJ	11 UJ	11 UJ	13 UJ
Vinyl chloride	11 UJ	11 UJ	11 UJ	13 UJ
Chloroethane	11 UJ	11 UJ	11 UJ	13 UJ
Methylene chloride	11 UJ	11 UJ	11 UJ	13 UJ
Acetone	11 UJ	11 UJ	11 UJ	2 J
Carbon disulfide	11 UJ	11 UJ	11 UJ	13 UJ
1,1-Dichloroethene	11 UJ	11 UJ	11 UJ	13 UJ
1,1-Dichloroethane	11 UJ	11 UJ	11 UJ	13 UJ
1,2-Dichloroethene (total)	11 UJ	11 UJ	11 UJ	13 UJ
Chloroform	11 UJ	11 UJ	11 UJ	13 UJ
1,2-Dichloroethane	11 UJ	11 UJ	11 UJ	13 UJ
2-Butanone	11 UJ	11 UJ	11 UJ	13 UJ
1,1,1-Trichloroethane	11 UJ	11 UJ	11 UJ	13 UJ
Carbon Tetrachloride	11 UJ	11 UJ	11 UJ	13 UJ
Bromodichloromethane	11 UJ	11 UJ	11 UJ	13 UJ
1,2-Dichloropropane	11 UJ	11 UJ	11 UJ	13 UJ
cis-1,3-Dichloropropene	11 UJ	11 UJ	11 UJ	13 UJ
Trichloroethene	11 UJ	11 UJ	3 J	4 J
Dibromochloromethane	11 UJ	11 UJ	11 UJ	13 UJ
1,1,2-Trichloroethane	11 UJ	11 UJ	11 UJ	13 UJ
Benzene	11 UJ	11 UJ	11 UJ	13 UJ
trans-1,3-Dichloropropene	11 UJ	11 UJ	11 UJ	13 UJ
Bromoform	11 UJ	11 UJ	11 UJ	13 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SBCCA1	SBCCA1	SBCCA1	SBCCA1
TtFW Sample I.D.	LV-SBCCA1-18	LV-SBCCA1-23	LV-SBCCA1-28	LV-SBCCA1-30
Sampling Date	06/17/1998	06/17/1998	06/17/1998	06/17/1998
Depth	18'-20'	23'-25'	28'-30'	30'-32'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	11 UJ	11 UJ	11 UJ	13 UJ
2-Hexanone	11 UJ	11 UJ	11 UJ	13 UJ
Tetrachloroethene	11 UJ	11 UJ	11 UJ	13 UJ
1,1,2,2-Tetrachloroethane	11 UJ	11 UJ	11 UJ	13 UJ
Toluene	11 UJ	11 UJ	11 UJ	13 UJ
Chlorobenzene	11 UJ	11 UJ	11 UJ	13 UJ
Ethylbenzene	11 UJ	11 UJ	11 UJ	13 UJ
Styrene	11 UJ	11 UJ	11 UJ	13 UJ
Xylenes (total)	11 UJ	11 UJ	11 UJ	13 UJ
Total Volatile TICs	R	R	--	--

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SBCCA1	SBCCA2	SBCCA2	SBCCA2
TtFW Sample I.D.	LV-SBCCA1-35	LV-SBCCA2-00	LV-SBCCA2-06	LV-SBCCA2-10
Sampling Date	06/18/1998	06/16/1998	06/16/1998	06/16/1998
Depth	35'-37'	0'-2'	6'-8'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	12 UJ	16 UJ	12 U	11 U
Bromomethane	12 UJ	16 UJ	12 U	11 U
Vinyl chloride	12 UJ	16 UJ	12 U	11 U
Chloroethane	12 UJ	16 UJ	12 U	11 U
Methylene chloride	12 UJ	16 UJ	12 U	11 U
Acetone	4 J	16 UJ	16 UJ	12 UJ
Carbon disulfide	12 UJ	16 UJ	12 U	11 U
1,1-Dichloroethene	12 UJ	16 UJ	12 U	11 U
1,1-Dichloroethane	12 UJ	16 UJ	12 U	11 U
1,2-Dichloroethene (total)	12 UJ	16 UJ	12 U	11 U
Chloroform	12 UJ	16 UJ	12 U	11 U
1,2-Dichloroethane	12 UJ	16 UJ	12 U	11 U
2-Butanone	12 UJ	16 UJ	12 U	11 U
1,1,1-Trichloroethane	12 UJ	16 UJ	12 U	11 U
Carbon Tetrachloride	12 UJ	16 UJ	12 U	11 U
Bromodichloromethane	12 UJ	16 UJ	12 U	11 U
1,2-Dichloropropane	12 UJ	16 UJ	12 U	11 U
cis-1,3-Dichloropropene	12 UJ	16 UJ	12 U	11 U
Trichloroethene	11 J	16 UJ	12 U	11 U
Dibromochloromethane	12 UJ	16 UJ	12 U	11 U
1,1,2-Trichloroethane	12 UJ	16 UJ	12 U	11 U
Benzene	12 UJ	16 UJ	12 U	11 U
trans-1,3-Dichloropropene	12 UJ	16 UJ	12 U	11 U
Bromoform	12 UJ	16 UJ	12 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SBCCA1	SBCCA2	SBCCA2	SBCCA2
TtFW Sample I.D.	LV-SBCCA1-35	LV-SBCCA2-00	LV-SBCCA2-06	LV-SBCCA2-10
Sampling Date	06/18/1998	06/16/1998	06/16/1998	06/16/1998
Depth	35'-37'	0'-2'	6'-8'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
-Methyl-2-pentanone	12 UJ	16 UJ	12 U	11 U
-Hexanone	12 UJ	16 UJ	12 U	11 U
etrachloroethene	12 UJ	16 UJ	12 U	11 U
,1,2,2-Tetrachloroethane	12 UJ	16 UJ	12 U	11 U
oluene	12 UJ	16 UJ	12 U	11 U
hlorobenzene	12 UJ	16 UJ	12 U	11 U
thylbenzene	12 UJ	16 UJ	12 U	11 U
tyrene	12 UJ	16 UJ	12 U	11 U
ylenes (total)	12 UJ	16 UJ	12 U	11 U
otal Volatile TICs	R	R	--	--

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SBCCA2	SBCCA2	SBCCA2	SBCCA2
TtFW Sample I.D.	LV-SBCCA2-12	LV-SBCCA2-14	LV-SBCCA2-16	LV-SBCCA2-18
Sampling Date	06/16/1998	06/16/1998	06/16/1998	06/16/1998
Depth	12'-14'	14'-16'	16'-18'	18'-20'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 UJ	11 U	11 U	11 UJ
Bromomethane	11 U	11 U	11 U	11 UJ
Vinyl chloride	11 U	11 U	11 U	11 UJ
Chloroethane	11 U	11 U	11 U	11 UJ
Methylene chloride	11 U	11 U	11 U	11 UJ
Acetone	11 U	11 U	11 UJ	11 UJ
Carbon disulfide	11 U	11 U	11 U	11 UJ
1,1-Dichloroethene	11 U	11 U	11 U	11 UJ
1,1-Dichloroethane	11 U	11 U	11 U	11 UJ
1,2-Dichloroethene (total)	11 U	11 U	11 U	11 UJ
Chloroform	11 U	11 U	11 U	11 UJ
1,2-Dichloroethane	11 U	11 U	11 U	11 UJ
2-Butanone	11 U	11 U	11 U	11 UJ
1,1,1-Trichloroethane	11 U	11 U	11 U	11 UJ
Carbon Tetrachloride	11 U	11 U	11 U	11 UJ
Bromodichloromethane	11 U	11 U	11 U	11 UJ
1,2-Dichloropropane	11 U	11 U	11 U	11 UJ
cis-1,3-Dichloropropene	11 U	11 U	11 U	11 UJ
Trichloroethene	7 J	10 J	11 U	7 J
Dibromochloromethane	11 U	11 U	11 U	11 UJ
1,1,2-Trichloroethane	11 U	11 U	11 U	11 UJ
Benzene	11 U	11 U	11 U	11 UJ
trans-1,3-Dichloropropene	11 U	11 U	11 U	11 UJ
Bromoform	11 U	11 U	11 U	11 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SBCCA2	SBCCA2	SBCCA2	SBCCA2
TtFW Sample I.D.	LV-SBCCA2-12	LV-SBCCA2-14	LV-SBCCA2-16	LV-SBCCA2-18
Sampling Date	06/16/1998	06/16/1998	06/16/1998	06/16/1998
Depth	12'-14'	14'-16'	16'-18'	18'-20'
Units	ug/kg	ug/kg	ug/kg	ug/kg
-Methyl-2-pentanone	11 U	11 U	11 U	11 UJ
-Hexanone	11 U	11 U	11 U	11 UJ
etrachloroethene	3 J	2 J	11 U	2 J
,1,2,2-Tetrachloroethane	11 U	11 U	11 U	11 UJ
oluene	11 U	11 U	1 J	11 UJ
hlorobenzene	11 U	11 U	11 U	11 UJ
thylbenzene	11 U	11 U	11 U	11 UJ
tyrene	11 U	11 U	11 U	11 UJ
ylenes (total)	11 U	11 U	11 U	11 UJ
otal Volatile TICs	R	--	--	R

e Table D-1 f bbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SBCCA2	SBCCA2	SBCCA2	SBCCA2
TtFW Sample I.D.	LV-SBCCA2-20	LV-SBCCA2-30	LV-SBCCA2-32	LV-SBCCA2-38
Sampling Date	06/16/1998	06/16/1998	06/16/98	06/16/1998
Depth	20'-22'	30'-32'	32'-34'	38'-40'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	12 U	11 UJ
Bromomethane	11 U	11 U	12 U	11 U
Vinyl chloride	11 U	11 U	12 U	11 U
Chloroethane	11 U	11 U	12 U	11 U
Methylene chloride	11 U	11 U	12 U	11 U
Acetone	16 UJ	12 UJ	12 U	11 U
Carbon disulfide	11 U	11 U	12 U	11 U
1,1-Dichloroethene	11 U	11 U	12 U	11 U
1,1-Dichloroethane	11 U	11 U	12 U	11 U
1,2-Dichloroethene (total)	11 U	11 U	12 U	11 U
Chloroform	11 U	11 U	12 U	11 U
1,2-Dichloroethane	11 U	11 U	12 U	11 U
2-Butanone	11 U	11 U	12 U	11 U
1,1,1-Trichloroethane	11 U	11 U	12 U	11 U
Carbon Tetrachloride	11 U	11 U	12 U	11 U
Bromodichloromethane	11 U	11 U	12 U	11 U
1,2-Dichloropropane	11 U	11 U	12 U	11 U
cis-1,3-Dichloropropene	11 U	11 U	12 U	11 U
Trichloroethene	9 J	11 U	12 U	11 U
Dibromochloromethane	11 U	11 U	12 U	11 U
1,1,2-Trichloroethane	11 U	11 U	12 U	11 U
Benzene	1 J	11 U	12 U	11 U
trans-1,3-Dichloropropene	11 U	11 U	12 U	11 U
Bromoform	11 U	11 U	12 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SBCCA2	SBCCA2	SBCCA2	SBCCA2
TtFW Sample I.D.	LV-SBCCA2-20	LV-SBCCA2-30	LV-SBCCA2-32	LV-SBCCA2-38
Sampling Date	06/16/1998	06/16/1998	06/16/98	06/16/1998
Depth	20'-22'	30'-32'	32'-34'	38'-40'
Units	ug/kg	ug/kg	ug/kg	ug/kg
-Methyl-2-pentanone	11 U	11 U	12 U	11 U
-Hexanone	11 U	11 U	12 U	11 U
etrachloroethene	2 J	11 U	12 U	11 U
,1,2,2-Tetrachloroethane	11 U	11 U	12 U	11 U
oluene	2 J	11 U	12 U	11 U
hlorobenzene	11 U	11 U	12 U	11 U
thylbenzene	11 U	11 U	12 U	11 U
tyrene	11 U	11 U	12 U	11 U
ylenes (total)	11 U	11 U	12 U	11 U
otal Volatile TICs	--	--	--	--

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SBCCA3	SBCCA3	SBCCA3	SBCCA3
TtFW Sample I.D.	LV-SBCCA3-00	LV-SBCCA3-02	LV-SBCCA3-13	LV-SBCCA3-18
Sampling Date	07/01/1998	07/01/1998	07/01/1998	07/01/1998
Depth	0'-2'	2'-4'	13'-15'	18'-20'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	12 U	13 U	11 U	11 U
Bromomethane	12 U	13 U	11 U	11 U
Vinyl chloride	12 U	13 U	11 U	11 U
Chloroethane	12 U	13 U	11 U	11 U
Methylene chloride	12 U	13 U	11 U	11 U
Acetone	12 U	13 U	11 U	11 U
Carbon disulfide	12 UJ	13 UJ	11 UJ	11 UJ
1,1-Dichloroethene	12 U	13 U	11 U	11 U
1,1-Dichloroethane	12 U	13 U	11 U	11 U
1,2-Dichloroethene (total)	12 U	13 U	3 J	11 U
Chloroform	12 U	13 U	11 U	11 U
1,2-Dichloroethane	12 U	13 U	11 U	11 U
2-Butanone	12 U	13 U	11 U	11 U
1,1,1-Trichloroethane	12 U	13 U	11 U	11 U
Carbon Tetrachloride	12 UJ	13 UJ	11 UJ	11 UJ
Bromodichloromethane	12 U	13 U	11 U	11 U
1,2-Dichloropropane	12 U	13 U	11 U	11 U
cis-1,3-Dichloropropene	12 U	13 U	11 U	11 U
Trichloroethene	18	13 U	70	28
Dibromochloromethane	12 U	13 U	11 U	11 U
1,1,2-Trichloroethane	12 U	13 U	11 U	11 U
Benzene	12 U	13 U	11 U	11 U
trans-1,3-Dichloropropene	12 U	13 U	11 U	11 U
Bromoform	12 U	13 U	11 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SBCCA3	SBCCA3	SBCCA3	SBCCA3
TtFW Sample I.D.	LV-SBCCA3-00	LV-SBCCA3-02	LV-SBCCA3-13	LV-SBCCA3-18
Sampling Date	07/01/1998	07/01/1998	07/01/1998	07/01/1998
Depth	0'-2'	2'-4'	13'-15'	18'-20'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Methyl-2-pentanone	12 U	13 U	11 U	11 U
Hexanone	12 UJ	13 UJ	11 UJ	11 UJ
etrachloroethene	12 U	13 U	1 J	11 U
1,2,2-Tetrachloroethane	12 U	13 U	11 U	11 U
oluene	12 U	13 U	11 U	11 U
hlorobenzene	12 U	13 U	11 U	11 U
thylbenzene	12 U	13 U	11 U	11 U
tyrene	12 U	13 U	11 U	11 U
ylenes (total)	12 U	13 U	11 U	11 U
otal Volatile TICs	--	--	--	--

e Table D-1 f bbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	King Window Area
Location	SBCCA3	SBCCA3	SBCCA3	SBKWA1
TtFW Sample I.D.	LV-SBCCA3-23	LV-SBCCA3-28	LV-SBCCA3-40	LV-SBKWA1-00
Sampling Date	07/01/1998	07/01/1998	07/02/1998	06/12/1998
Depth	23'-25'	28'-30'	40'-42'	0'-2'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	11 U	13 U
Bromomethane	11 U	11 U	11 U	13 U
Vinyl chloride	11 U	11 U	11 U	13 U
Chloroethane	11 U	11 U	11 U	13 UJ
Methylene chloride	11 U	11 U	11 U	2 J
Acetone	11 U	11 U	11 U	50 UJ
Carbon disulfide	11 UJ	11 UJ	11 UJ	13 U
1,1-Dichloroethene	11 U	11 U	11 U	13 U
1,1-Dichloroethane	11 U	11 U	11 U	13 U
1,2-Dichloroethene (total)	11 U	11 U	11 U	13 U
Chloroform	11 U	11 U	11 U	13 U
1,2-Dichloroethane	11 U	11 U	11 U	13 U
2-Butanone	11 U	11 U	11 U	13 UJ
1,1,1-Trichloroethane	11 U	11 U	11 U	13 U
Carbon Tetrachloride	11 UJ	11 UJ	11 UJ	13 U
Bromodichloromethane	11 U	11 U	11 U	13 U
1,2-Dichloropropane	11 U	11 U	11 U	13 U
cis-1,3-Dichloropropene	11 U	11 U	11 U	13 U
Trichloroethene	45	23	2 J	13 U
Dibromochloromethane	11 U	11 U	11 U	13 U
1,1,2-Trichloroethane	11 U	11 U	11 U	13 U
Benzene	11 U	11 U	11 U	13 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	13 U
Bromoform	11 U	11 U	11 U	13 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	King Window Area
Location	SBCCA3	SBCCA3	SBCCA3	SBKWA1
TtFW Sample I.D.	LV-SBCCA3-23	LV-SBCCA3-28	LV-SBCCA3-40	LV-SBKWA1-00
Sampling Date	07/01/1998	07/01/1998	07/02/1998	06/12/1998
Depth	23'-25'	28'-30'	40'-42'	0'-2'
Units	ug/kg	ug/kg	ug/kg	ug/kg
-Methyl-2-pentanone	11 U	11 U	11 U	13 UJ
-Hexanone	11 UJ	11 UJ	11 UJ	13 UJ
etrachloroethene	2 J	11 U	11 U	13 U
,1,2,2-Tetrachloroethane	11 U	11 U	11 U	13 UJ
oluene	11 U	11 U	11 U	2 J
hlorobenzene	11 U	11 U	11 U	13 U
thylbenzene	11 U	11 U	11 U	13 U
tyrene	11 U	11 U	11 U	13 U
ylenes (total)	11 U	11 U	11 U	13 U
otal Volatile TICs	--	--	--	--

e Table D-1 f bbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	King Window Area	King Window Area	King Window Area	King Window Area
Location	SBKWA1	SBKWA1	SBKWA1	SBKWA1
TtFW Sample I.D.	LV-SBKWA1-10	LV-SBKWA1-11 Duplicate of SBKWA1-10	LV-SBKWA1-18	LV-SBKWA1-24
Sampling Date	06/12/1998	06/12/1998	06/12/1998	06/12/1998
Depth	10'-12'	10'-12'	18'-20'	24'-26'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	11 U	11 U
Bromomethane	11 U	11 U	11 U	11 U
Vinyl chloride	11 U	11 U	11 U	11 U
Chloroethane	11 UJ	11 UJ	11 UJ	11 UJ
Methylene chloride	1 J	1 J	1 J	1 J
Acetone	27 UJ	20 UJ	15 UJ	22 UJ
Carbon disulfide	11 U	11 U	11 U	11 U
1,1-Dichloroethene	11 U	11 U	11 U	11 U
1,1-Dichloroethane	11 U	11 U	11 U	11 U
1,2-Dichloroethene (total)	11 U	11 U	11 U	11 U
Chloroform	11 U	11 U	11 U	11 U
1,2-Dichloroethane	11 U	11 U	11 U	11 U
2-Butanone	5 J	11 UJ	6 J	5 J
1,1,1-Trichloroethane	11 U	11 U	11 U	11 U
Carbon Tetrachloride	11 U	11 U	11 U	11 U
Bromodichloromethane	11 U	11 U	11 U	11 U
1,2-Dichloropropane	11 U	11 U	11 U	11 U
cis-1,3-Dichloropropene	11 U	11 U	11 U	11 U
Trichloroethene	11 U	11 U	11 U	11 U
Dibromochloromethane	11 U	11 U	11 U	11 U
1,1,2-Trichloroethane	11 U	11 U	11 U	11 U
Benzene	11 U	11 U	11 U	11 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	11 U
Bromoform	11 U	11 U	11 U	11 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	King Window Area	King Window Area	King Window Area	King Window Area
Location	SBKWA1	SBKWA1	SBKWA1	SBKWA1
TtFW Sample I.D.	LV-SBKWA1-10	LV-SBKWA1-11 Duplicate of SBKWA1-10	LV-SBKWA1-18	LV-SBKWA1-24
Sampling Date	06/12/1998	06/12/1998	06/12/1998	06/12/1998
Depth	10'-12'	10'-12'	18'-20'	24'-26'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Methyl-2-pentanone	11 UJ	11 UJ	11 UJ	11 UJ
Hexanone	11 UJ	11 UJ	11 UJ	11 UJ
etrachloroethene	11 U	11 U	11 U	11 U
,1,2,2-Tetrachloroethane	11 UJ	11 UJ	11 UJ	11 UJ
oluene	11 U	11 U	11 U	11 U
hlorobenzene	11 U	11 U	11 U	11 U
thylbenzene	11 U	11 U	11 U	11 U
tyrene	11 U	11 U	11 U	11 U
ylenes (total)	11 U	11 U	11 U	11 U
otal Volatile TICs	--	--	--	--

e Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	King Window Area	King Window Area	First Street Area	First Street Area
Location	SBKWA1	SBKWA1	SB1ST1	SB1ST1
TtFW Sample I.D.	LV-SBKWA1-28	LV-SBKWA1-30	LV-SB1ST1-00	LV-SB1ST1-08
Sampling Date	06/15/1998	06/15/1998	06/09/1998	06/09/1998
Depth	28'-30'	30'-32'	0'-2'	8'-10'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 UJ	12 UJ	11 UJ
Bromomethane	11 U	11 UJ	12 UJ	11 UJ
Vinyl chloride	11 U	11 UJ	12 U	11 U
Chloroethane	11 U	11 UJ	12 U	11 U
Methylene chloride	11 U	11 UJ	12 U	11 U
Acetone	13 UJ	11 UJ	12 UJ	11 UJ
Carbon disulfide	11 U	11 UJ	12 U	11 U
1,1-Dichloroethene	11 U	11 UJ	12 U	11 U
1,1-Dichloroethane	11 U	11 UJ	12 U	11 U
1,2-Dichloroethene (total)	11 U	11 UJ	12 U	11 U
Chloroform	11 U	11 UJ	12 U	11 U
1,2-Dichloroethane	11 U	11 UJ	12 U	11 U
2-Butanone	11 U	11 UJ	12 UJ	11 UJ
1,1,1-Trichloroethane	11 U	11 UJ	12 U	11 U
Carbon Tetrachloride	11 U	11 UJ	12 U	11 U
Bromodichloromethane	11 U	11 UJ	12 U	11 U
1,2-Dichloropropane	11 U	11 UJ	12 U	11 U
cis-1,3-Dichloropropene	11 U	11 UJ	12 U	11 U
Trichloroethene	11 U	11 UJ	12 U	11 U
Dibromochloromethane	11 U	11 UJ	12 U	11 U
1,1,2-Trichloroethane	11 U	11 UJ	12 U	11 U
Benzene	11 U	11 UJ	12 U	11 U
trans-1,3-Dichloropropene	11 U	11 UJ	12 U	11 U
Bromoform	11 U	11 UJ	12 U	11 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	King Window Area	King Window Area	First Street Area	First Street Area
Location	SBKWA1	SBKWA1	SB1ST1	SB1ST1
TtFW Sample I.D.	LV-SBKWA1-28	LV-SBKWA1-30	LV-SB1ST1-00	LV-SB1ST1-08
Sampling Date	06/15/1998	06/15/1998	06/09/1998	06/09/1998
Depth	28'-30'	30'-32'	0'-2'	8'-10'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Methyl-2-pentanone	11 U	11 UJ	12 UJ	11 UJ
Hexanone	11 U	11 UJ	12 UJ	11 UJ
etrachloroethene	11 U	11 UJ	12 U	11 U
1,2,2-Tetrachloroethane	11 U	11 UJ	12 U	11 U
oluene	11 U	11 UJ	12 U	11 U
hlorobenzene	11 U	11 UJ	12 U	11 U
thylbenzene	11 U	11 UJ	12 U	11 U
tyrene	11 U	11 UJ	12 U	11 U
ylenes (total)	11 U	11 UJ	12 U	11 U
otal Volatile TICs	--	R	--	--

e Table D-1 f[illegible]bbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	First Street Area	First Street Area	First Street Area	First Street Area
Location	SB1ST1	SB1ST1	SB1ST1	SB1ST1
TtFW Sample I.D.	LV-SB1ST1-14	LV-SB1ST1-25	LV-SB1ST1-26 Duplicate of SB1ST1-25	LV-SB1ST1-45
Sampling Date	06/09/1998	06/10/1998	06/10/1998	06/11/1998
Depth	14'-16'	25'-27'	25'-27'	45'-47'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 UJ	11 UJ	11 U	12 U
Bromomethane	11 UJ	11 UJ	11 U	12 U
Vinyl chloride	11 U	11 U	11 U	12 U
Chloroethane	11 U	11 U	11 UJ	12 UJ
Methylene chloride	11 U	11 U	1 J	1 J
Acetone	11 UJ	11 UJ	21 UJ	22 UJ
Carbon disulfide	11 U	11 U	11 U	12 U
1,1-Dichloroethene	11 U	11 U	11 U	12 U
1,1-Dichloroethane	11 U	11 U	11 U	12 U
1,2-Dichloroethene (total)	11 U	11 U	11 U	12 U
Chloroform	11 U	11 U	11 U	12 U
1,2-Dichloroethane	11 U	11 U	11 U	12 U
2-Butanone	11 UJ	11 UJ	5 J	5 J
1,1,1-Trichloroethane	11 U	11 U	11 U	12 U
Carbon Tetrachloride	11 U	11 U	11 U	12 U
Bromodichloromethane	11 U	11 U	11 U	12 U
1,2-Dichloropropane	11 U	11 U	11 U	12 U
cis-1,3-Dichloropropene	11 U	11 U	11 U	12 U
Trichloroethene	11 U	11 U	11 U	12 U
Dibromochloromethane	11 U	11 U	11 U	12 U
1,1,2-Trichloroethane	11 U	11 U	11 U	12 U
Benzene	11 U	11 U	11 U	12 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	12 U
Bromoform	11 U	11 U	11 U	12 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	First Street Area	First Street Area	First Street Area	First Street Area
Location	SB1ST1	SB1ST1	SB1ST1	SB1ST1
TtFW Sample I.D.	LV-SB1ST1-14	LV-SB1ST1-25	LV-SB1ST1-26 Duplicate of SB1ST1-25	LV-SB1ST1-45
Sampling Date	06/09/1998	06/10/1998	06/10/1998	06/11/1998
Depth	14'-16'	25'-27'	25'-27'	45'-47'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Methyl-2-pentanone	11 UJ	11 UJ	11 UJ	12 UJ
Hexanone	11 UJ	11 UJ	11 UJ	12 UJ
etrachloroethene	11 U	11 U	11 U	12 U
1,2,2-Tetrachloroethane	11 U	11 U	11 UJ	12 UJ
oluene	11 U	11 U	0.4 J	12 UJ
hlorobenzene	11 U	11 U	11 U	12 U
thylbenzene	11 U	11 U	11 U	12 U
tyrene	11 U	11 U	11 U	12 U
ylenes (total)	11 U	11 U	11 U	12 U
otal Volatile TICs	--	--	--	--

e Table D-1 f[illegible]bbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Great Triangle Area
Location	SBGTA1	SBGTA1	SBGTA1	SBGTA1
TtFW Sample I.D.	LV-SBGTA1-00	LV-SBGTA1-08	LV-SBGTA1-19	LV-SBGTA1-29
Sampling Date	06/29/1998	06/29/1998	06/30/1998	06/30/1998
Depth	0'-2'	8'-10'	19'-21'	29'-31'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	11 U	11 U
Bromomethane	11 UJ	11 UJ	11 U	11 U
Vinyl chloride	11 U	11 U	11 U	11 U
Chloroethane	11 U	11 U	11 U	11 U
Methylene chloride	21 U	19 U	11 U	11 U
Acetone	11 UJ	11 UJ	11 UJ	11 UJ
Carbon disulfide	11 U	11 U	11 U	11 U
1,1-Dichloroethene	11 U	11 U	11 U	11 U
1,1-Dichloroethane	11 U	11 U	11 U	11 U
1,2-Dichloroethene (total)	11 U	11 U	11 U	11 U
Chloroform	11 U	11 U	11 U	11 U
1,2-Dichloroethane	11 U	11 U	11 U	11 U
2-Butanone	11 UJ	11 UJ	11 U	11 U
1,1,1-Trichloroethane	11 U	11 U	11 U	11 U
Carbon Tetrachloride	11 U	11 U	11 U	11 U
Bromodichloromethane	11 U	11 U	11 U	11 U
1,2-Dichloropropane	11 U	11 U	11 U	11 U
cis-1,3-Dichloropropene	11 U	11 U	11 U	11 U
Trichloroethene	11 U	11 U	11 UJ	1 J
Dibromochloromethane	11 U	11 U	11 U	11 U
1,1,2-Trichloroethane	11 U	11 U	11 U	11 U
Benzene	11 U	11 U	11 U	11 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	11 U
Bromoform	11 U	11 U	11 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Great Triangle Area
Location	SBGTA1	SBGTA1	SBGTA1	SBGTA1
TtFW Sample I.D.	LV-SBGTA1-00	LV-SBGTA1-08	LV-SBGTA1-19	LV-SBGTA1-29
Sampling Date	06/29/1998	06/29/1998	06/30/1998	06/30/1998
Depth	0'-2'	8'-10'	19'-21'	29'-31'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Methyl-2-pentanone	11 UJ	11 UJ	11 U	11 U
Hexanone	11 UJ	11 UJ	11 U	11 U
trachloroethene	11 U	11 U	11 U	11 U
1,2,2-Tetrachloroethane	11 UJ	11 UJ	11 U	11 U
luene	2 J	11 U	11 U	11 U
hlorobenzene	11 U	11 U	11 U	11 U
thylbenzene	11 U	11 U	11 U	11 U
yrene	11 U	11 U	11 U	11 U
/lenes (total)	11 U	11 U	11 U	11 U
otal Volatile TICs	--	--	--	--

e Table D-1 fo bbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Great Triangle Area
Location	SBGTA1	SBGTA1	SBGTA1	SBGTA1
TtFW Sample I.D.	LV-SBGTA1-49	LV-SBGTA1-69	LV-SBGTA1-74	LV-SBGTA1-79
Sampling Date	06/30/1998	07/01/1998	07/01/1998	07/01/1998
Depth	49'-51'	69'-71'	74'-76'	79'-81'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	11 U	12 U
Bromomethane	11 U	11 U	11 U	12 U
Vinyl chloride	11 U	11 U	11 U	12 U
Chloroethane	11 U	11 U	11 U	12 U
Methylene chloride	11 U	11 U	11 U	12 U
Acetone	11 U	11 U	11 U	12 U
Carbon disulfide	11 UJ	11 UJ	11 UJ	12 UJ
1,1-Dichloroethene	11 U	11 U	11 U	12 U
1,1-Dichloroethane	11 U	11 U	11 U	12 U
1,2-Dichloroethene (total)	11 U	11 U	11 U	12 U
Chloroform	11 U	11 U	11 U	12 U
1,2-Dichloroethane	11 U	11 U	11 U	12 U
2-Butanone	11 U	11 U	11 U	12 U
1,1,1-Trichloroethane	11 U	11 U	11 U	12 U
Carbon Tetrachloride	11 UJ	11 UJ	11 UJ	12 UJ
Bromodichloromethane	11 U	11 U	11 U	12 U
1,2-Dichloropropane	11 U	11 U	11 U	12 U
cis-1,3-Dichloropropene	11 U	11 U	11 U	12 U
Trichloroethene	11 U	3 J	11 U	12 U
Dibromochloromethane	11 U	11 U	11 U	12 U
1,1,2-Trichloroethane	11 U	11 U	11 U	12 U
Benzene	11 U	11 U	11 U	12 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	12 U
Bromoform	11 U	11 U	11 U	12 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Great Triangle Area
Location	SBGTA1	SBGTA1	SBGTA1	SBGTA1
TtFW Sample I.D.	LV-SBGTA1-49	LV-SBGTA1-69	LV-SBGTA1-74	LV-SBGTA1-79
Sampling Date	06/30/1998	07/01/1998	07/01/1998	07/01/1998
Depth	49'-51'	69'-71'	74'-76'	79'-81'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Methyl-2-pentanone	11 U	11 U	11 U	12 UJ
Hexanone	11 UJ	11 UJ	11 UJ	12 U
trachloroethene	11 U	11 U	11 U	12 U
1,2,2-Tetrachloroethane	11 U	11 U	11 U	12 U
luene	11 U	11 U	11 U	12 U
lorobenzene	11 U	11 U	11 U	12 U
hylbenzene	11 U	11 U	11 U	12 U
yrene	11 U	11 U	11 U	12 U
lenes (total)	11 U	11 U	11 U	12 U
tal Volatile TICs	--	--	--	--

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Great Triangle Area
Location	SBGTA1	SBGTA1	SBGTA1	SBGTA2
TtFW Sample I.D.	LV-SBGTA1-84	LV-SBGTA1-94	LV-SBGTA1-99	LV-SBGTA2-00
Sampling Date	07/01/1998	07/01/1998	07/02/1998	06/25/98
Depth	84'-86'	94'-96'	99'-101'	0'-2'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	11 U	11 U
Bromomethane	11 U	11 U	11 U	11 U
Vinyl chloride	11 U	11 U	11 U	11 U
Chloroethane	11 U	11 U	11 U	11 U
Methylene chloride	11 U	11 U	11 U	5 J
Acetone	11 U	11 U	11 U	11 U
Carbon disulfide	11 UJ	11 UJ	11 UJ	11 U
1,1-Dichloroethene	11 U	11 U	11 U	11 U
1,1-Dichloroethane	11 U	11 U	11 U	11 U
1,2-Dichloroethene (total)	11 U	11 U	11 U	11 U
Chloroform	11 U	11 U	11 U	11 U
1,2-Dichloroethane	11 U	11 U	11 U	11 U
2-Butanone	11 U	11 U	11 U	11 U
1,1,1-Trichloroethane	11 U	11 U	11 U	11 U
Carbon Tetrachloride	11 UJ	11 UJ	11 UJ	11 U
Bromodichloromethane	11 U	11 U	11 U	11 U
1,2-Dichloropropane	11 U	11 U	11 U	11 U
cis-1,3-Dichloropropene	11 U	11 U	11 U	11 U
Trichloroethene	11 U	11 U	11 U	11 U
Dibromochloromethane	11 U	11 U	11 U	11 U
1,1,2-Trichloroethane	11 U	11 U	11 U	11 U
Benzene	11 U	11 U	11 U	11 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	11 U
Bromoform	11 U	11 U	11 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Great Triangle Area
Location	SBGTA1	SBGTA1	SBGTA1	SBGTA2
TtFW Sample I.D.	LV-SBGTA1-84	LV-SBGTA1-94	LV-SBGTA1-99	LV-SBGTA2-00
Sampling Date	07/01/1998	07/01/1998	07/02/1998	06/25/98
Depth	84'-86'	94'-96'	99'-101'	0'-2'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Methyl-2-pentanone	11 U	11 U	11 U	11 UJ
Hexanone	11 UJ	11 UJ	11 UJ	11 UJ
etrachloroethene	11 U	11 U	11 U	11 U
1,2,2-Tetrachloroethane	11 U	11 U	11 U	11 U
oluene	11 U	11 U	11 U	1 J
nlorobenzene	11 U	11 U	11 U	11 U
hylbenzene	11 U	11 U	11 U	11 U
tyrene	11 U	11 U	11 U	11 U
ylenes (total)	11 U	11 U	11 U	11 U
otal Volatile TICs	--	--	--	22 J

e Table D-1 fo bbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Great Triangle Area
Location	SBGTA2	SBGTA2	SBGTA2	SBGTA2
TtFW Sample I.D.	LV-SBGTA2-08	LV-SBGTA2-22	LV-SBGTA2-30	LV-SBGTA2-35
Sampling Date	06/25/1998	06/25/1998	06/25/1998	06/25/1998
Depth	8'-10'	22'-24'	30'-32'	35'-37'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	11 U	11 U
Bromomethane	11 U	11 U	11 U	11 U
Vinyl chloride	11 U	11 U	11 U	11 U
Chloroethane	11 U	11 U	11 U	11 U
Methylene chloride	4 J	3 J	3 J	4 J
Acetone	11 U	11 U	11 U	11 U
Carbon disulfide	11 U	11 U	11 U	11 U
1,1-Dichloroethene	11 U	11 U	11 U	11 U
1,1-Dichloroethane	11 U	11 U	11 U	11 U
1,2-Dichloroethene (total)	11 U	11 U	11 U	11 U
Chloroform	11 U	11 U	11 U	11 U
1,2-Dichloroethane	11 U	11 U	11 U	11 U
2-Butanone	11 U	11 U	11 U	11 U
1,1,1-Trichloroethane	11 U	11 U	11 U	11 U
Carbon Tetrachloride	11 U	11 U	11 U	11 U
Bromodichloromethane	11 U	11 U	11 U	11 U
1,2-Dichloropropane	11 U	11 U	11 U	11 U
cis-1,3-Dichloropropene	11 U	11 U	11 U	11 U
Trichloroethene	11 U	11 U	11 U	11 U
Dibromochloromethane	11 U	11 U	11 U	11 U
1,1,2-Trichloroethane	11 U	11 U	11 U	11 U
Benzene	11 U	11 U	11 U	11 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	11 U
Bromoform	11 U	11 U	11 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Great Triangle Area
Location	SBGTA2	SBGTA2	SBGTA2	SBGTA2
TtFW Sample I.D.	LV-SBGTA2-08	LV-SBGTA2-22	LV-SBGTA2-30	LV-SBGTA2-35
Sampling Date	06/25/1998	06/25/1998	06/25/1998	06/25/1998
Depth	8'-10'	22'-24'	30'-32'	35'-37'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Methyl-2-pentanone	11 UJ	11 UJ	11 UJ	11 UJ
Hexanone	11 UJ	11 UJ	11 UJ	11 UJ
trachloroethene	11 U	11 U	11 U	11 U
1,2,2-Tetrachloroethane	11 U	11 U	11 U	11 U
luene	11 U	11 U	11 U	11 U
lorobenzene	11 U	11 U	11 U	11 U
hylbenzene	11 U	11 U	11 U	11 U
yrene	11 U	11 U	11 U	11 U
lenes (total)	11 U	11 U	11 U	11 U
tal Volatile TICs	--	--	--	14 J

Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Whig Street Area	Whig Street Area	Whig Street Area	Whig Street Area
Location	SBWSA1	SBWSA1	SBWSA1	SBWSA1
TtFW Sample I.D.	LV-SBWSA1-00	LV-SBWSA1-01 Duplicate of SBWSA1-00	LV-SBWSA1-08	LV-SBWSA1-20
Sampling Date	06/29/1998	06/29/1998	06/29/1998	06/29/1998
Depth	0'-2'	0'-2'	8'-10'	20'-22'
Units	ug/kg	ug/kg	ug/kg	ug/kg
hloromethane	11 U	11 U	11 U	11 U
romomethane	11 UJ	11 U	11 U	11 U
inyl chloride	11 U	11 U	11 U	11 U
hloroethane	11 U	11 U	11 U	11 U
lethylene chloride	14 U	11 U	11 U	11 U
cetone	11 UJ	11 UJ	11 UJ	11 UJ
arbon disulfide	11 U	11 UJ	11 UJ	11 UJ
,1-Dichloroethene	11 U	11 U	11 U	11 U
,1-Dichloroethane	11 U	11 U	11 U	11 U
,2-Dichloroethene (total)	11 U	11 U	11 U	11 U
hloroform	11 U	11 U	11 U	11 U
,2-Dichloroethane	11 U	11 U	11 U	11 U
-Butanone	11 UJ	11 UJ	11 UJ	11 UJ
,1,1-Trichloroethane	11 U	11 U	11 U	11 U
arbon Tetrachloride	11 U	11 U	11 U	11 U
romodichloromethane	11 U	11 U	11 U	11 U
,2-Dichloropropane	11 U	11 U	11 U	11 U
is-1,3-Dichloropropene	11 U	11 U	11 U	11 U
richloroethene	11 U	11 U	11 U	11 U
ibromochloromethane	11 U	11 U	11 U	11 U
,1,2-Trichloroethane	11 U	11 U	11 U	11 U
enzene	11 U	11 U	11 U	11 U
ans-1,3-Dichloropropene	11 U	11 U	11 U	11 U
romoform	11 U	11 U	11 U	11 U

e Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Whig Street Area	Whig Street Area	Whig Street Area	Whig Street Area
Location	SBWSA1	SBWSA1	SBWSA1	SBWSA1
TtFW Sample I.D.	LV-SBWSA1-00	LV-SBWSA1-01 Duplicate of SBWSA1-00	LV-SBWSA1-08	LV-SBWSA1-20
Sampling Date	06/29/1998	06/29/1998	06/29/1998	06/29/1998
Depth	0'-2'	0'-2'	8'-10'	20'-22'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Methyl-2-pentanone	11 UJ	11 UJ	11 UJ	11 UJ
Hexanone	11 UJ	11 UJ	11 UJ	11 UJ
trachloroethene	11 U	11 U	11 U	11 U
1,2,2-Tetrachloroethane	11 UJ	11 U	11 U	11 U
luene	3 J	11 U	11 U	11 U
lorobenzene	11 U	11 U	11 U	11 U
hylbenzene	11 U	11 U	11 U	11 U
yrene	11 U	11 U	11 U	11 U
lenes (total)	11 U	11 U	11 U	11 U
tal Volatile TICs	--	--	--	--

Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Whig Street Area
Location	SBWSA1
TtFW Sample I.D.	LV-SBWSA1-35
Sampling Date	06/29/1998
Depth	~35'
Units	ug/kg
Chloromethane	13 U
Bromomethane	13 UJ
Vinyl chloride	13 U
Chloroethane	13 U
Methylene chloride	13 U
Acetone	13 UJ
Carbon disulfide	13 U
1,1-Dichloroethene	13 U
1,1-Dichloroethane	13 U
1,2-Dichloroethene (total)	13 U
Chloroform	13 U
1,2-Dichloroethane	13 U
2-Butanone	13 UJ
1,1,1-Trichloroethane	13 U
Carbon Tetrachloride	13 U
Bromodichloromethane	13 U
1,2-Dichloropropane	13 U
cis-1,3-Dichloropropene	13 U
Trichloroethene	13 U
Dibromochloromethane	13 U
1,1,2-Trichloroethane	13 U
Benzene	13 U
trans-1,3-Dichloropropene	13 U
Bromoform	13 U

e Table D-1 for abbreviations and data qualifiers.

TABLE D-3
Volatile Organic Compounds - Soils (1998)
Little Valley Superfund Site

Area	Whig Street Area
Location	SBWSA1
TtFW Sample I.D.	LV-SBWSA1-35
Sampling Date	06/29/1998
Depth	~35'
Units	ug/kg
4-Methyl-2-pentanone	13 UJ
2-Hexanone	13 UJ
Tetrachloroethene	13 U
1,1,2,2-Tetrachloroethane	13 UJ
Toluene	13 U
Chlorobenzene	13 U
Ethylbenzene	13 U
Styrene	13 U
Xylenes (total)	13 U
Total Volatile TICs	--

Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA04	MWCCA04	MWCCA04	MWCCA04
TtFW Sample I.D.	LI-CCA-04-SS	LI-CCA-04-04-06	LI-CCA-04-10-12	LI-CCA-04-14-16
Sampling Date	09/15/1999	09/13/1999	09/14/1999	09/14/1999
Depth	0"-2"	4'-6'	10'-12'	14'-16'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	13 U	11 U	11 U	11 U
Bromomethane	13 U	11 U	11 U	11 U
Vinyl chloride	13 U	11 U	11 U	11 U
Chloroethane	13 U	11 U	11 U	11 U
Methylene chloride	13 U	11 U	11 U	11 U
Acetone	13 U	11 U	11 U	11 U
Carbon disulfide	13 U	11 U	11 U	11 U
1,1-Dichloroethene	13 U	11 U	11 U	11 U
1,1-Dichloroethane	13 U	11 U	11 U	11 U
cis-1,2-Dichloroethene	13 U	11 U	11 U	11 U
trans-1,2-Dichloroethene	13 U	11 U	11 U	11 U
Chloroform	13 U	11 U	11 U	11 U
1,2-Dichloroethane	13 U	11 U	11 U	11 U
2-Butanone	13 U	11 U	11 U	11 U
1,1,1-Trichloroethane	13 U	11 U	11 U	11 U
Carbon tetrachloride	13 U	11 U	11 U	11 U
Bromodichloromethane	13 U	11 U	11 U	11 U
1,2-Dichloropropane	13 U	11 U	11 U	11 U
cis-1,3-Dichloropropene	13 U	11 U	11 U	11 U
Trichloroethene	13 U	11 U	36	27
Dibromochloromethane	13 U	11 U	11 U	11 U
1,1,2-Trichloroethane	13 U	11 U	11 U	11 U
Benzene	13 U	11 U	11 U	11 U
trans-1,3-Dichloropropene	13 U	11 U	11 U	11 U
Bromoform	13 U	11 U	11 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA04	MWCCA04	MWCCA04	MWCCA04
TtFW Sample I.D.	LI-CCA-04-SS	LI-CCA-04-04-06	LI-CCA-04-10-12	LI-CCA-04-14-16
Sampling Date	09/15/1999	09/13/1999	09/14/1999	09/14/1999
Depth	0"-2"	4'-6'	10'-12'	14'-16'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	13 U	11 U	11 U	11 U
2-Hexanone	13 U	11 U	11 U	11 U
Tetrachloroethene	13 U	11 U	11 U	11 U
1,1,2,2-Tetrachloroethane	13 U	11 U	11 U	11 U
1,2-Dibromoethane	13 U	11 U	11 U	11 U
Toluene	13 U	11 U	11 U	11 U
Chlorobenzene	13 U	11 U	11 U	11 U
Ethylbenzene	13 U	11 U	11 U	11 U
Styrene	13 U	11 U	11 U	11 U
Xylene (total)	13 U	11 U	11 U	11 U
1,2-Dichlorobenzene	13 U	11 U	11 U	11 U
1,3-Dichlorobenzene	13 U	11 U	11 U	11 U
1,4-Dichlorobenzene	13 U	11 U	11 U	11 U
1,2-Dibromo-3-chloropropane	13 U	11 U	11 U	11 U
1,2,4-Trichlorobenzene	13 U	11 U	11 U	11 U
Cyclohexane	13 U	11 U	11 U	11 U
Dichlorodifluoromethane	13 U	11 U	11 U	11 U
Isopropylbenzene	13 U	11 U	11 U	11 U
Methyl acetate	13 U	11 U	11 U	11 U
Methylcyclohexane	13 U	11 U	11 U	11 U
tert-Butyl methyl ether	13 U	11 U	11 U	11 U
Trichlorofluoromethane	13 U	11 U	11 U	11 U
Trichlorotrifluoroethane	13 U	11 U	11 U	11 U
Total Volatile TICs	--	--	--	30 NJ

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA04	MWCCA04	MWCCA04	MWCCA04
TtFW Sample I.D.	LI-CCA-04-20-22	LI-CCA-04-24-26	LI-CCA-04-30-32	LI-CCA-04-34-36
Sampling Date	09/14/1999	09/14/1999	09/14/1999	09/14/1999
Depth	20'-22'	24'-26'	30'-32'	34'-36'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	10 U	10 U	10 U	9 U
Bromomethane	10 U	10 U	10 U	9 U
Vinyl chloride	10 U	10 U	10 U	9 U
Chloroethane	10 U	10 U	10 U	9 U
Methylene chloride	10 U	10 U	10 U	9 U
Acetone	10 U	10 U	10 U	9 U
Carbon disulfide	10 U	10 U	10 U	9 U
1,1-Dichloroethene	10 U	10 U	10 U	9 U
1,1-Dichloroethane	10 U	10 U	10 U	9 U
cis-1,2-Dichloroethene	10 U	10 U	10 U	9 U
trans-1,2-Dichloroethene	10 U	10 U	10 U	9 U
Chloroform	10 U	10 U	10 U	9 U
1,2-Dichloroethane	10 U	10 U	10 U	9 U
2-Butanone	10 U	10 U	10 U	9 U
1,1,1-Trichloroethane	10 U	10 U	10 U	9 U
Carbon tetrachloride	10 U	10 U	10 U	9 U
Bromodichloromethane	10 U	10 U	10 U	9 U
1,2-Dichloropropane	10 U	10 U	10 U	9 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	9 U
Trichloroethene	32	24	10 U	9 U
Dibromochloromethane	10 U	10 U	10 U	9 U
1,1,2-Trichloroethane	10 U	10 U	10 U	9 U
Benzene	10 U	10 U	10 U	9 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	9 U
Bromoform	10 U	10 U	10 U	9 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA04	MWCCA04	MWCCA04	MWCCA04
TtFW Sample I.D.	LI-CCA-04-20-22	LI-CCA-04-24-26	LI-CCA-04-30-32	LI-CCA-04-34-36
Sampling Date	09/14/1999	09/14/1999	09/14/1999	09/14/1999
Depth	20'-22'	24'-26'	30'-32'	34'-36'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	10 U	10 U	10 U	9 U
2-Hexanone	10 U	10 U	10 U	9 U
Tetrachloroethene	10 U	10 U	10 U	9 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	9 U
1,2-Dibromoethane	10 U	10 U	10 U	9 U
Toluene	10 U	10 U	10 U	9 U
Chlorobenzene	10 U	10 U	10 U	9 U
Ethylbenzene	10 U	10 U	10 U	9 U
Styrene	10 U	10 U	10 U	9 U
Xylene (total)	10 U	10 U	10 U	9 U
1,2-Dichlorobenzene	10 U	10 U	10 U	9 U
1,3-Dichlorobenzene	10 U	10 U	10 U	9 U
1,4-Dichlorobenzene	10 U	10 U	10 U	9 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	9 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	9 U
Cyclohexane	10 U	10 U	10 U	9 U
Dichlorodifluoromethane	10 U	10 U	10 U	9 U
Isopropylbenzene	10 U	10 U	10 U	9 U
Methyl acetate	10 U	10 U	10 U	9 U
Methylcyclohexane	10 U	10 U	10 U	9 U
tert-Butyl methyl ether	10 U	10 U	10 U	9 U
Trichlorofluoromethane	10 U	10 U	10 U	9 U
Trichlorotrifluoroethane	10 U	10 U	10 U	9 U
Total Volatile TICs	--	--	--	24 NJ

See Table I[illegible]r abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA04	MWCCA04	MWCCA05	MWCCA05
TtFW Sample I.D.	LI-CCA-04-40-42	LI-CCA-04-44-46	LI-CCA-05-SS	LI-CCA-05-1.5-2.0
Sampling Date	09/14/1999	09/14/1999	09/15/1999	09/21/1999
Depth	40'-42'	44'-46'	0"-2"	1.5'-2'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	9 U	10 U	60 U	16 U
Bromomethane	9 U	10 U	60 U	16 U
Vinyl chloride	9 U	10 U	60 U	16 U
Chloroethane	9 U	10 U	60 U	16 U
Methylene chloride	9 U	10 U	60 U	8 J
Acetone	9 U	10 U	60 U	16 U
Carbon disulfide	9 U	10 U	60 U	16 U
1,1-Dichloroethene	9 U	10 U	60 U	16 U
1,1-Dichloroethane	9 U	10 U	60 U	16 U
cis-1,2-Dichloroethene	9 U	10 U	60 U	16 U
trans-1,2-Dichloroethene	9 U	10 U	60 U	16 U
Chloroform	9 U	10 U	60 U	16 U
1,2-Dichloroethane	9 U	10 U	60 U	16 UJ
2-Butanone	9 U	10 U	60 U	16 UJ
1,1,1-Trichloroethane	9 U	10 U	60 U	16 U
Carbon tetrachloride	9 U	10 U	60 U	16 U
Bromodichloromethane	9 U	10 U	60 U	16 U
1,2-Dichloropropane	9 U	10 U	60 U	16 U
cis-1,3-Dichloropropene	9 U	10 U	60 U	16 U
Trichloroethene	9 U	10 U	1200 D	72000 D
Dibromochloromethane	9 U	10 U	60 U	16 U
1,1,2-Trichloroethane	9 U	10 U	60 U	16 U
Benzene	9 U	10 U	60 U	16 U
trans-1,3-Dichloropropene	9 U	10 U	60 U	16 U
Bromoform	9 U	10 U	60 U	16 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA04	MWCCA04	MWCCA05	MWCCA05
TtFW Sample I.D.	LI-CCA-04-40-42	LI-CCA-04-44-46	LI-CCA-05-SS	LI-CCA-05-1.5-2.0
Sampling Date	09/14/1999	09/14/1999	09/15/1999	09/21/1999
Depth	40'-42'	44'-46'	0"-2"	1.5'-2'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	9 U	10 U	60 U	16 UJ
2-Hexanone	9 U	10 U	60 U	16 UJ
Tetrachloroethene	9 U	10 U	60 U	16 U
1,1,2,2-Tetrachloroethane	9 U	10 U	60 U	16 U
1,2-Dibromoethane	9 U	10 U	60 U	16 U
Toluene	9 U	10 U	60 U	16 U
Chlorobenzene	9 U	10 U	60 U	16 U
Ethylbenzene	9 U	10 U	60 U	16 U
Styrene	9 U	10 U	60 U	16 U
Xylene (total)	9 U	10 U	60 U	16 U
1,2-Dichlorobenzene	9 U	10 U	60 U	16 U
1,3-Dichlorobenzene	9 U	10 U	60 U	16 U
1,4-Dichlorobenzene	9 U	10 U	60 U	16 U
1,2-Dibromo-3-chloropropane	9 U	10 U	60 U	16 UJ
1,2,4-Trichlorobenzene	9 U	10 U	60 U	16 U
Cyclohexane	9 U	10 U	60 U	16 U
Dichlorodifluoromethane	9 U	10 U	60 U	16 U
Isopropylbenzene	9 U	10 U	60 U	16 U
Methyl acetate	9 U	10 U	60 U	16 UJ
Methylcyclohexane	9 U	10 U	60 U	16 U
tert-Butyl methyl ether	9 U	10 U	60 U	16 U
Trichlorofluoromethane	9 U	10 U	60 U	16 UJ
Trichlorotrifluoroethane	9 U	10 U	60 U	16 U
Total Volatile TICs	--	68 J	--	--

See Table [illegible] for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA05	MWCCA05	MWCCA05	MWCCA05
TtFW Sample I.D.	LI-CCA-05-05-07	LI-CCA-05-10-12	LI-CCA-05-08-10 Duplicate of CCA05-10-12	LI-CCA-05-15-17
Sampling Date	09/15/1999	09/15/1999	09/15/1999	09/15/1999
Depth	5'-7'	10'-12'	10'-12'	15'-17'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	11 U	12 U
Bromomethane	11 U	11 U	11 U	12 U
Vinyl chloride	11 U	11 U	11 U	12 U
Chloroethane	11 U	11 U	11 U	12 U
Methylene chloride	11 U	11 U	11 U	12 U
Acetone	11 U	11 U	11 U	12 U
Carbon disulfide	11 U	11 U	11 U	12 U
1,1-Dichloroethene	11 U	11 U	11 U	12 U
1,1-Dichloroethane	11 U	11 U	11 U	12 U
cis-1,2-Dichloroethene	11 U	11 U	11 U	12 U
trans-1,2-Dichloroethene	11 U	11 U	11 U	12 U
Chloroform	11 U	11 U	11 U	12 U
1,2-Dichloroethane	11 U	11 U	11 U	12 U
2-Butanone	11 U	11 U	11 U	12 U
1,1,1-Trichloroethane	11 U	11 U	11 U	12 U
Carbon tetrachloride	11 U	11 U	11 U	12 U
Bromodichloromethane	11 U	11 U	11 U	12 U
1,2-Dichloropropane	11 U	11 U	11 U	12 U
cis-1,3-Dichloropropene	11 U	11 U	11 U	12 U
Trichloroethene	41	91	140	120
Dibromochloromethane	11 U	11 U	11 U	12 U
1,1,2-Trichloroethane	11 U	11 U	11 U	12 U
Benzene	11 U	11 U	11 U	12 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	12 U
Bromoform	11 U	11 U	11 U	12 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA05	MWCCA05	MWCCA05	MWCCA05
TtFW Sample I.D.	LI-CCA-05-05-07	LI-CCA-05-10-12	LI-CCA-05-08-10 Duplicate of CCA05-10-12	LI-CCA-05-15-17
Sampling Date	09/15/1999	09/15/1999	09/15/1999	09/15/1999
Depth	5'-7'	10'-12'	10'-12'	15'-17'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	11 U	11 U	11 U	12 U
2-Hexanone	11 U	11 U	11 U	12 U
Tetrachloroethene	11 U	11 U	11 U	12 U
1,1,2,2-Tetrachloroethane	11 U	11 U	11 U	12 U
1,2-Dibromoethane	11 U	11 U	11 U	12 U
Toluene	11 U	11 U	11 U	12 U
Chlorobenzene	11 U	11 U	11 U	12 U
Ethylbenzene	11 U	11 U	11 U	12 U
Styrene	11 U	11 U	11 U	12 U
Xylene (total)	11 U	11 U	11 U	12 U
1,2-Dichlorobenzene	11 U	11 U	11 U	12 U
1,3-Dichlorobenzene	11 U	11 U	11 U	12 U
1,4-Dichlorobenzene	11 U	11 U	11 U	12 U
1,2-Dibromo-3-chloropropane	11 U	11 U	11 U	12 U
1,2,4-Trichlorobenzene	11 U	11 U	11 U	12 U
Cyclohexane	11 U	11 U	11 U	12 U
Dichlorodifluoromethane	11 U	11 U	11 U	12 U
Isopropylbenzene	11 U	11 U	11 U	12 U
Methyl acetate	11 U	11 U	11 U	12 U
Methylcyclohexane	11 U	11 U	11 U	12 U
tert-Butyl methyl ether	11 U	11 U	11 U	12 U
Trichlorofluoromethane	11 U	11 U	11 U	12 U
Trichlorotrifluoroethane	11 U	11 U	11 U	12 U
Total Volatile TICs	--	--	--	--

See Table D for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA05	MWCCA05	MWCCA05	MWCCA05
TtFW Sample I.D.	LI-CCA-05-20-22	LI-CCA-05-25-27	LI-CCA-05-30-32	LI-CCA-05-35-37
Sampling Date	09/16/1999	09/16/1999	09/16/1999	09/16/1999
Depth	20'-22'	25'-27'	30'-32'	35'-37'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	11 U	10 U
Bromomethane	11 U	11 U	11 U	10 U
Vinyl chloride	11 U	11 U	11 U	10 U
Chloroethane	11 U	11 U	11 U	10 U
Methylene chloride	11 U	11 U	11 U	10 U
Acetone	11 U	11 U	11 U	10 U
Carbon disulfide	11 U	11 U	11 U	10 U
1,1-Dichloroethene	11 U	11 U	11 U	10 U
1,1-Dichloroethane	11 U	11 U	11 U	10 U
cis-1,2-Dichloroethene	11 U	11 U	11 U	10 U
trans-1,2-Dichloroethene	11 U	11 U	11 U	10 U
Chloroform	11 U	11 U	11 U	10 U
1,2-Dichloroethane	11 U	11 U	11 U	10 U
2-Butanone	11 U	11 U	11 U	10 U
1,1,1-Trichloroethane	11 U	11 U	11 U	10 U
Carbon tetrachloride	11 U	11 U	11 U	10 U
Bromodichloromethane	11 U	11 U	11 U	10 U
1,2-Dichloropropane	11 U	11 U	11 U	10 U
cis-1,3-Dichloropropene	11 U	11 U	11 U	10 U
Trichloroethene	58	76	8 J	10 U
Dibromochloromethane	11 U	11 U	11 U	10 U
1,1,2-Trichloroethane	11 U	11 U	11 U	10 U
Benzene	11 U	11 U	11 U	10 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	10 U
Bromoform	11 U	11 U	11 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA05	MWCCA05	MWCCA05	MWCCA05
TtFW Sample I.D.	LI-CCA-05-20-22	LI-CCA-05-25-27	LI-CCA-05-30-32	LI-CCA-05-35-37
Sampling Date	09/16/1999	09/16/1999	09/16/1999	09/16/1999
Depth	20'-22'	25'-27'	30'-32'	35'-37'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	11 U	11 U	11 U	10 U
2-Hexanone	11 U	11 U	11 U	10 U
Tetrachloroethene	11 U	2 J	11 U	10 U
1,1,2,2-Tetrachloroethane	11 U	11 U	11 U	10 U
1,2-Dibromoethane	11 U	11 U	11 U	10 U
Toluene	11 U	11 U	11 U	10 U
Chlorobenzene	11 U	11 U	11 U	10 U
Ethylbenzene	11 U	11 U	11 U	10 U
Styrene	11 U	11 U	11 U	10 U
Xylene (total)	11 U	11 U	11 U	10 U
1,2-Dichlorobenzene	11 U	11 U	11 U	10 U
1,3-Dichlorobenzene	11 U	11 U	11 U	10 U
1,4-Dichlorobenzene	11 U	11 U	11 U	10 U
1,2-Dibromo-3-chloropropane	11 U	11 U	11 U	10 U
1,2,4-Trichlorobenzene	11 U	11 U	11 U	10 U
Cyclohexane	11 U	11 U	11 U	10 U
Dichlorodifluoromethane	11 U	11 U	11 U	10 U
Isopropylbenzene	11 U	11 U	11 U	10 U
Methyl acetate	11 U	11 U	11 U	10 U
Methylcyclohexane	11 U	11 U	11 U	10 U
tert-Butyl methyl ether	11 U	11 U	11 U	10 U
Trichlorofluoromethane	11 U	11 U	11 U	10 U
Trichlorotrifluoroethane	11 U	11 U	11 U	10 U
Total Volatile TICs	--	--	--	--

See Table D( )r abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA05	MWCCA05	MWCCA06	MWCCA06
TtFW Sample I.D.	LI-CCA-05-40-42	LI-CCA-05-45-47	LI-CCA-06-SS	LI-CCA-06-05-07
Sampling Date	09/16/1999	09/16/1999	09/15/1999	09/20/1999
Depth	40'-42'	45'-47'	0"-2"	5'-7'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	11 U	11 U	10 U	15 U
Bromomethane	11 U	11 U	10 U	15 U
Vinyl chloride	11 U	11 U	10 U	15 U
Chloroethane	11 U	11 U	10 U	15 U
Methylene chloride	11 U	11 U	10 U	15 U
Acetone	11 U	11 U	10 U	15 U
Carbon disulfide	11 U	11 U	10 U	15 U
1,1-Dichloroethene	11 U	11 U	10 U	15 U
1,1-Dichloroethane	11 U	11 U	10 U	15 U
cis-1,2-Dichloroethene	11 U	11 U	10 U	15 U
trans-1,2-Dichloroethene	11 U	11 U	10 U	15 U
Chloroform	11 U	11 U	10 U	15 U
1,2-Dichloroethane	11 U	11 U	10 U	15 U
2-Butanone	11 U	11 U	10 U	15 U
1,1,1-Trichloroethane	11 U	11 U	10 U	15 U
Carbon tetrachloride	11 U	11 U	10 U	15 U
Bromodichloromethane	11 U	11 U	10 U	15 U
1,2-Dichloropropane	11 U	11 U	10 U	15 U
cis-1,3-Dichloropropene	11 U	11 U	10 U	15 U
Trichloroethene	11 U	11 U	10 U	15 U
Dibromochloromethane	11 U	11 U	10 U	15 U
1,1,2-Trichloroethane	11 U	11 U	10 U	15 U
Benzene	11 U	11 U	10 U	15 U
trans-1,3-Dichloropropene	11 U	11 U	10 U	15 U
Bromoform	11 U	11 U	10 U	15 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA05	MWCCA05	MWCCA06	MWCCA06
TtFW Sample I.D.	LI-CCA-05-40-42	LI-CCA-05-45-47	LI-CCA-06-SS	LI-CCA-06-05-07
Sampling Date	09/16/1999	09/16/1999	09/15/1999	09/20/1999
Depth	40'-42'	45'-47'	0"-2"	5'-7'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	11 U	11 U	10 U	15 UJ
2-Hexanone	11 U	11 U	10 U	15 UJ
Tetrachloroethene	11 U	11 U	10 U	15 U
1,1,2,2-Tetrachloroethane	11 U	11 U	10 U	15 U
1,2-Dibromoethane	11 U	11 U	10 U	15 U
Toluene	11 U	11 U	10 U	15 U
Chlorobenzene	11 U	11 U	10 U	15 U
Ethylbenzene	11 U	11 U	10 U	15 U
Styrene	11 U	11 U	10 U	15 U
Xylene (total)	11 U	11 U	10 U	15 U
1,2-Dichlorobenzene	11 U	11 U	10 U	15 U
1,3-Dichlorobenzene	11 U	11 U	10 U	15 U
1,4-Dichlorobenzene	11 U	11 U	10 U	15 U
1,2-Dibromo-3-chloropropane	11 U	11 U	10 U	15 UJ
1,2,4-Trichlorobenzene	11 U	11 U	10 U	15 U
Cyclohexane	11 U	11 U	10 U	15 U
Dichlorodifluoromethane	11 U	11 U	10 U	15 U
Isopropylbenzene	11 U	11 U	10 U	15 U
Methyl acetate	11 U	11 U	10 U	15 U
Methylcyclohexane	11 U	11 U	10 U	15 U
tert-Butyl methyl ether	11 U	11 U	10 U	15 U
Trichlorofluoromethane	11 U	11 U	10 U	15 UJ
Trichlorotrifluoroethane	11 U	11 U	10 U	15 U
Total Volatile TICs	--	--	--	--

See Table D[illegible]r abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA06	MWCCA06	MWCCA06	MWCCA06
TtFW Sample I.D.	LI-CCA-06-10-12	LI-CCA-06-15-17	LI-CCA-06-20-22	LI-CCA-06-25-27
Sampling Date	09/20/1999	09/20/1999	09/20/1999	09/20/1999
Depth	10'-12'	15'-17'	20'-22'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	15 U	14 U	16 U	15 U
Bromomethane	15 U	14 U	16 U	15 U
Vinyl chloride	15 U	14 U	16 U	15 U
Chloroethane	15 U	14 U	16 U	15 U
Methylene chloride	15 U	14 U	16 U	15 U
Acetone	15 U	14 U	16 U	15 U
Carbon disulfide	15 U	14 U	16 U	15 U
1,1-Dichloroethene	15 U	14 U	16 U	15 U
1,1-Dichloroethane	15 U	14 U	16 U	15 U
cis-1,2-Dichloroethene	15 U	14 U	16 U	5 J
trans-1,2-Dichloroethene	15 U	14 U	16 U	15 U
Chloroform	15 U	14 U	16 U	15 U
1,2-Dichloroethane	15 U	14 U	16 U	15 U
2-Butanone	15 U	14 U	16 U	15 U
1,1,1-Trichloroethane	15 U	14 U	16 U	15 U
Carbon tetrachloride	15 U	14 U	16 U	15 U
Bromodichloromethane	15 U	14 U	16 U	15 U
1,2-Dichloropropane	15 U	14 U	16 U	15 U
cis-1,3-Dichloropropene	15 U	14 U	16 U	15 U
Trichloroethene	13 J	70	220	680 D
Dibromochloromethane	15 U	14 U	16 U	15 U
1,1,2-Trichloroethane	15 U	14 U	16 U	15 U
Benzene	15 U	14 U	16 U	15 U
trans-1,3-Dichloropropene	15 U	14 U	16 U	15 U
Bromoform	15 U	14 U	16 U	15 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA06	MWCCA06	MWCCA06	MWCCA06
TtFW Sample I.D.	LI-CCA-06-10-12	LI-CCA-06-15-17	LI-CCA-06-20-22	LI-CCA-06-25-27
Sampling Date	09/20/1999	09/20/1999	09/20/1999	09/20/1999
Depth	10'-12'	15'-17'	20'-22'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	15 UJ	14 UJ	16 UJ	15 UJ
2-Hexanone	15 UJ	14 UJ	16 UJ	15 UJ
Tetrachloroethene	15 U	14 U	5 J	23
1,1,2,2-Tetrachloroethane	15 U	14 U	16 U	15 U
1,2-Dibromoethane	15 U	14 U	16 U	15 U
Toluene	15 U	14 U	16 U	15 U
Chlorobenzene	15 U	14 U	16 U	15 U
Ethylbenzene	15 U	14 U	16 U	15 U
Styrene	15 U	14 U	16 U	15 U
Xylene (total)	15 U	14 U	16 U	15 U
1,2-Dichlorobenzene	15 U	14 U	16 U	15 U
1,3-Dichlorobenzene	15 U	14 U	16 U	15 U
1,4-Dichlorobenzene	15 U	14 U	16 U	15 U
1,2-Dibromo-3-chloropropane	15 UJ	14 UJ	16 UJ	15 UJ
1,2,4-Trichlorobenzene	15 U	14 U	16 U	15 U
Cyclohexane	15 U	14 U	16 U	15 U
Dichlorodifluoromethane	15 U	14 U	16 U	15 U
Isopropylbenzene	15 U	14 U	16 U	15 U
Methyl acetate	15 U	14 U	16 U	15 U
Methylcyclohexane	15 U	14 U	16 U	15 U
tert-Butyl methyl ether	15 U	14 U	16 U	15 U
Trichlorofluoromethane	15 UJ	14 UJ	16 UJ	15 UJ
Trichlorotrifluoroethane	15 U	14 U	16 U	15 U
Total Volatile TICs	--	--	--	--

See Table D[illegible] abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA06	MWCCA06	MWCCA06	MWCCA06
TtFW Sample I.D.	LI-CCA-06-30-32	LI-CCA-06-28-30 Duplicate of CCA06-30-32	LI-CCA-06-35-37	LI-CCA-06-40-42
Sampling Date	09/20/1999	09/20/1999	09/20/1999	09/20/1999
Depth	30'-32'	30'-32'	35'-37'	40'-42'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	14 U	14 U	14 U	14 U
Bromomethane	14 U	14 U	14 U	14 U
Vinyl chloride	14 U	14 U	14 U	14 U
Chloroethane	14 U	14 U	14 U	14 U
Methylene chloride	14 U	14 U	12 J	14 U
Acetone	14 U	14 U	14 U	14 U
Carbon disulfide	14 U	14 U	14 U	14 U
1,1-Dichloroethene	14 U	14 U	14 U	14 U
1,1-Dichloroethane	14 U	14 U	14 U	14 U
cis-1,2-Dichloroethene	14 U	5 J	14 U	14 U
trans-1,2-Dichloroethene	14 U	14 U	14 U	14 U
Chloroform	14 U	14 U	14 U	14 U
1,2-Dichloroethane	14 U	14 U	14 U	14 U
2-Butanone	14 U	14 U	14 U	14 U
1,1,1-Trichloroethane	14 U	14 U	14 U	14 U
Carbon tetrachloride	14 U	14 U	14 U	14 U
Bromodichloromethane	14 U	14 U	14 U	14 U
1,2-Dichloropropane	14 U	14 U	14 U	14 U
cis-1,3-Dichloropropene	14 U	14 U	14 U	14 U
Trichloroethene	93	220	14 U	5 J
Dibromochloromethane	14 U	14 U	14 UJ	14 UJ
1,1,2-Trichloroethane	14 U	14 U	14 U	14 U
Benzene	14 U	14 U	14 U	14 U
trans-1,3-Dichloropropene	14 U	14 U	14 U	14 U
Bromoform	14 U	14 U	14 UJ	14 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA06	MWCCA06	MWCCA06	MWCCA06
TtFW Sample I.D.	LI-CCA-06-30-32	LI-CCA-06-28-30 Duplicate of CCA06-30-32	LI-CCA-06-35-37	LI-CCA-06-40-42
Sampling Date	09/20/1999	09/20/1999	09/20/1999	09/20/1999
Depth	30'-32'	30'-32'	35'-37'	40'-42'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	14 UJ	14 UJ	14 U	14 U
2-Hexanone	14 UJ	14 UJ	14 U	14 U
Tetrachloroethene	4 J	7 J	14 U	14 U
1,1,2,2-Tetrachloroethane	14 U	14 U	14 U	14 U
1,2-Dibromoethane	14 U	14 U	14 U	14 U
Toluene	14 U	14 U	14 U	14 U
Chlorobenzene	14 U	14 U	14 U	14 U
Ethylbenzene	14 U	14 U	14 U	14 U
Styrene	14 U	14 U	14 U	14 U
Xylene (total)	14 U	14 U	14 U	14 U
1,2-Dichlorobenzene	14 U	14 U	14 U	14 U
1,3-Dichlorobenzene	14 U	14 U	14 U	14 U
1,4-Dichlorobenzene	14 U	14 U	14 U	14 U
1,2-Dibromo-3-chloropropane	14 UJ	14 UJ	14 U	14 U
1,2,4-Trichlorobenzene	14 U	14 U	14 U	14 U
Cyclohexane	14 U	14 U	14 U	14 U
Dichlorodifluoromethane	14 U	14 U	14 U	14 U
Isopropylbenzene	14 U	14 U	14 U	14 U
Methyl acetate	14 U	14 U	14 U	14 U
Methylcyclohexane	14 U	14 U	14 U	14 U
tert-Butyl methyl ether	14 U	14 U	14 U	14 U
Trichlorofluoromethane	14 UJ	14 UJ	14 UJ	14 UJ
Trichlorotrifluoroethane	14 U	14 U	14 U	14 U
Total Volatile TICs	--	--	--	--

See Table D abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA06	MWCCA07	MWCCA07	MWCCA07
TtFW Sample I.D.	LI-CCA-06-45-47	LI-CCA-07-SS	LI-CCA-07-05-07	LI-CCA-07-10-12
Sampling Date	09/20/1999	09/15/1999	09/21/1999	09/21/1999
Depth	45'-47'	0"-2"	5'-7'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	15 U	10 U	16 U	15 U
Bromomethane	15 U	10 U	16 U	15 U
Vinyl chloride	15 U	10 U	16 U	15 U
Chloroethane	15 U	10 U	16 U	15 U
Methylene chloride	15 U	10 U	16 U	15 U
Acetone	15 U	10 U	16 U	15 U
Carbon disulfide	15 U	10 U	16 U	15 U
1,1-Dichloroethene	15 U	10 U	16 U	15 U
1,1-Dichloroethane	15 U	10 U	16 U	15 U
cis-1,2-Dichloroethene	15 U	10 U	16 U	15 U
trans-1,2-Dichloroethene	15 U	10 U	16 U	15 U
Chloroform	15 U	10 U	16 U	15 U
1,2-Dichloroethane	15 U	10 U	16 U	15 U
2-Butanone	15 U	10 U	16 U	15 U
1,1,1-Trichloroethane	15 U	10 U	16 U	15 U
Carbon tetrachloride	15 U	10 U	16 U	15 U
Bromodichloromethane	15 U	10 U	16 U	15 U
1,2-Dichloropropane	15 U	10 U	16 U	15 U
cis-1,3-Dichloropropene	15 U	10 U	16 U	15 U
Trichloroethene	15 U	10 U	26	28
Dibromochloromethane	15 U	10 U	16 UJ	15 UJ
1,1,2-Trichloroethane	15 U	10 U	16 U	15 U
Benzene	15 U	10 U	16 U	15 U
trans-1,3-Dichloropropene	15 U	10 U	16 U	15 U
Bromoform	15 U	10 U	16 UJ	15 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA06	MWCCA07	MWCCA07	MWCCA07
TtFW Sample I.D.	LI-CCA-06-45-47	LI-CCA-07-SS	LI-CCA-07-05-07	LI-CCA-07-10-12
Sampling Date	09/20/1999	09/15/1999	09/21/1999	09/21/1999
Depth	45'-47'	0"-2"	5'-7'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	15 UJ	10 U	16 U	15 U
2-Hexanone	15 UJ	10 U	16 U	15 U
Tetrachloroethene	15 U	10 U	16 U	15 U
1,1,2,2-Tetrachloroethane	15 U	10 U	16 U	15 U
1,2-Dibromoethane	15 U	10 U	16 U	15 U
Toluene	15 U	10 U	16 U	15 U
Chlorobenzene	15 U	10 U	16 U	15 U
Ethylbenzene	15 U	10 U	16 U	15 U
Styrene	15 U	10 U	16 U	15 U
Xylene (total)	15 U	10 U	16 U	15 U
1,2-Dichlorobenzene	15 U	10 U	16 U	15 U
1,3-Dichlorobenzene	15 U	10 U	16 U	15 U
1,4-Dichlorobenzene	15 U	10 U	16 U	15 U
1,2-Dibromo-3-chloropropane	15 UJ	10 U	16 U	15 U
1,2,4-Trichlorobenzene	15 U	10 U	16 U	15 U
Cyclohexane	15 U	10 U	16 U	15 U
Dichlorodifluoromethane	15 U	10 U	16 U	15 U
Isopropylbenzene	15 U	10 U	16 U	15 U
Methyl acetate	15 U	10 U	16 U	15 U
Methylcyclohexane	15 U	10 U	16 U	15 U
tert-Butyl methyl ether	15 U	10 U	16 U	15 U
Trichlorofluoromethane	15 UJ	10 U	16 UJ	15 UJ
Trichlorotrifluoroethane	15 U	10 U	16 U	15 U
Total Volatile TICs	--	--	--	--

See Table D[illegible] abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA07	MWCCA07	MWCCA07	MWCCA07
TtFW Sample I.D.	LI-CCA-07-15-17	LI-CCA-07-20-22	LI-CCA-07-25-27	LI-CCA-07-27-29 Duplicate of CCA07-25-27
Sampling Date	09/21/1999	09/21/1999	09/21/1999	09/21/1999
Depth	15'-17'	20'-22'	25'-27'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	15 U	15 U	15 U	15 U
Bromomethane	15 U	15 U	15 U	15 U
Vinyl chloride	15 U	15 U	15 U	15 U
Chloroethane	15 U	15 U	15 U	15 U
Methylene chloride	15 U	7 J	15 U	15 U
Acetone	15 U	15 U	15 U	15 U
Carbon disulfide	15 U	15 U	15 U	15 U
1,1-Dichloroethene	15 U	15 U	15 U	15 U
1,1-Dichloroethane	15 U	15 U	15 U	15 U
cis-1,2-Dichloroethene	15 U	15 U	15 U	15 U
trans-1,2-Dichloroethene	15 U	15 U	15 U	15 U
Chloroform	15 U	15 U	15 U	15 U
1,2-Dichloroethane	15 U	15 UJ	15 U	15 U
2-Butanone	15 U	15 UJ	15 U	15 U
1,1,1-Trichloroethane	15 U	15 U	15 U	15 U
Carbon tetrachloride	15 U	15 U	15 U	15 U
Bromodichloromethane	15 U	15 U	15 U	15 U
1,2-Dichloropropane	15 U	15 U	15 U	15 U
cis-1,3-Dichloropropene	15 U	15 U	15 U	15 U
Trichloroethene	17	22	67	48
Dibromochloromethane	15 UJ	15 U	15 UJ	15 UJ
1,1,2-Trichloroethane	15 U	15 U	15 U	15 U
Benzene	15 U	15 U	15 U	15 U
trans-1,3-Dichloropropene	15 U	15 U	15 U	15 U
Bromoform	15 UJ	15 U	15 UJ	15 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA07	MWCCA07	MWCCA07	MWCCA07
TtFW Sample I.D.	LI-CCA-07-15-17	LI-CCA-07-20-22	LI-CCA-07-25-27	LI-CCA-07-27-29 Duplicate of CCA07-25-27
Sampling Date	09/21/1999	09/21/1999	09/21/1999	09/21/1999
Depth	15'-17'	20'-22'	25'-27'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	15 U	15 UJ	15 U	15 U
2-Hexanone	15 U	15 UJ	15 U	15 U
Tetrachloroethene	15 U	15 U	4 J	15 U
1,1,2,2-Tetrachloroethane	15 U	15 U	15 U	15 U
1,2-Dibromoethane	15 U	15 U	15 U	15 U
Toluene	15 U	15 U	15 U	15 U
Chlorobenzene	15 U	15 U	15 U	15 U
Ethylbenzene	15 U	15 U	15 U	15 U
Styrene	15 U	15 U	15 U	15 U
Xylene (total)	15 U	15 U	15 U	15 U
1,2-Dichlorobenzene	15 U	15 U	15 U	15 U
1,3-Dichlorobenzene	15 U	15 U	15 U	15 U
1,4-Dichlorobenzene	15 U	15 U	15 U	15 U
1,2-Dibromo-3-chloropropane	15 U	15 UJ	15 U	15 U
1,2,4-Trichlorobenzene	15 U	15 U	15 U	15 U
Cyclohexane	15 U	15 U	15 U	15 U
Dichlorodifluoromethane	15 U	15 U	15 U	15 U
Isopropylbenzene	15 U	15 U	15 U	15 U
Methyl acetate	15 U	15 UJ	15 U	15 U
Methylcyclohexane	15 U	15 U	15 U	15 U
tert-Butyl methyl ether	15 U	15 U	15 U	15 U
Trichlorofluoromethane	15 UJ	15 UJ	15 UJ	15 UJ
Trichlorotrifluoroethane	15 U	15 U	15 U	15 U
Total Volatile TICs	--	--	--	--

See Table D- abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA07	MWCCA07	MWCCA07	MWCCA07
TtFW Sample I.D.	LI-CCA-07-30-32	LI-CCA-07-35-37	LI-CCA-07-40-42	LI-CCA-07-45-47
Sampling Date	09/22/1999	09/22/1999	09/22/1999	09/22/1999
Depth	30'-32'	35'-37'	40'-42'	45'-47'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	15 U	14 U	14 U	14 U
Bromomethane	15 U	14 U	14 U	14 U
Vinyl chloride	15 U	14 U	14 U	14 U
Chloroethane	15 U	14 U	14 U	14 U
Methylene chloride	15 U	14 U	14 U	14 U
Acetone	15 U	14 U	28	14 U
Carbon disulfide	15 U	14 U	14 U	14 U
1,1-Dichloroethene	15 U	14 U	14 U	14 U
1,1-Dichloroethane	15 U	14 U	14 U	14 U
cis-1,2-Dichloroethene	15 U	14 U	14 U	14 U
trans-1,2-Dichloroethene	15 U	14 U	14 U	14 U
Chloroform	15 U	14 U	14 U	14 U
1,2-Dichloroethane	15 U	14 UJ	14 U	14 U
2-Butanone	15 U	14 UJ	14 U	14 U
1,1,1-Trichloroethane	15 U	14 U	14 U	14 U
Carbon tetrachloride	15 U	14 U	14 U	14 U
Bromodichloromethane	15 U	14 U	14 U	14 U
1,2-Dichloropropane	15 U	14 U	14 U	14 U
cis-1,3-Dichloropropene	15 U	14 U	14 U	14 U
Trichloroethene	70	4 JN	14 U	14 U
Dibromochloromethane	15 UJ	14 U	14 UJ	14 UJ
1,1,2-Trichloroethane	15 U	14 U	14 U	14 U
Benzene	15 U	14 U	14 U	14 U
trans-1,3-Dichloropropene	15 U	14 U	14 U	14 U
Bromoform	15 UJ	14 U	14 UJ	14 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA07	MWCCA07	MWCCA07	MWCCA07
TtFW Sample I.D.	LI-CCA-07-30-32	LI-CCA-07-35-37	LI-CCA-07-40-42	LI-CCA-07-45-47
Sampling Date	09/22/1999	09/22/1999	09/22/1999	09/22/1999
Depth	30'-32'	35'-37'	40'-42'	45'-47'
Units	ug/kg	ug/kg	ug/kg	ug/kg
4-Methyl-2-pentanone	15 U	14 UJ	14 U	14 U
2-Hexanone	15 U	14 UJ	14 U	14 U
Tetrachloroethene	15 U	14 U	14 U	14 U
1,1,2,2-Tetrachloroethane	15 U	14 U	14 U	14 U
1,2-Dibromoethane	15 U	14 U	14 U	14 U
Toluene	15 U	14 U	14 U	14 U
Chlorobenzene	15 U	14 U	14 U	14 U
Ethylbenzene	15 U	14 U	14 U	14 U
Styrene	15 U	14 U	14 U	14 U
Xylene (total)	15 U	14 U	14 U	14 U
1,2-Dichlorobenzene	15 U	14 U	14 U	14 U
1,3-Dichlorobenzene	15 U	14 U	14 U	14 U
1,4-Dichlorobenzene	15 U	14 U	14 U	14 U
1,2-Dibromo-3-chloropropane	15 U	14 UJ	14 U	14 U
1,2,4-Trichlorobenzene	15 U	14 U	14 U	14 U
Cyclohexane	15 U	14 U	14 U	14 U
Dichlorodifluoromethane	15 U	14 U	14 U	14 U
Isopropylbenzene	15 U	14 U	14 U	14 U
Methyl acetate	15 U	14 UJ	14 U	14 U
Methylcyclohexane	15 U	14 U	14 U	14 U
tert-Butyl methyl ether	15 U	14 U	14 U	14 U
Trichlorofluoromethane	15 UJ	14 UJ	14 UJ	14 UJ
Trichlorotrifluoroethane	15 U	14 U	14 U	14 U
Total Volatile TICs	--	--	--	--

See Table D- abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery
Location	Drain Material
TtFW Sample I.D.	LI-CCA-DRAIN
Sampling Date	09/21/1999
Depth	
Units	ug/kg
Chloromethane	30 UJ
Bromomethane	30 UJ
Vinyl chloride	30 UJ
Chloroethane	30 UJ
Methylene chloride	14 J
Acetone	30 UJ
Carbon disulfide	30 UJ
1,1-Dichloroethene	30 UJ
1,1-Dichloroethane	30 UJ
cis-1,2-Dichloroethene	30 UJ
trans-1,2-Dichloroethene	30 UJ
Chloroform	30 UJ
1,2-Dichloroethane	30 UJ
2-Butanone	30 UJ
1,1,1-Trichloroethane	30 UJ
Carbon tetrachloride	30 UJ
Bromodichloromethane	30 UJ
1,2-Dichloropropane	30 UJ
cis-1,3-Dichloropropene	30 UJ
Trichloroethene	53 J
Dibromochloromethane	30 UJ
1,1,2-Trichloroethane	30 UJ
Benzene	30 UJ
trans-1,3-Dichloropropene	30 UJ
Bromoform	30 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-4
Volatile Organic Compounds - Soils (1999)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery
Location	Drain Material
TtFW Sample I.D.	LI-CCA-DRAIN
Sampling Date	09/21/1999
Depth	
Units	ug/kg
4-Methyl-2-pentanone	30 UJ
2-Hexanone	30 UJ
Tetrachloroethene	30 UJ
1,1,2,2-Tetrachloroethane	30 UJ
1,2-Dibromoethane	30 UJ
Toluene	30 UJ
Chlorobenzene	30 UJ
Ethylbenzene	30 UJ
Styrene	30 UJ
Xylene (total)	30 UJ
1,2-Dichlorobenzene	30 UJ
1,3-Dichlorobenzene	30 UJ
1,4-Dichlorobenzene	30 UJ
1,2-Dibromo-3-chloropropane	30 UJ
1,2,4-Trichlorobenzene	30 UJ
Cyclohexane	30 UJ
Dichlorodifluoromethane	30 UJ
Isopropylbenzene	30 UJ
Methyl acetate	30 UJ
Methylcyclohexane	30 UJ
tert-Butyl methyl ether	30 UJ
Trichlorofluoromethane	30 UJ
Trichlorotrifluoroethane	30 UJ
Total Volatile TICs	--

See Table D[illegible]r abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB101	SB101	SB101
TtFW Sample I.D.	LV-BIA-SB101-00	LV-BIA-SB101-04	LV-BIA-SB101-14	LV-BIA-SB101-24
Sampling Date	11/27/00	11/27/00	11/27/00	11/27/00
Depth	0'-2'	4'-6'	14'-16'	24'-26'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	13 UJ	12 UJ	10 UJ	10 UJ
Chloromethane	13 UJ	12 UJ	10 UJ	10 UJ
Vinyl Chloride	13 UJ	12 UJ	10 UJ	10 UJ
Bromomethane	13 U	12 U	10 U	10 U
Chloroethane	13 U	12 U	10 U	10 U
Trichlorofluoromethane	13 UJ	12 UJ	10 UJ	10 UJ
1,1-Dichloroethene	13 U	12 U	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	13 U	12 U	10 U	10 U
Acetone	13 U	12 U	10 U	10 U
Carbon Disulfide	13 U	12 U	10 U	10 U
Methyl Acetate	13 U	12 U	10 U	10 U
Methylene Chloride	13 U	12 U	10 U	10 U
trans-1,2-Dichloroethene	13 U	12 U	10 U	10 U
Methyl tert-Butyl Ether	13 U	12 U	10 U	10 U
1,1-Dichloroethane	13 U	12 U	10 U	10 U
cis-1,2-Dichloroethene	13 U	12 U	10 U	10 U
2-Butanone	13 U	12 U	10 U	10 U
Chloroform	13 U	12 U	10 U	10 U
1,1,1-Trichloroethane	13 U	12 U	10 U	10 U
Cyclohexane	13 U	12 U	10 U	10 U
Carbon Tetrachloride	13 U	12 U	10 U	10 U
Benzene	13 U	12 U	10 U	10 U
1,2-Dichloroethane	13 UJ	12 UJ	10 UJ	10 UJ
Trichloroethene	13 U	12 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB101	SB101	SB101
TtFW Sample I.D.	LV-BIA-SB101-00	LV-BIA-SB101-04	LV-BIA-SB101-14	LV-BIA-SB101-24
Sampling Date	11/27/00	11/27/00	11/27/00	11/27/00
Depth	0'-2'	4'-6'	14'-16'	24'-26'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Methylcyclohexane	13 U	12 U	10 U	10 U
1,2-Dichloropropane	13 U	12 U	10 U	10 U
Bromodichloromethane	13 U	12 U	10 U	10 U
cis-1,3-Dichloropropene	13 U	12 U	10 U	10 U
4-Methyl-2-pentanone	13 U	12 U	10 U	10 U
Toluene	13 U	12 U	10 U	10 U
trans-1,3-Dichloropropene	13 U	12 U	10 U	10 U
1,1,2-Trichloroethane	13 U	12 U	10 U	10 U
Tetrachloroethene	13 U	12 U	10 U	10 U
2-Hexanone	13 U	12 U	10 U	10 U
Dibromochloromethane	13 U	12 U	10 U	10 U
1,2-Dibromoethane	13 U	12 U	10 U	10 U
Chlorobenzene	13 U	12 U	10 U	10 U
Ethylbenzene	13 U	12 U	10 U	10 U
Xylenes (total)	13 U	12 U	10 U	10 U
Styrene	13 U	12 U	10 U	10 U
Bromoform	13 U	12 U	10 U	10 U
Isopropylbenzene	13 U	12 U	10 U	10 U
1,1,2,2-Tetrachloroethane	13 U	12 U	10 U	10 U
1,3-Dichlorobenzene	13 U	12 U	10 U	10 U
1,4-Dichlorobenzene	13 U	12 U	10 U	10 U
1,2-Dichlorobenzene	13 U	12 U	10 U	10 U
1,2-Dibromo-3-chloropropane	13 U	12 U	10 U	10 U
1,2,4-Trichlorobenzene	13 U	12 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB102	SB102	SB102
TtFW Sample I.D.	LV-BIA-SB101-34	LV-BIA-SB102-00	LV-BIA-SB102-04	LV-BIA-SB102-08
Sampling Date	11/27/00	11/28/00	11/28/00	11/28/00
Depth	34'-36'	0'-2'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	10 UJ	12 UJ	13 UJ	11 UJ
Chloromethane	10 UJ	12 U	13 U	11 U
Vinyl Chloride	10 UJ	12 U	13 U	11 U
Bromomethane	10 U	12 U	13 U	11 U
Chloroethane	10 U	12 U	13 U	11 U
Trichlorofluoromethane	10 UJ	12 UJ	13 UJ	11 UJ
1,1-Dichloroethene	10 U	12 U	13 U	11 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	12 U	13 U	11 U
Acetone	10 U	12 U	7 J	11 U
Carbon Disulfide	10 U	12 U	7 J	11 U
Methyl Acetate	10 U	12 UJ	13 UJ	11 UJ
Methylene Chloride	10 U	12 UJ	13 UJ	11 UJ
trans-1,2-Dichloroethene	10 U	12 U	13 U	11 U
Methyl tert-Butyl Ether	10 U	12 U	13 U	11 U
1,1-Dichloroethane	10 U	12 U	13 U	11 U
cis-1,2-Dichloroethene	10 U	12 U	13 U	11 U
2-Butanone	10 U	12 U	13 U	11 U
Chloroform	10 U	12 U	13 U	11 U
1,1,1-Trichloroethane	10 U	12 U	13 U	11 U
Cyclohexane	10 U	12 U	13 U	11 U
Carbon Tetrachloride	10 U	12 U	13 U	11 U
Benzene	10 U	12 U	13 U	11 U
1,2-Dichloroethane	10 UJ	12 U	13 U	11 U
Trichloroethene	10 U	12 U	13 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB102	SB102	SB102
TtFW Sample I.D.	LV-BIA-SB101-34	LV-BIA-SB102-00	LV-BIA-SB102-04	LV-BIA-SB102-08
Sampling Date	11/27/00	11/28/00	11/28/00	11/28/00
Depth	34'-36'	0'-2'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Methylcyclohexane	10 U	12 U	13 U	11 U
1,2-Dichloropropane	10 U	12 U	13 U	11 U
Bromodichloromethane	10 U	12 U	13 U	11 U
cis-1,3-Dichloropropene	10 U	12 U	13 U	11 U
4-Methyl-2-pentanone	10 U	12 UJ	13 UJ	11 UJ
Toluene	10 U	12 U	13 U	11 U
trans-1,3-Dichloropropene	10 U	12 U	13 U	11 U
1,1,2-Trichloroethane	10 U	12 U	13 U	11 U
Tetrachloroethene	10 U	12 U	13 U	11 U
2-Hexanone	10 U	12 UJ	13 UJ	11 UJ
Dibromochloromethane	10 U	12 U	13 U	11 U
1,2-Dibromoethane	10 U	12 U	13 U	11 U
Chlorobenzene	10 U	12 U	13 U	11 U
Ethylbenzene	10 U	12 U	13 U	11 U
Xylenes (total)	10 U	12 U	13 U	11 U
Styrene	10 U	12 U	13 U	11 U
Bromoform	10 U	12 U	13 U	11 U
Isopropylbenzene	10 U	12 U	13 U	11 U
1,1,2,2-Tetrachloroethane	10 U	12 U	13 U	11 U
1,3-Dichlorobenzene	10 U	12 U	13 U	11 U
1,4-Dichlorobenzene	10 U	12 U	13 U	11 U
1,2-Dichlorobenzene	10 U	12 U	13 U	11 U
1,2-Dibromo-3-chloropropane	10 U	12 U	13 U	11 U
1,2,4-Trichlorobenzene	10 U	12 U	13 U	11 U

See Table [illegible] for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB102	SB102	SB103	SB103
TtFW Sample I.D.	LV-BIA-SB102-14	LV-BIA-SB102-18	LV-BIA-SB103-00	LV-BIA-SB103-04
Sampling Date	11/28/00	11/28/00	11/28/00	11/28/00
Depth	14'-16'	18'-20'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	10 UJ	10 UJ	15 UJ	11 UJ
Chloromethane	10 U	10 U	15 U	11 U
Vinyl Chloride	10 U	10 U	15 U	11 U
Bromomethane	10 U	10 U	15 U	11 U
Chloroethane	10 U	10 U	15 U	11 U
Trichlorofluoromethane	1 J	10 UJ	15 UJ	11 UJ
1,1-Dichloroethene	10 U	10 U	15 U	11 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10 U	15 U	11 U
Acetone	3 J	10 UJ	15 U	11 J
Carbon Disulfide	10 U	10 U	15 U	4 J
Methyl Acetate	10 UJ	10 UJ	15 UJ	11 UJ
Methylene Chloride	10 UJ	10 UJ	15 UJ	11 UJ
trans-1,2-Dichloroethene	10 U	10 U	15 U	11 U
Methyl tert-Butyl Ether	10 U	10 U	15 U	11 U
1,1-Dichloroethane	10 U	10 U	15 U	11 U
cis-1,2-Dichloroethene	10 U	3 J	15 U	11 U
2-Butanone	10 U	10 U	15 U	11 U
Chloroform	10 U	10 U	15 U	11 U
1,1,1-Trichloroethane	10 U	10 U	15 U	11 U
Cyclohexane	10 U	10 U	15 U	11 U
Carbon Tetrachloride	10 U	10 U	15 U	11 U
Benzene	10 U	2 J	15 U	11 U
1,2-Dichloroethane	10 U	10 U	15 U	11 U
Trichloroethene	5 J	6 J	15 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB102	SB102	SB103	SB103
TtFW Sample I.D.	LV-BIA-SB102-14	LV-BIA-SB102-18	LV-BIA-SB103-00	LV-BIA-SB103-04
Sampling Date	11/28/00	11/28/00	11/28/00	11/28/00
Depth	14'-16'	18'-20'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Methylcyclohexane	10 U	10 U	15 U	11 U
1,2-Dichloropropane	10 U	10 U	15 U	11 U
Bromodichloromethane	10 U	10 U	15 U	11 U
cis-1,3-Dichloropropene	10 U	10 U	15 U	11 U
4-Methyl-2-pentanone	10 UJ	10 UJ	15 UJ	11 UJ
Toluene	10 U	1 J	15 U	2 J
trans-1,3-Dichloropropene	10 U	10 U	15 U	11 U
1,1,2-Trichloroethane	10 U	10 U	15 U	11 U
Tetrachloroethene	10 U	10 U	15 U	11 U
2-Hexanone	10 UJ	10 UJ	15 UJ	11 UJ
Dibromochloromethane	10 U	10 U	15 U	11 U
1,2-Dibromoethane	10 U	10 U	15 U	11 U
Chlorobenzene	10 U	10 U	15 U	11 U
Ethylbenzene	10 U	10 U	15 U	11 U
Xylenes (total)	10 U	10 U	15 U	26
Styrene	10 U	10 U	15 U	11 U
Bromoform	10 U	10 U	15 U	11 U
Isopropylbenzene	10 U	10 U	15 U	3 J
1,1,2,2-Tetrachloroethane	10 U	10 U	15 U	11 U
1,3-Dichlorobenzene	10 U	10 U	15 U	11 U
1,4-Dichlorobenzene	10 U	10 U	15 U	11 U
1,2-Dichlorobenzene	10 U	10 U	15 U	11 U
1,2-Dibromo-3-chloropropane	10 U	10 U	15 U	11 U
1,2,4-Trichlorobenzene	10 U	10 U	15 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB103	SB103	SB103	SB104
TtFW Sample I.D.	LV-BIA-SB103-14	LV-BIA-SB103-18	LV-BIASB103-24	LV-BIA-SB104-00
Sampling Date	11/28/00	11/28/00	11/29/00	11/29/00
Depth	14'-16'	18'-20'	24'-26'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	11 UJ	10 UJ	10 UJ	13 UJ
Chloromethane	11 U	10 U	10 UJ	13 UJ
Vinyl Chloride	11 U	10 U	10 UJ	13 UJ
Bromomethane	11 U	10 U	10 U	13 U
Chloroethane	11 U	10 U	10 U	13 U
Trichlorofluoromethane	11 UJ	10 UJ	4 J	2 J
1,1-Dichloroethene	11 U	10 U	10 U	13 U
1,1,2-Trichloro-1,2,2-trifluoroethane	11 U	10 U	10 U	13 U
Acetone	2 J	10 U	2 J	23 J
Carbon Disulfide	11 U	1 J	10 UJ	7 J
Methyl Acetate	11 UJ	10 UJ	10 U	13 U
Methylene Chloride	11 UJ	10 UJ	10 UJ	13 UJ
trans-1,2-Dichloroethene	11 U	10 U	10 U	13 U
Methyl tert-Butyl Ether	11 U	10 U	10 U	13 U
1,1-Dichloroethane	11 U	10 U	10 U	13 U
cis-1,2-Dichloroethene	5 J	5 J	2 J	13 U
2-Butanone	11 U	10 U	10 UJ	13 UJ
Chloroform	11 U	10 U	10 U	13 U
1,1,1-Trichloroethane	11 U	10 U	10 U	13 U
Cyclohexane	11 U	10 U	10 U	13 U
Carbon Tetrachloride	11 U	10 U	10 U	13 U
Benzene	11 U	10 U	10 U	13 U
1,2-Dichloroethane	11 U	10 U	10 U	13 U
Trichloroethene	36	34	19	13 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB103	SB103	SB103	SB104
TtFW Sample I.D.	LV-BIA-SB103-14	LV-BIA-SB103-18	LV-BIASB103-24	LV-BIA-SB104-00
Sampling Date	11/28/00	11/28/00	11/29/00	11/29/00
Depth	14'-16'	18'-20'	24'-26'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Methylcyclohexane	11 U	10 U	10 UJ	13 UJ
1,2-Dichloropropane	11 U	10 U	10 U	13 U
Bromodichloromethane	11 U	10 U	10 U	13 U
cis-1,3-Dichloropropene	11 U	10 U	10 U	13 U
4-Methyl-2-pentanone	11 UJ	10 UJ	10 U	13 U
Toluene	2 J	10 U	10 U	13 U
trans-1,3-Dichloropropene	11 U	10 U	10 U	13 U
1,1,2-Trichloroethane	11 U	10 U	10 U	13 U
Tetrachloroethene	11 U	10 U	10 U	13 U
2-Hexanone	11 UJ	10 UJ	10 U	13 U
Dibromochloromethane	11 U	10 U	10 U	13 U
1,2-Dibromoethane	11 U	10 U	10 U	13 U
Chlorobenzene	11 U	10 U	10 U	13 U
Ethylbenzene	1 J	10 U	10 U	13 U
Xylenes (total)	38	4 J	10 U	13 U
Styrene	11 U	10 U	10 U	13 U
Bromoform	11 U	10 U	10 U	13 U
Isopropylbenzene	1 J	10 U	10 U	13 U
1,1,2,2-Tetrachloroethane	11 U	10 U	10 U	13 U
1,3-Dichlorobenzene	11 U	10 U	10 U	13 U
1,4-Dichlorobenzene	11 U	10 U	10 U	13 U
1,2-Dichlorobenzene	11 U	10 U	10 U	13 U
1,2-Dibromo-3-chloropropane	11 U	10 U	10 U	13 U
1,2,4-Trichlorobenzene	11 U	10 U	10 U	13 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB104	SB104	SB104 Duplicate of SB104-08	SB105
TtFW Sample I.D.	LV-BIA-SB104-04	LV-BIA-SB104-08	LV-BIA-SB104-09	LV-BIA-SB105-00
Sampling Date	11/29/00	11/29/00	11/29/00	11/29/00
Depth	4'-6'	8'-10'	8'-10'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	11 U	10 U	10 U	10 UJ
Chloromethane	11 U	10 U	10 U	10 UJ
Vinyl Chloride	11 U	10 U	10 U	10 UJ
Bromomethane	11 U	10 U	10 U	10 U
Chloroethane	11 U	10 U	10 U	10 U
Trichlorofluoromethane	11 UJ	3 J	3 J	3 J
1,1-Dichloroethene	11 U	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	11 UJ	10 UJ	10 UJ	10 U
Acetone	11 U	10 U	10 U	10 UJ
Carbon Disulfide	11 U	10 U	10 U	10 UJ
Methyl Acetate	11 U	10 U	10 U	10 U
Methylene Chloride	11 U	17 U	18 U	10 UJ
trans-1,2-Dichloroethene	11 U	10 U	10 U	10 U
Methyl tert-Butyl Ether	11 U	10 U	10 U	10 U
1,1-Dichloroethane	11 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	8 J	10 U	10 U	10 U
2-Butanone	11 U	10 U	10 U	10 UJ
Chloroform	11 U	10 U	10 U	10 U
1,1,1-Trichloroethane	11 U	10 U	10 U	10 U
Cyclohexane	11 U	10 U	10 U	10 U
Carbon Tetrachloride	11 U	10 U	10 U	10 U
Benzene	11 U	10 U	10 U	10 U
1,2-Dichloroethane	11 UJ	10 UJ	10 UJ	10 U
Trichloroethene	33	61	29	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB104	SB104	SB104 Duplicate of SB104-08	SB105
TtFW Sample I.D.	LV-BIA-SB104-04	LV-BIA-SB104-08	LV-BIA-SB104-09	LV-BIA-SB105-00
Sampling Date	11/29/00	11/29/00	11/29/00	11/29/00
Depth	4'-6'	8'-10'	8'-10'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Methylcyclohexane	11 U	10 U	10 U	10 UJ
1,2-Dichloropropane	11 U	10 U	10 U	10 U
Bromodichloromethane	11 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	11 U	10 U	10 U	10 U
4-Methyl-2-pentanone	11 U	10 U	10 U	10 U
Toluene	11 U	1 J	1 J	10 U
trans-1,3-Dichloropropene	11 U	10 U	10 U	10 U
1,1,2-Trichloroethane	11 U	10 U	10 U	10 U
Tetrachloroethene	11 U	10 U	10 U	10 U
2-Hexanone	11 U	10 U	10 U	10 U
Dibromochloromethane	11 U	10 U	10 U	10 U
1,2-Dibromoethane	11 U	10 U	10 U	10 U
Chlorobenzene	11 U	10 U	10 U	10 U
Ethylbenzene	11 U	10 U	10 U	10 U
Xylenes (total)	1 J	2 J	1 J	10 U
Styrene	11 U	10 U	10 U	10 U
Bromoform	11 U	10 U	10 U	10 U
Isopropylbenzene	11 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	11 U	10 U	10 U	10 U
1,3-Dichlorobenzene	11 U	10 U	10 U	10 U
1,4-Dichlorobenzene	11 U	10 U	10 U	10 U
1,2-Dichlorobenzene	11 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	11 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	11 U	10 U	10 U	10 U

See Table D for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB105	SB105	SB105	SB106
TtFW Sample I.D.	LV-BIA-SB105-04	LV-BIA-SB105-08	LV-BIA-SB105-14	LV-BIA-SB106-00
Sampling Date	11/29/00	11/29/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	10 UJ	10 UJ	10 U	10 U
Chloromethane	10 UJ	10 UJ	10 U	10 U
Vinyl Chloride	10 UJ	10 UJ	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U
Trichlorofluoromethane	3 J	10 UJ	10 UJ	10 UJ
1,1-Dichloroethene	10 U	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10 U	10 U	10 U
Acetone	5 J	4 J	10 UJ	10 UJ
Carbon Disulfide	10 UJ	10 UJ	10 U	10 U
Methyl Acetate	10 U	10 U	10 U	10 U
Methylene Chloride	10 UJ	10 UJ	12 U	14 U
trans-1,2-Dichloroethene	10 U	10 U	10 U	10 U
Methyl tert-Butyl Ether	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	6 J	3 J	3 J	10 U
2-Butanone	10 UJ	10 UJ	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 UJ	10 UJ
Cyclohexane	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 UJ	10 UJ
Trichloroethene	15	56	23	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site
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Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB105	SB105	SB105	SB106
TtFW Sample I.D.	LV-BIA-SB105-04	LV-BIA-SB105-08	LV-BIA-SB105-14	LV-BIA-SB106-00
Sampling Date	11/29/00	11/29/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Methylcyclohexane	10 UJ	10 UJ	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	2 J
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U
1,2-Dibromoethane	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U
Xylenes (total)	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U
Isopropylbenzene	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB106	SB106	SB106	SB106
TtFW Sample I.D.	LV-BIA-SB106-04	LV-BIA-SB106-08	LV-BIA-SB106-14	LV-BIA-SB106-18
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	18'-20'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	14 U	10 U	13 U	10 U
Chloromethane	14 U	10 U	13 U	10 U
Vinyl Chloride	14 U	10 U	13 U	10 U
Bromomethane	14 U	10 U	13 U	10 U
Chloroethane	14 U	10 U	13 U	10 U
Trichlorofluoromethane	14 UJ	10 UJ	13 UJ	10 UJ
1,1-Dichloroethene	14 U	10 U	13 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	14 U	10 U	13 U	10 U
Acetone	14 UJ	10 UJ	14 UJ	10 UJ
Carbon Disulfide	14 U	10 U	13 U	2 J
Methyl Acetate	14 U	10 U	13 U	10 U
Methylene Chloride	19 U	11 U	21 U	16 U
trans-1,2-Dichloroethene	14 U	10 U	13 U	10 U
Methyl tert-Butyl Ether	14 U	10 U	13 U	10 U
1,1-Dichloroethane	14 U	10 U	13 U	10 U
cis-1,2-Dichloroethene	2 J	10 U	13 U	10 U
2-Butanone	14 U	10 U	13 U	10 U
Chloroform	14 U	10 U	13 U	10 U
1,1,1-Trichloroethane	14 UJ	10 UJ	13 UJ	10 UJ
Cyclohexane	14 U	10 U	13 U	10 U
Carbon Tetrachloride	14 U	10 U	13 U	10 U
Benzene	4 J	10 U	13 U	10 U
1,2-Dichloroethane	14 UJ	10 UJ	13 UJ	10 UJ
Trichloroethene	14 U	10 U	13 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB106	SB106	SB106	SB106
TtFW Sample I.D.	LV-BIA-SB106-04	LV-BIA-SB106-08	LV-BIA-SB106-14	LV-BIA-SB106-18
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	18'-20'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Methylcyclohexane	14 U	10 U	13 U	10 U
1,2-Dichloropropane	14 U	10 U	13 U	10 U
Bromodichloromethane	14 U	10 U	13 U	10 U
cis-1,3-Dichloropropene	14 U	10 U	13 U	10 U
4-Methyl-2-pentanone	14 U	10 U	13 U	10 U
Toluene	14 U	10 U	13 U	2 J
trans-1,3-Dichloropropene	14 U	10 U	13 U	10 U
1,1,2-Trichloroethane	14 U	10 U	13 U	10 U
Tetrachloroethene	14 U	10 U	13 U	10 U
2-Hexanone	14 U	10 U	13 U	10 U
Dibromochloromethane	14 U	10 U	13 U	10 U
1,2-Dibromoethane	14 U	10 U	13 U	10 U
Chlorobenzene	14 U	10 U	13 U	10 U
Ethylbenzene	22	10 U	13 U	10 U
Xylenes (total)	47	10 U	13 U	10 U
Styrene	14 U	10 U	13 U	10 U
Bromoform	14 U	10 U	13 U	10 U
Isopropylbenzene	14 U	10 U	13 U	10 U
1,1,2,2-Tetrachloroethane	14 U	10 U	13 U	10 U
1,3-Dichlorobenzene	14 U	10 U	13 U	10 U
1,4-Dichlorobenzene	14 U	10 U	13 U	10 U
1,2-Dichlorobenzene	14 U	10 U	13 U	10 U
1,2-Dibromo-3-chloropropane	14 U	10 U	13 U	10 U
1,2,4-Trichlorobenzene	14 U	10 U	13 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB107	SB107	SB107	SB107
TtFW Sample I.D.	LV-BIA-SB107-00	LV-BIA-SB107-04	LV-BIA-SB107-08	LV-BIA-SB107-14
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	0'-2'	4'-6'	8'-10'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	13 UJ	14 UJ	14 UJ	15 UJ
Chloromethane	13 UJ	14 UJ	14 UJ	15 UJ
Vinyl Chloride	13 UJ	14 UJ	14 UJ	15 UJ
Bromomethane	13 U	14 U	14 U	15 U
Chloroethane	13 UJ	14 UJ	14 UJ	15 UJ
Trichlorofluoromethane	13 UJ	14 UJ	14 UJ	15 UJ
1,1-Dichloroethene	13 U	14 U	14 U	15 U
1,1,2-Trichloro-1,2,2-trifluoroethane	13 U	14 U	14 U	15 U
Acetone	13 UJ	21 UJ	14 UJ	15 UJ
Carbon Disulfide	13 U	14 U	1 J	15 U
Methyl Acetate	13 U	14 U	14 U	15 U
Methylene Chloride	13 UJ	25 UJ	20 UJ	18 UJ
trans-1,2-Dichloroethene	13 U	14 U	14 U	15 U
Methyl tert-Butyl Ether	13 U	14 U	14 U	15 U
1,1-Dichloroethane	13 U	14 U	14 U	15 U
cis-1,2-Dichloroethene	13 U	14 U	14 U	2 J
2-Butanone	13 UJ	14 UJ	14 UJ	15 UJ
Chloroform	13 U	14 U	14 U	15 U
1,1,1-Trichloroethane	13 U	14 U	14 U	15 U
Cyclohexane	13 U	14 U	14 U	15 U
Carbon Tetrachloride	13 U	14 U	14 U	15 U
Benzene	13 U	14 U	14 U	15 U
1,2-Dichloroethane	13 U	14 U	14 U	15 U
Trichloroethene	13 U	14 U	14 U	13 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB107	SB107	SB107	SB107
TtFW Sample I.D.	LV-BIA-SB107-00	LV-BIA-SB107-04	LV-BIA-SB107-08	LV-BIA-SB107-14
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	0'-2'	4'-6'	8'-10'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Methylcyclohexane	13 U	14 U	14 U	15 U
1,2-Dichloropropane	13 U	14 U	14 U	15 U
Bromodichloromethane	13 U	14 U	14 U	15 U
cis-1,3-Dichloropropene	13 U	14 U	14 U	15 U
4-Methyl-2-pentanone	13 U	14 U	14 U	15 U
Toluene	13 U	14 U	14 U	15 U
trans-1,3-Dichloropropene	13 U	14 U	14 U	15 U
1,1,2-Trichloroethane	13 U	14 U	14 U	15 U
Tetrachloroethene	13 U	14 U	14 U	15 U
2-Hexanone	13 U	14 U	14 U	15 U
Dibromochloromethane	13 U	14 U	14 U	15 U
1,2-Dibromoethane	13 U	14 U	14 U	15 U
Chlorobenzene	13 U	14 U	14 U	15 U
Ethylbenzene	13 U	14 U	14 U	15 U
Xylenes (total)	13 U	14 U	14 U	15 U
Styrene	13 U	14 U	14 U	15 U
Bromoform	13 U	14 U	14 U	15 U
Isopropylbenzene	13 U	14 U	14 U	15 U
1,1,2,2-Tetrachloroethane	13 U	14 U	14 U	15 U
1,3-Dichlorobenzene	13 U	14 U	14 U	15 U
1,4-Dichlorobenzene	13 U	14 U	14 U	15 U
1,2-Dichlorobenzene	13 U	14 U	14 U	15 U
1,2-Dibromo-3-chloropropane	13 U	14 U	14 U	15 U
1,2,4-Trichlorobenzene	13 U	14 U	14 U	15 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB108	SB108	SB108	SB108
TtFW Sample I.D.	LV-BIA-SB108-00	LV-BIA-SB108-04	LV-BIA-SB108-10	LV-BIA-SB108-14
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	10'-12'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	12 U	10 U	10 U	10 U
Chloromethane	12 U	10 U	10 U	10 U
Vinyl Chloride	12 U	10 U	10 U	10 U
Bromomethane	12 U	10 U	10 U	10 U
Chloroethane	12 U	10 U	10 U	10 U
Trichlorofluoromethane	3 J	4 J	10 U	1 J
1,1-Dichloroethene	12 U	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	12 U	10 U	10 U	10 U
Acetone	56 U	10 U	13 U	10 U
Carbon Disulfide	12 U	10 U	10 U	10 U
Methyl Acetate	12 U	10 U	10 U	10 U
Methylene Chloride	12 U	11 U	10 U	10 U
trans-1,2-Dichloroethene	12 U	10 U	10 U	10 U
Methyl tert-Butyl Ether	12 U	10 U	10 U	10 U
1,1-Dichloroethane	12 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	12 U	3 J	5 J	3 J
2-Butanone	12 U	10 U	10 U	10 U
Chloroform	12 U	10 U	10 U	10 U
1,1,1-Trichloroethane	12 U	10 U	10 U	10 U
Cyclohexane	12 U	10 U	10 U	10 U
Carbon Tetrachloride	12 U	10 U	10 U	10 U
Benzene	12 U	10 U	10 U	10 U
1,2-Dichloroethane	12 U	10 U	10 U	10 U
Trichloroethene	12 U	10 U	8 J	4 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB108	SB108	SB108	SB108
TtFW Sample I.D.	LV-BIA-SB108-00	LV-BIA-SB108-04	LV-BIA-SB108-10	LV-BIA-SB108-14
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	10'-12'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Methylcyclohexane	12 U	10 U	10 U	10 U
1,2-Dichloropropane	12 U	10 U	10 U	10 U
Bromodichloromethane	12 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	12 U	10 U	10 U	10 U
4-Methyl-2-pentanone	12 U	10 U	10 U	10 U
Toluene	12 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	12 U	10 U	10 U	10 U
1,1,2-Trichloroethane	12 U	10 U	10 U	10 U
Tetrachloroethene	12 U	10 U	10 U	10 U
2-Hexanone	12 U	10 U	10 U	10 U
Dibromochloromethane	12 U	10 U	10 U	10 U
1,2-Dibromoethane	12 U	10 U	10 U	10 U
Chlorobenzene	12 U	10 U	10 U	10 U
Ethylbenzene	12 U	10 U	10 U	10 U
Xylenes (total)	12 U	10 U	10 U	10 U
Styrene	12 U	10 U	10 U	10 U
Bromoform	12 U	10 U	10 U	10 U
Isopropylbenzene	12 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	12 U	10 U	10 U	10 U
1,3-Dichlorobenzene	12 U	10 U	10 U	10 U
1,4-Dichlorobenzene	12 U	10 U	10 U	10 U
1,2-Dichlorobenzene	12 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	12 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	12 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	SB109 Duplicate of SB109-04	SB109
TtFW Sample I.D.	LV-BIA-SB109-00	LV-BIA-SB109-04	LV-BIA-SB109-05	LV-BIA-SB109-08
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	14 U	11 U	13 U	10 U
Chloromethane	14 U	11 U	13 U	10 U
Vinyl Chloride	14 U	11 U	13 U	10 U
Bromomethane	14 U	11 U	13 U	10 U
Chloroethane	14 U	11 U	13 U	10 U
Trichlorofluoromethane	14 U	11 U	13 U	10 U
1,1-Dichloroethene	14 U	11 U	13 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	14 U	11 U	13 U	10 U
Acetone	51 U	16 U	13 U	10 U
Carbon Disulfide	14 U	11 U	13 U	10 U
Methyl Acetate	14 U	11 U	13 U	10 U
Methylene Chloride	14 U	11 U	13 U	10 U
trans-1,2-Dichloroethene	14 U	11 U	13 U	10 U
Methyl tert-Butyl Ether	14 U	11 U	13 U	10 U
1,1-Dichloroethane	14 U	11 U	13 U	10 U
cis-1,2-Dichloroethene	14 U	11 U	13 U	10 U
2-Butanone	14 U	11 U	4 J	4 J
Chloroform	14 U	11 U	13 U	10 U
1,1,1-Trichloroethane	14 U	11 U	13 U	10 U
Cyclohexane	14 U	11 U	13 U	10 U
Carbon Tetrachloride	14 U	11 U	13 U	10 U
Benzene	14 U	11 U	13 U	10 U
1,2-Dichloroethane	14 U	11 U	13 U	10 U
Trichloroethene	14 U	11 U	13 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	SB109 Duplicate of SB109-04	SB109
TtFW Sample I.D.	LV-BIA-SB109-00	LV-BIA-SB109-04	LV-BIA-SB109-05	LV-BIA-SB109-08
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Methylcyclohexane	14 U	11 U	13 U	10 U
1,2-Dichloropropane	14 U	11 U	13 U	10 U
Bromodichloromethane	14 U	11 U	13 U	10 U
cis-1,3-Dichloropropene	14 U	11 U	13 U	10 U
4-Methyl-2-pentanone	14 U	11 U	13 U	10 U
Toluene	14 U	11 U	13 U	10 U
trans-1,3-Dichloropropene	14 U	11 U	13 U	10 U
1,1,2-Trichloroethane	14 U	11 U	13 U	10 U
Tetrachloroethene	14 U	11 U	13 U	10 U
2-Hexanone	14 U	11 U	13 U	10 U
Dibromochloromethane	14 U	11 U	13 U	10 U
1,2-Dibromoethane	14 U	11 U	13 U	10 U
Chlorobenzene	14 U	11 U	13 U	10 U
Ethylbenzene	14 U	11 U	13 U	10 U
Xylenes (total)	14 U	11 U	13 U	10 U
Styrene	14 U	11 U	13 U	10 U
Bromoform	14 U	11 U	13 U	10 U
Isopropylbenzene	14 U	11 U	13 U	10 U
1,1,2,2-Tetrachloroethane	14 U	11 U	13 U	10 U
1,3-Dichlorobenzene	14 U	11 U	13 U	10 U
1,4-Dichlorobenzene	14 U	11 U	13 U	10 U
1,2-Dichlorobenzene	14 U	11 U	13 U	10 U
1,2-Dibromo-3-chloropropane	14 U	11 U	13 U	10 U
1,2,4-Trichlorobenzene	14 U	11 U	13 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	MW8	MW8
TtFW Sample I.D.	LV-BIA-SB109-14	LV-BIA-SB109-24	LV-BIA-SBMW8-00	LV-BIA-SBMW8-04
Sampling Date	12/5/00	12/5/00	12/5/00	12/5/00
Depth	14'-16'	24'-26'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	9 U	11 U	14 U	15 U
Chloromethane	9 U	11 U	14 U	15 U
Vinyl Chloride	9 U	11 U	14 U	15 U
Bromomethane	9 U	11 U	14 U	15 U
Chloroethane	9 U	11 U	14 U	15 U
Trichlorofluoromethane	9 U	11 U	14 U	15 U
1,1-Dichloroethene	9 U	11 U	14 U	15 U
1,1,2-Trichloro-1,2,2-trifluoroethane	9 U	11 U	14 U	15 U
Acetone	9 U	11 U	14 U	15 U
Carbon Disulfide	9 U	11 U	14 U	15 U
Methyl Acetate	9 U	11 U	14 U	15 U
Methylene Chloride	9 U	11 U	14 U	15 U
trans-1,2-Dichloroethene	9 U	11 U	14 U	15 U
Methyl tert-Butyl Ether	9 U	11 U	14 U	15 U
1,1-Dichloroethane	9 U	11 U	14 U	15 U
cis-1,2-Dichloroethene	9 U	11 U	14 U	15 U
2-Butanone	9 U	11 U	14 U	15 U
Chloroform	9 U	11 U	14 U	15 U
1,1,1-Trichloroethane	9 U	11 U	14 U	15 U
Cyclohexane	9 U	11 U	14 U	15 U
Carbon Tetrachloride	9 U	11 U	14 U	15 U
Benzene	9 U	11 U	14 U	15 U
1,2-Dichloroethane	9 U	11 U	14 U	15 U
Trichloroethene	9 U	11 U	14 U	15 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	MW8	MW8
TtFW Sample I.D.	LV-BIA-SB109-14	LV-BIA-SB109-24	LV-BIA-SBMW8-00	LV-BIA-SBMW8-04
Sampling Date	12/5/00	12/5/00	12/5/00	12/5/00
Depth	14'-16'	24'-26'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Methylcyclohexane	9 U	11 U	14 U	15 U
1,2-Dichloropropane	9 U	11 U	14 U	15 U
Bromodichloromethane	9 U	11 U	14 U	15 U
cis-1,3-Dichloropropene	9 U	11 U	14 U	15 U
4-Methyl-2-pentanone	9 U	11 U	14 U	15 U
Toluene	9 U	11 U	14 U	15 U
trans-1,3-Dichloropropene	9 U	11 U	14 U	15 U
1,1,2-Trichloroethane	9 U	11 U	14 U	15 U
Tetrachloroethene	2 J	2 J	3 J	4 J
2-Hexanone	9 U	11 U	14 U	15 U
Dibromochloromethane	9 U	11 U	14 U	15 U
1,2-Dibromoethane	9 U	11 U	14 U	15 U
Chlorobenzene	9 U	11 U	14 U	15 U
Ethylbenzene	9 U	11 U	14 U	15 U
Xylenes (total)	9 U	11 U	14 U	15 U
Styrene	9 U	11 U	14 U	15 U
Bromoform	9 U	11 U	14 U	15 U
Isopropylbenzene	9 U	11 U	14 U	15 U
1,1,2,2-Tetrachloroethane	9 U	11 U	14 U	15 U
1,3-Dichlorobenzene	9 U	11 U	14 U	15 U
1,4-Dichlorobenzene	9 U	11 U	14 U	15 U
1,2-Dichlorobenzene	9 U	11 U	14 U	15 U
1,2-Dibromo-3-chloropropane	9 U	11 U	14 U	15 U
1,2,4-Trichlorobenzene	9 U	11 U	14 U	15 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW8	MW8 Duplicate of MW8-08	MW8	MW8
TtFW Sample I.D.	LV-BIA-SBMW8-08	LV-BIA-SBMW8-09	LV-BIA-SBMW8-18	LV-BIA-SBMW8-34
Sampling Date	12/5/00	12/5/00	12/6/00	12/6/00
Depth	8'-10'	8'-10'	18'-20'	34'-36'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	14 U	12 U	20 U	13 U
Chloromethane	14 U	12 U	20 U	13 U
Vinyl Chloride	14 U	12 U	20 U	13 U
Bromomethane	14 U	12 U	20 U	13 U
Chloroethane	14 U	12 U	20 U	13 U
Trichlorofluoromethane	14 U	12 U	20 U	4 J
1,1-Dichloroethene	14 U	12 U	20 U	13 U
1,1,2-Trichloro-1,2,2-trifluoroethane	14 U	12 U	20 U	13 U
Acetone	14 U	12 UJ	20 UJ	13 UJ
Carbon Disulfide	14 U	12 U	20 U	13 U
Methyl Acetate	14 U	12 U	20 U	13 U
Methylene Chloride	14 U	12 U	26 U	24 U
trans-1,2-Dichloroethene	14 U	12 U	20 U	13 U
Methyl tert-Butyl Ether	14 U	12 U	20 U	13 U
1,1-Dichloroethane	14 U	12 U	20 U	13 U
cis-1,2-Dichloroethene	14 U	12 U	20 U	13 U
2-Butanone	14 U	12 U	20 U	13 U
Chloroform	14 U	12 U	20 U	13 U
1,1,1-Trichloroethane	14 U	12 U	20 U	13 U
Cyclohexane	14 U	12 U	20 U	13 U
Carbon Tetrachloride	14 U	12 U	20 U	13 U
Benzene	14 U	12 U	20 U	13 U
1,2-Dichloroethane	14 U	12 U	20 U	13 U
Trichloroethene	14 U	12 U	20 U	13 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-5
Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW8	MW8 Duplicate of MW8-08	MW8	MW8
TtFW Sample I.D.	LV-BIA-SBMW8-08	LV-BIA-SBMW8-09	LV-BIA-SBMW8-18	LV-BIA-SBMW8-34
Sampling Date	12/5/00	12/5/00	12/6/00	12/6/00
Depth	8'-10'	8'-10'	18'-20'	34'-36'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Methylcyclohexane	14 U	12 U	20 U	13 U
1,2-Dichloropropane	14 U	12 U	20 U	13 U
Bromodichloromethane	14 U	12 U	20 U	13 U
cis-1,3-Dichloropropene	14 U	12 U	20 U	13 U
4-Methyl-2-pentanone	14 U	12 U	20 U	13 U
Toluene	14 U	12 U	20 U	13 U
trans-1,3-Dichloropropene	14 U	12 U	20 U	13 U
1,1,2-Trichloroethane	14 U	12 U	20 U	13 U
Tetrachloroethene	4 J	3 J	5 J	3 J
2-Hexanone	14 U	12 U	20 U	13 U
Dibromochloromethane	14 U	12 U	20 U	13 U
1,2-Dibromoethane	14 U	12 U	20 U	13 U
Chlorobenzene	14 U	12 U	20 U	13 U
Ethylbenzene	14 U	12 U	20 U	13 U
Xylenes (total)	14 U	12 U	20 U	13 U
Styrene	14 U	12 U	20 U	13 U
Bromoform	14 U	12 U	20 U	13 U
Isopropylbenzene	14 U	12 U	20 U	13 U
1,1,2,2-Tetrachloroethane	14 U	12 U	20 U	13 U
1,3-Dichlorobenzene	14 U	12 U	20 U	13 U
1,4-Dichlorobenzene	14 U	12 U	20 U	13 U
1,2-Dichlorobenzene	14 U	12 U	20 U	13 U
1,2-Dibromo-3-chloropropane	14 U	12 U	20 U	13 U
1,2,4-Trichlorobenzene	14 U	12 U	20 U	13 U

See Table D- for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-1	CCAGEO-1	CCAGEO-1	CCAGEO-1
TtFW Sample I.D.	LV-SS-CCA-GEO1-0-1	LV-SB-CCA-GEO1-6-8	LV-SB-GEO1-16-18	LV-SB-CCA-GEO1-26-28
Sampling Date	09/10/03	09/08/03	09/08/03	09/08/03
Depth	0'-1'	6'-8'	16'-18'	26'-28'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	12 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	12 U	10 U	10 U	10 U
1,1,2-Trichloroethane	12 U	10 U	10 U	10 U
1,1-Dichloroethane	12 U	10 U	10 U	10 U
1,1-Dichloroethylene	12 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	12 U	10 U	10 U	10 U
1,2-Dichloroethane	12 U	10 U	10 U	10 U
1,2-Dichloropropane	12 U	10 U	10 U	10 U
2-Hexanone	12 U	10 U	10 U	10 U
Acetone	5 J	10 U	10 U	10 U
Benzene	12 U	10 U	10 U	10 U
Isopropylbenzene	12 U	10 U	10 U	10 U
Bromodichloromethane	12 U	10 U	10 U	10 U
Bromoform	12 U	10 U	10 U	10 U
Carbon disulfide	12 U	10 U	0.7 J	10 U
Carbon tetrachloride	12 U	10 U	10 U	10 U
Chlorobenzene	12 U	10 U	10 U	10 U
Chloroethane	12 UJ	10 U	10 U	10 U
Chloroform	12 U	10 U	10 U	10 U
cis-1,2-Dichloroethylene	12 U	10 U	3 J	7 J
cis-1,3-Dichloropropene	12 U	10 U	10 U	10 U
Cyclohexane	12 U	10 U	10 U	10 U
Dibromochloropropane	12 U	10 U	10 U	10 U
Dibromochloromethane	12 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-1	CCAGEO-1	CCAGEO-1	CCAGEO-1
TtFW Sample I.D.	LV-SS-CCA-GEO1-0-1	LV-SB-CCA-GEO1-6-8	LV-SB-GEO1-16-18	LV-SB-CCA-GEO1-26-28
Sampling Date	09/10/03	09/08/03	09/08/03	09/08/03
Depth	0'-1'	6'-8'	16'-18'	26'-28'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	12 U	10 U	10 U	10 U
1,2-Dibromoethane	12 U	10 U	10 U	10 U
Ethylbenzene	12 U	10 U	10 U	10 U
Freon 113	12 U	10 U	10 U	10 U
m-Dichlorobenzene	12 U	10 U	10 U	10 U
Methyl Acetate	12 U	10 U	10 U	10 U
Methyl bromide	12 U	10 U	10 U	10 U
Methyl chloride	12 U	10 U	10 U	10 U
Methyl ethylketone	12 U	10 U	10 U	10 U
Methyl isobutyl ketone (MIBK)	12 U	10 UJ	10 UJ	10 UJ
Methyl tert-butyl ether	12 U	10 U	10 U	10 U
Methylcyclohexane	12 U	10 U	10 U	10 U
Methylene chloride	12 UJ	10 U	10 U	13 U
o-Dichlorobenzene	12 U	10 U	10 U	10 U
p-Dichlorobenzene	12 U	10 U	10 U	10 U
Styrene	12 U	10 U	10 U	10 U
Tetrachloroethylene	12 U	10 U	10 U	2 J
Toluene	12 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	12 UJ	10 U	10 U	10 U
trans-1,3-Dichloropropene	12 U	10 U	10 U	10 U
Trichloroethylene	3 J	2 J	86	110
Trichlorofluoromethane	12 UJ	10 U	10 U	10 U
Vinyl chloride	12 U	10 U	10 U	10 U
Xylene (total)	12 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-2	CCAGEO-2	CCAGEO-2	CCAGEO-2
TtFW Sample I.D.	LV-SS-CCA-GEO2-0-1	LV-SB-CCA-GEO2-6-8	LV-SB-CCA-GEO2-18-20	LV-SB-CCA-GEO2-25-27
Sampling Date	09/10/03	09/09/03	09/09/03	09/09/03
Depth	0'-1'	6'-8'	18'-20'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	11 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	11 UJ	10 U	10 U	10 U
1,1,2-Trichloroethane	11 U	10 U	10 U	10 U
1,1-Dichloroethane	11 U	10 U	10 U	10 U
1,1-Dichloroethylene	11 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	11 UJ	10 U	10 U	10 U
1,2-Dichloroethane	11 U	10 U	10 U	10 U
1,2-Dichloropropane	11 U	10 U	10 U	10 U
2-Hexanone	11 UJ	10 U	10 U	10 U
Acetone	11 U	10 U	10 U	10 U
Benzene	11 U	10 U	10 U	10 U
Isopropylbenzene	11 UJ	10 U	10 U	10 U
Bromodichloromethane	11 U	10 U	10 U	10 U
Bromoform	11 U	10 U	10 U	10 U
Carbon disulfide	11 UJ	10 U	10 U	10 U
Carbon tetrachloride	11 U	10 U	10 U	10 U
Chlorobenzene	11 UJ	10 U	10 U	10 U
Chloroethane	11 U	10 U	10 U	10 U
Chloroform	11 U	10 U	10 U	10 U
cis-1,2-Dichloroethylene	11 U	10 U	10 U	1 J
cis-1,3-Dichloropropene	11 U	10 U	10 U	10 U
Cyclohexane	11 U	10 U	10 U	10 U
Dibromochloropropane	11 UJ	10 U	10 U	10 U
Dibromochloromethane	11 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-2	CCAGEO-2	CCAGEO-2	CCAGEO-2
TtFW Sample I.D.	LV-SS-CCA-GEO2-0-1	LV-SB-CCA-GEO2-6-8	LV-SB-CCA-GEO2-18-20	LV-SB-CCA-GEO2-25-27
Sampling Date	09/10/03	09/09/03	09/09/03	09/09/03
Depth	0'-1'	6'-8'	18'-20'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	11 UJ	10 U	10 U	10 U
1,2-Dibromoethane	11 UJ	10 U	10 U	10 U
Ethylbenzene	11 UJ	10 U	10 U	10 U
Freon 113	11 U	10 U	10 U	10 U
m-Dichlorobenzene	11 UJ	10 U	10 U	10 U
Methyl Acetate	11 U	10 U	10 U	10 U
Methyl bromide	11 U	10 U	10 U	10 U
Methyl chloride	11 UJ	10 U	10 U	10 U
Methyl ethylketone	11 U	10 U	10 U	10 U
Methyl isobutyl ketone (MIBK)	11 UJ	10 UJ	10 UJ	10 UJ
Methyl tert-butyl ether	11 U	10 U	10 U	10 U
Methylcyclohexane	11 U	10 U	10 U	10 U
Methylene chloride	14 U	20 U	11 U	11 U
o-Dichlorobenzene	11 UJ	10 U	10 U	10 U
p-Dichlorobenzene	11 UJ	10 U	10 U	10 U
Styrene	11 UJ	10 U	10 U	10 U
Tetrachloroethylene	2 J	10 U	1 J	7 J
Toluene	11 UJ	10 U	10 U	10 U
trans-1,2-Dichloroethene	11 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	11 U	10 U	10 U	10 U
Trichloroethylene	14	1 J	71	27
Trichlorofluoromethane	11 UJ	10 U	10 U	10 U
Vinyl chloride	11 UJ	10 U	10 U	10 U
Xylene (total)	11 UJ	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-3	CCAGEO-3	CCAGEO-3	CCAGEO-3
TtFW Sample I.D.	LV-SS-CCA-GEO3-0-1	LV-SB-CCA-GEO3-8-10	LV-SB-CCA-GEO3-20-22	LV-SB-CCA-GEO3-25-27
Sampling Date	09/10/03	09/09/03	09/09/03	09/09/03
Depth	0'-1'	8'-10'	20'-22'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	12 UJ	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	12 UJ	10 U	10 U	10 U
1,1,2-Trichloroethane	12 UJ	10 U	10 U	10 U
1,1-Dichloroethane	12 UJ	10 U	10 U	10 U
1,1-Dichloroethylene	12 UJ	10 U	10 U	10 U
1,2,4-Trichlorobenzene	12 UJ	10 U	10 U	10 U
1,2-Dichloroethane	12 UJ	10 U	10 U	10 U
1,2-Dichloropropane	12 UJ	10 U	10 U	10 U
2-Hexanone	12 UJ	10 U	10 U	10 U
Acetone	12 UJ	10 U	10 U	10 U
Benzene	12 UJ	10 U	10 U	10 U
Isopropylbenzene	12 UJ	10 U	10 U	10 U
Bromodichloromethane	12 UJ	10 U	10 U	10 U
Bromoform	12 UJ	10 U	10 U	10 UJ
Carbon disulfide	12 UJ	10 U	10 U	10 U
Carbon tetrachloride	12 UJ	10 U	10 U	10 U
Chlorobenzene	12 UJ	10 U	10 U	10 U
Chloroethane	12 UJ	10 U	10 U	10 U
Chloroform	12 UJ	10 U	10 U	10 U
cis-1,2-Dichloroethylene	12 UJ	10 U	0.7 J	4 J
cis-1,3-Dichloropropene	12 UJ	10 U	10 U	10 U
Cyclohexane	12 UJ	10 U	10 U	10 U
Dibromochloropropane	12 UJ	10 U	10 U	10 U
Dibromochloromethane	12 UJ	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-3	CCAGEO-3	CCAGEO-3	CCAGEO-3
TtFW Sample I.D.	LV-SS-CCA-GEO3-0-1	LV-SB-CCA-GEO3-8-10	LV-SB-CCA-GEO3-20-22	LV-SB-CCA-GEO3-25-27
Sampling Date	09/10/03	09/09/03	09/09/03	09/09/03
Depth	0'-1'	8'-10'	20'-22'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	12 UJ	10 U	10 U	10 U
1,2-Dibromoethane	12 UJ	10 U	10 U	10 U
Ethylbenzene	12 UJ	10 U	10 U	10 U
Freon 113	12 UJ	10 U	10 U	10 U
m-Dichlorobenzene	12 UJ	10 U	10 U	10 U
Methyl Acetate	12 UJ	10 U	10 U	10 U
Methyl bromide	12 UJ	10 U	10 U	10 UJ
Methyl chloride	12 UJ	10 U	10 U	10 U
Methyl ethylketone	12 UJ	10 U	10 U	10 U
Methyl isobutyl ketone (MIBK)	12 UJ	10 UJ	10 UJ	10 U
Methyl tert-butyl ether	12 UJ	10 U	10 U	10 U
Methylcyclohexane	12 UJ	10 U	10 U	10 U
Methylene chloride	12 UJ	10 U	15 U	10 UJ
o-Dichlorobenzene	12 UJ	10 U	10 U	10 U
p-Dichlorobenzene	12 UJ	10 U	10 U	10 U
Styrene	12 UJ	10 U	10 U	10 U
Tetrachloroethylene	12 UJ	10 U	0.7 J	4 J
Toluene	12 UJ	10 U	10 U	10 U
trans-1,2-Dichloroethene	12 UJ	10 U	10 U	10 U
trans-1,3-Dichloropropene	12 UJ	10 U	10 U	10 U
Trichloroethylene	6 J	9 J	70	120
Trichlorofluoromethane	12 UJ	10 U	10 U	10 U
Vinyl chloride	12 UJ	10 U	10 U	10 U
Xylene (total)	12 UJ	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-4	CCAGEO-4	CCAGEO-4	CCAGEO-4
TtFW Sample I.D.	LV-SS-CCA-GEO4-0-1	LV-SB-CCA-GEO4-8-10	LV-SB-CCA-GEO4-16-18	LV-SB-CCA-GEO4-22-24
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	0'-1'	8'-10'	16'-18'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U
1,1-Dichloroethylene	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U
Isopropylbenzene	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U	10 U
Carbon tetrachloride	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U
Chloroethane	10 UJ	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethylene	10 U	0.5 J	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Cyclohexane	10 U	10 U	10 U	10 U
Dibromochloropropane	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-4	CCAGEO-4	CCAGEO-4	CCAGEO-4
TtFW Sample I.D.	LV-SS-CCA-GEO4-0-1	LV-SB-CCA-GEO4-8-10	LV-SB-CCA-GEO4-16-18	LV-SB-CCA-GEO4-22-24
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	0'-1'	8'-10'	16'-18'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	10 U	10 U	10 U	10 U
1,2-Dibromoethane	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	3 J	0.5 J	10 U
Freon 113	10 U	10 U	10 U	10 U
m-Dichlorobenzene	10 U	10 U	10 U	10 U
Methyl Acetate	10 U	10 U	10 U	10 U
Methyl bromide	10 UJ	10 UJ	10 UJ	10 UJ
Methyl chloride	10 U	10 U	10 U	10 U
Methyl ethylketone	10 U	10 U	10 U	10 U
Methyl isobutyl ketone (MIBK)	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	10 U	10 U	10 U	10 U
Methylcyclohexane	10 U	0.8 J	10 U	10 U
Methylene chloride	11 UJ	10 U	10 U	10 U
o-Dichlorobenzene	10 U	10 U	10 U	10 U
p-Dichlorobenzene	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U
Tetrachloroethylene	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Trichloroethylene	40	190 J	72	150
Trichlorofluoromethane	10 U	10 U	10 U	10 U
Vinyl chloride	10 U	10 U	10 U	10 U
Xylene (total)	10 U	72	5 J	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-5	CCAGEO-5 Duplicate	CCAGEO-5	CCAGEO-5
TtFW Sample I.D.	LV-SS-CCA-GEO5-0-1	LV-SS-CCA-GEO7-0-1	LV-SB-CCA-GEO5-2-4	LV-SB-CCA-GEO5-6-8
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	0'-1'	0'-1'	2'-4'	6'-8'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	10 U	11 UJ	11 U	10 U
1,1,2,2-Tetrachloroethane	10 U	11 UJ	11 U	10 U
1,1,2-Trichloroethane	10 U	11 UJ	11 U	10 U
1,1-Dichloroethane	10 U	11 UJ	11 UJ	10 U
1,1-Dichloroethylene	10 U	11 UJ	11 UJ	10 U
1,2,4-Trichlorobenzene	10 U	11 UJ	11 U	10 U
1,2-Dichloroethane	10 U	11 UJ	11 UJ	10 U
1,2-Dichloropropane	10 U	11 UJ	11 U	10 U
2-Hexanone	10 U	11 UJ	11 U	10 U
Acetone	10 U	11 UJ	11 UJ	10 U
Benzene	10 U	11 UJ	1 J	10 U
Isopropylbenzene	10 U	11 UJ	11 U	10 U
Bromodichloromethane	10 U	11 UJ	11 U	10 U
Bromoform	10 U	11 UJ	11 U	10 U
Carbon disulfide	10 U	11 UJ	11 UJ	10 U
Carbon tetrachloride	10 U	11 UJ	11 U	10 U
Chlorobenzene	10 U	11 UJ	11 U	10 U
Chloroethane	10 UJ	11 UJ	11 UJ	10 U
Chloroform	10 U	11 UJ	11 UJ	10 U
cis-1,2-Dichloroethylene	10 U	11 UJ	11 UJ	10 U
cis-1,3-Dichloropropene	10 U	11 UJ	11 U	10 U
Cyclohexane	10 U	11 UJ	11 U	10 U
Dibromochloropropane	10 U	11 UJ	11 U	10 U
Dibromochloromethane	10 U	11 UJ	11 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-5	CCAGEO-5 Duplicate	CCAGEO-5	CCAGEO-5
TtFW Sample I.D.	LV-SS-CCA-GEO5-0-1	LV-SS-CCA-GEO7-0-1	LV-SB-CCA-GEO5-2-4	LV-SB-CCA-GEO5-6-8
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	0'-1'	0'-1'	2'-4'	6'-8'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	10 U	11 UJ	11 UJ	10 U
1,2-Dibromoethane	10 U	11 UJ	11 U	10 U
Ethylbenzene	10 U	11 UJ	11 U	10 U
Freon 113	10 U	11 UJ	11 UJ	10 U
m-Dichlorobenzene	10 U	11 UJ	11 U	10 U
Methyl Acetate	10 U	11 UJ	11 UJ	10 U
Methyl bromide	10 UJ	11 UJ	11 UJ	10 UJ
Methyl chloride	10 U	11 UJ	1700 J	10 U
Methyl ethylketone	10 U	11 UJ	11 UJ	10 U
Methyl isobutyl ketone (MIBK)	10 U	11 UJ	11 U	10 U
Methyl tert-butyl ether	10 U	11 UJ	11 UJ	10 U
Methylcyclohexane	10 U	11 UJ	11 U	10 U
Methylene chloride	10 UJ	11 UJ	11 UJ	10 U
o-Dichlorobenzene	10 U	11 UJ	11 U	10 U
p-Dichlorobenzene	10 U	11 UJ	11 U	10 U
Styrene	10 U	11 UJ	11 U	10 U
Tetrachloroethylene	10 U	11 UJ	11 U	10 U
Toluene	0.6 J	11 UJ	5 J	10 U
trans-1,2-Dichloroethene	10 U	11 UJ	11 UJ	10 U
trans-1,3-Dichloropropene	10 U	11 UJ	11 U	10 U
Trichloroethylene	110 D	96 J	550 D	84
Trichlorofluoromethane	10 U	11 UJ	11 UJ	10 U
Vinyl chloride	10 U	11 UJ	11 UJ	10 U
Xylene (total)	10 U	11 UJ	11 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-5	CCAGEO-6	CCAGEO-6	CCAGEO-6
TtFW Sample I.D.	LV-SB-CCA-GEO5-20-22	LV-SS-CCA-GEO6-0-1	LV-SB-CCA-GEO6-1-2	LV-SB-CCA-GEO6-12-14
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	20'-22'	0'-1'	1'-2'	12'-14'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	10 U	12 U	1400 U	11 U
1,1,2,2-Tetrachloroethane	10 U	12 U	1400 U	11 U
1,1,2-Trichloroethane	10 U	12 U	1400 U	11 U
1,1-Dichloroethane	10 U	12 U	1400 U	11 U
1,1-Dichloroethylene	10 U	12 U	1400 UJ	11 U
1,2,4-Trichlorobenzene	10 U	12 U	1400 U	11 U
1,2-Dichloroethane	10 U	12 U	1400 U	11 U
1,2-Dichloropropane	10 U	12 U	1400 U	11 U
2-Hexanone	10 U	12 U	1400 U	11 U
Acetone	10 U	12 U	1400 UJ	11 U
Benzene	10 U	12 U	1400 U	11 U
Isopropylbenzene	10 U	12 U	1400 U	11 U
Bromodichloromethane	10 U	12 U	1400 U	11 U
Bromoform	10 U	12 U	1400 UJ	11 U
Carbon disulfide	2 J	12 U	1400 UJ	11 U
Carbon tetrachloride	10 U	12 U	1400 U	11 U
Chlorobenzene	10 U	12 U	1400 U	11 U
Chloroethane	10 U	12 UJ	1400 U	11 UJ
Chloroform	10 U	12 U	1400 U	11 U
cis-1,2-Dichloroethylene	10 U	12 U	830 J	11 U
cis-1,3-Dichloropropene	10 U	12 U	1400 U	11 U
Cyclohexane	10 U	12 U	1400 UJ	11 U
Dibromochloropropane	10 U	12 U	1400 U	11 U
Dibromochloromethane	10 U	12 U	1400 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-5	CCAGEO-6	CCAGEO-6	CCAGEO-6
TtFW Sample I.D.	LV-SB-CCA-GEO5-20-22	LV-SS-CCA-GEO6-0-1	LV-SB-CCA-GEO6-1-2	LV-SB-CCA-GEO6-12-14
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	20'-22'	0'-1'	1'-2'	12'-14'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	10 UJ	12 U	1400 U	11 U
1,2-Dibromoethane	10 U	12 U	1400 U	11 U
Ethylbenzene	10 U	12 U	1400 U	11 U
Freon 113	10 U	12 U	1400 UJ	11 U
m-Dichlorobenzene	10 U	12 U	1400 U	11 U
Methyl Acetate	10 U	12 U	1400 U	11 U
Methyl bromide	10 U	12 UJ	1400 U	11 UJ
Methyl chloride	10 UJ	12 U	1400 U	11 U
Methyl ethylketone	10 U	12 U	1400 U	11 U
Methyl isobutyl ketone (MIBK)	10 U	12 U	1400 U	11 U
Methyl tert-butyl ether	10 U	12 U	1400 U	11 U
Methylcyclohexane	10 U	12 U	1300 J	11 U
Methylene chloride	10 U	12 UJ	1400 U	11 UJ
o-Dichlorobenzene	10 U	12 U	1400 U	11 U
p-Dichlorobenzene	10 U	12 U	1400 U	11 U
Styrene	10 U	12 U	1400 U	11 U
Tetrachloroethylene	10 U	12 U	1400 U	4 J
Toluene	2 J	12 U	1400 U	11 U
trans-1,2-Dichloroethene	10 U	12 U	1400 U	11 U
trans-1,3-Dichloropropene	10 U	12 U	1400 U	11 U
Trichloroethylene	87 D	73	11000 D	170 D
Trichlorofluoromethane	10 UJ	12 U	1400 U	11 U
Vinyl chloride	10 UJ	12 U	1400 U	11 U
Xylene (total)	10 U	12 U	1400 U	11 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	CCAGEO-6	RRAAGEO-1	RRAAGEO-1 Duplicate	RRAAGEO-1
TtFW Sample I.D.	LV-SB-CCA-GEO6-22-24	LV-SS-RRAA-GEO1-0-1	LV-SS-RRAA-GEO13-0-1	LV-SB-RRAA-GEO1-10-12
Sampling Date	09/10/03	09/11/03	09/11/03	09/11/03
Depth	22'-24'	0'-1'	0'-1'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	10 U	11 U	12 U	10 U
1,1,2,2-Tetrachloroethane	10 U	11 U	12 U	10 U
1,1,2-Trichloroethane	10 U	11 U	12 U	10 U
1,1-Dichloroethane	10 U	11 U	12 U	10 U
1,1-Dichloroethylene	10 U	11 U	12 U	10 U
1,2,4-Trichlorobenzene	10 U	11 U	12 U	10 U
1,2-Dichloroethane	10 U	11 U	12 U	10 U
1,2-Dichloropropane	10 U	11 U	12 U	10 U
2-Hexanone	10 U	11 U	12 U	10 U
Acetone	10 U	11 U	12 U	10 U
Benzene	10 U	11 U	12 U	10 U
Isopropylbenzene	10 U	11 U	12 U	10 U
Bromodichloromethane	10 U	11 U	12 U	10 U
Bromoform	10 U	11 UJ	12 UJ	10 UJ
Carbon disulfide	10 UJ	11 U	12 U	10 U
Carbon tetrachloride	10 U	11 U	12 U	10 U
Chlorobenzene	10 U	11 U	12 U	10 U
Chloroethane	10 U	11 U	12 U	10 U
Chloroform	10 U	11 U	12 U	10 U
cis-1,2-Dichloroethylene	10 U	11 U	12 U	10 U
cis-1,3-Dichloropropene	10 U	11 U	12 U	10 U
Cyclohexane	10 U	2 J	12 U	10 U
Dibromochloropropane	10 U	11 U	12 U	10 U
Dibromochloromethane	10 U	11 U	12 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	CCAGEO-6	RRAAGEO-1	RRAAGEO-1 Duplicate	RRAAGEO-1
TtFW Sample I.D.	LV-SB-CCA-GEO6-22-24	LV-SS-RRAA-GEO1-0-1	LV-SS-RRAA-GEO13-0-1	LV-SB-RRAA-GEO1-10-12
Sampling Date	09/10/03	09/11/03	09/11/03	09/11/03
Depth	22'-24'	0'-1'	0'-1'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	10 UJ	11 U	12 U	10 U
1,2-Dibromoethane	10 U	11 U	12 U	10 U
Ethylbenzene	10 U	11 U	12 U	10 U
Freon 113	10 U	11 U	12 U	10 U
m-Dichlorobenzene	10 U	11 U	12 U	10 U
Methyl Acetate	10 U	11 U	12 U	10 U
Methyl bromide	10 U	11 UJ	12 UJ	10 UJ
Methyl chloride	10 UJ	11 U	12 U	10 U
Methyl ethylketone	10 U	11 U	12 U	10 U
Methyl isobutyl ketone (MIBK)	10 U	11 U	12 U	10 U
Methyl tert-butyl ether	10 U	11 U	12 U	10 U
Methylcyclohexane	10 U	11 U	12 U	10 U
Methylene chloride	10 U	11 UJ	12 UJ	27 UJ
o-Dichlorobenzene	10 U	11 U	12 U	10 U
p-Dichlorobenzene	10 U	11 U	12 U	10 U
Styrene	10 U	11 U	12 U	10 U
Tetrachloroethylene	0.6 J	11 U	12 U	10 U
Toluene	10 U	11 U	12 U	10 U
trans-1,2-Dichloroethene	10 U	11 U	12 U	10 U
trans-1,3-Dichloropropene	10 U	11 U	12 U	10 U
Trichloroethylene	26	11 U	12 U	10 U
Trichlorofluoromethane	10 UJ	11 U	12 U	10 U
Vinyl chloride	10 UJ	11 U	12 U	10 U
Xylene (total)	10 U	11 U	12 U	10 U

See Table D-[illegible] abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-1	RRAAGEO-2	RRAAGEO-2	RRAAGEO-2
TtFW Sample I.D.	LV-SB-RRAA-GEO1-20-22	LV-SS-RRAA-GE02-0-1	LV-SB-RRAA-GEO2-10-12	LV-SB-RRAA-GEO2-18-20
Sampling Date	09/11/03	09/16/03	09/23/03	09/23/03
Depth	20'-22'	0'-1'	10'-12'	18'-20'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	10 U	12 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	12 U	10 U	10 U
1,1,2-Trichloroethane	10 U	12 U	10 U	10 U
1,1-Dichloroethane	10 U	12 U	10 U	10 U
1,1-Dichloroethylene	10 U	12 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	12 U	10 U	10 U
1,2-Dichloroethane	10 U	12 U	10 U	10 U
1,2-Dichloropropane	10 U	12 U	10 U	10 U
2-Hexanone	10 U	12 U	10 UJ	10 UJ
Acetone	10 U	12 U	10 U	10 U
Benzene	10 U	12 U	10 U	10 U
Isopropylbenzene	10 U	12 U	10 U	10 U
Bromodichloromethane	10 U	12 U	10 U	10 U
Bromoform	10 UJ	12 U	10 U	10 U
Carbon disulfide	10 U	12 U	10 U	10 U
Carbon tetrachloride	10 U	12 U	10 U	10 U
Chlorobenzene	10 U	12 U	10 U	10 U
Chloroethane	10 U	12 U	10 U	10 U
Chloroform	10 U	12 U	10 U	10 U
cis-1,2-Dichloroethylene	10 U	12 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	12 U	10 U	10 U
Cyclohexane	10 U	12 U	10 U	10 U
Dibromochloropropane	10 U	12 U	10 U	10 U
Dibromochloromethane	10 U	12 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-1	RRAAGEO-2	RRAAGEO-2	RRAAGEO-2
TtFW Sample I.D.	LV-SB-RRAA-GEO1-20-22	LV-SS-RRAA-GE02-0-1	LV-SB-RRAA-GEO2-10-12	LV-SB-RRAA-GEO2-18-20
Sampling Date	09/11/03	09/16/03	09/23/03	09/23/03
Depth	20'-22'	0'-1'	10'-12'	18'-20'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	10 U	12 UJ	10 U	10 U
1,2-Dibromoethane	10 U	12 U	10 U	10 U
Ethylbenzene	10 U	12 U	10 U	10 U
Freon 113	10 U	12 U	10 U	10 U
m-Dichlorobenzene	10 U	12 U	10 U	10 U
Methyl Acetate	10 U	12 U	10 U	10 U
Methyl bromide	10 UJ	12 U	10 U	10 U
Methyl chloride	10 U	12 U	10 U	10 U
Methyl ethylketone	10 U	12 U	10 U	10 U
Methyl isobutyl ketone (MIBK)	10 U	12 U	10 U	10 U
Methyl tert-butyl ether	10 U	12 U	10 U	10 U
Methylcyclohexane	10 U	12 U	10 U	10 U
Methylene chloride	14 UJ	26 UJ	10 UJ	10 UJ
o-Dichlorobenzene	10 U	12 U	10 U	10 U
p-Dichlorobenzene	10 U	12 U	10 U	10 U
Styrene	10 U	12 U	10 U	10 U
Tetrachloroethylene	10 U	12 U	10 U	10 U
Toluene	10 U	12 U	10 U	10 U
trans-1,2-Dichloroethene	10 U	12 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	12 U	10 U	10 U
Trichloroethylene	10 U	12 U	10 U	10 U
Trichlorofluoromethane	10 U	12 U	10 U	10 U
Vinyl chloride	10 U	12 U	10 U	10 U
Xylene (total)	10 U	12 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-3	RRAAGEO-3	RRAAGEO-3	RRAAGEO-4
TtFW Sample I.D.	LV-SS-RRAA-GE03-0-1	LV-SB-RRAA-GEO3-8-10	LV-SB-RRAA-GEO3-18-20	LV-SS-RRAA-GE04-0-1
Sampling Date	09/16/03	09/17/03	09/17/03	09/16/03
Depth	0'-1'	8'-10'	18'-20'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	12 U	10 U	10 U	13 U
1,1,2,2-Tetrachloroethane	12 U	10 U	10 U	13 U
1,1,2-Trichloroethane	12 U	10 U	10 U	13 U
1,1-Dichloroethane	12 U	10 U	10 U	13 U
1,1-Dichloroethylene	12 U	10 U	10 U	13 U
1,2,4-Trichlorobenzene	12 U	10 U	10 U	13 U
1,2-Dichloroethane	12 U	10 U	10 U	13 U
1,2-Dichloropropane	12 U	10 U	10 U	13 U
2-Hexanone	12 U	10 U	10 U	13 U
Acetone	12 U	3 J	10 U	13 U
Benzene	12 U	10 U	10 U	13 U
Isopropylbenzene	12 U	10 U	10 U	13 U
Bromodichloromethane	12 U	10 U	10 U	13 U
Bromoform	12 U	10 U	10 U	13 U
Carbon disulfide	12 U	10 U	10 U	13 U
Carbon tetrachloride	12 U	10 U	10 U	13 U
Chlorobenzene	12 U	10 U	10 U	13 U
Chloroethane	12 U	10 U	10 U	13 U
Chloroform	12 U	10 U	10 U	13 U
cis-1,2-Dichloroethylene	12 U	10 U	10 U	13 U
cis-1,3-Dichloropropene	12 U	10 U	10 U	13 U
Cyclohexane	12 U	10 U	10 U	13 U
Dibromochloropropane	12 U	10 U	10 U	13 U
Dibromochloromethane	12 U	10 U	10 U	13 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-3	RRAAGEO-3	RRAAGEO-3	RRAAGEO-4
TtFW Sample I.D.	LV-SS-RRAA-GE03-0-1	LV-SB-RRAA-GEO3-8-10	LV-SB-RRAA-GEO3-18-20	LV-SS-RRAA-GE04-0-1
Sampling Date	09/16/03	09/17/03	09/17/03	09/16/03
Depth	0'-1'	8'-10'	18'-20'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	12 UJ	10 UJ	10 UJ	13 UJ
1,2-Dibromoethane	12 U	10 U	10 U	13 U
Ethylbenzene	12 U	10 U	10 U	13 U
Freon 113	12 U	10 U	10 U	13 U
m-Dichlorobenzene	12 U	10 U	10 U	13 U
Methyl Acetate	12 U	10 U	10 U	13 U
Methyl bromide	12 U	10 U	10 U	13 U
Methyl chloride	12 U	10 U	10 U	13 U
Methyl ethylketone	12 U	10 U	10 U	13 U
Methyl isobutyl ketone (MIBK)	12 U	10 U	10 U	13 U
Methyl tert-butyl ether	12 U	10 U	10 U	13 U
Methylcyclohexane	12 U	10 U	10 U	13 U
Methylene chloride	12 UJ	15 UJ	14 UJ	19 UJ
o-Dichlorobenzene	12 U	10 U	10 U	13 U
p-Dichlorobenzene	12 U	10 U	10 U	13 U
Styrene	12 U	10 U	10 U	13 U
Tetrachloroethylene	12 U	10 U	10 U	13 U
Toluene	12 U	10 U	10 U	13 U
trans-1,2-Dichloroethene	12 U	10 U	10 U	13 U
trans-1,3-Dichloropropene	12 U	10 U	10 U	13 U
Trichloroethylene	12 U	10 U	10 U	13 U
Trichlorofluoromethane	12 U	10 U	10 U	13 U
Vinyl chloride	12 U	10 U	10 U	13 U
Xylene (total)	12 U	10 U	10 U	13 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-4	RRAAGEO-4	RRAAGEO-5	RRAAGEO-5
TtFW Sample I.D.	LV-SB-RRAA-GEO4-14-16	LV-SB-RRAA-GEO4-22-24	LV-SS-RRAA-GE05-0-1	LV-SB-RRAA-GEO5-10-12
Sampling Date	09/24/03	09/24/03	09/16/03	10/06/03
Depth	14'-16'	22'-24'	0'-1'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	10 U	10 U	12 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	12 U	10 U
1,1,2-Trichloroethane	10 U	10 U	12 U	10 U
1,1-Dichloroethane	10 U	10 U	12 U	10 U
1,1-Dichloroethylene	10 U	10 U	12 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	12 U	10 U
1,2-Dichloroethane	10 U	10 U	12 U	10 U
1,2-Dichloropropane	10 U	10 U	12 U	10 U
2-Hexanone	10 UJ	10 UJ	12 U	10 U
Acetone	10 U	10 U	12 U	10 U
Benzene	10 U	10 U	12 U	10 U
Isopropylbenzene	10 U	10 U	12 U	10 U
Bromodichloromethane	10 U	10 U	12 U	10 U
Bromoform	10 U	10 U	12 U	10 U
Carbon disulfide	10 U	10 U	12 U	10 U
Carbon tetrachloride	10 U	10 U	12 U	10 U
Chlorobenzene	10 U	10 U	12 U	10 U
Chloroethane	10 U	10 U	12 U	10 U
Chloroform	10 U	10 U	12 U	10 U
cis-1,2-Dichloroethylene	10 U	10 U	12 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	12 U	10 U
Cyclohexane	10 U	10 U	12 U	10 U
Dibromochloropropane	10 U	10 U	12 U	10 U
Dibromochloromethane	10 U	10 U	12 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-4	RRAAGEO-4	RRAAGEO-5	RRAAGEO-5
TtFW Sample I.D.	LV-SB-RRAA-GEO4-14-16	LV-SB-RRAA-GEO4-22-24	LV-SS-RRAA-GE05-0-1	LV-SB-RRAA-GEO5-10-12
Sampling Date	09/24/03	09/24/03	09/16/03	10/06/03
Depth	14'-16'	22'-24'	0'-1'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	10 U	10 U	12 UJ	10 U
1,2-Dibromoethane	10 U	10 U	12 U	10 U
Ethylbenzene	10 U	10 U	12 U	10 U
Freon 113	10 U	10 U	12 U	10 U
m-Dichlorobenzene	10 U	10 U	12 U	10 U
Methyl Acetate	10 U	10 U	12 U	10 U
Methyl bromide	10 U	10 U	12 U	10 U
Methyl chloride	10 U	10 U	12 U	10 U
Methyl ethylketone	10 U	10 U	12 U	10 U
Methyl isobutyl ketone (MIBK)	10 U	10 U	12 U	10 U
Methyl tert-butyl ether	10 U	10 U	12 U	10 U
Methylcyclohexane	10 U	10 U	12 U	10 U
Methylene chloride	10 UJ	10 UJ	12 UJ	11 U
o-Dichlorobenzene	10 U	10 U	12 U	10 U
p-Dichlorobenzene	10 U	10 U	12 U	10 U
Styrene	10 U	10 U	12 U	10 U
Tetrachloroethylene	10 U	10 U	12 U	10 U
Toluene	10 U	10 U	12 U	10 U
trans-1,2-Dichloroethene	10 U	10 U	12 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	12 U	10 U
Trichloroethylene	10 U	10 U	12 U	10 U
Trichlorofluoromethane	10 U	10 U	12 U	10 UJ
Vinyl chloride	10 U	10 U	12 U	10 U
Xylene (total)	10 U	10 U	12 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-5	RRAAGEO-6	RRAAGEO-6	RRAAGEO-6
TtFW Sample I.D.	LV-SB-RRAA-GEO5-22-24	LV-SS-RRAA-GE06-0-1	LV-SB-RRAA-GEO6-8-10	LV-SB-RRAA-GEO6-22-24
Sampling Date	10/07/03	09/16/03	10/06/03	10/06/03
Depth	22'-24'	0'-1'	8'-10'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	10 U	12 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	12 U	10 U	10 U
1,1,2-Trichloroethane	10 U	12 U	10 U	10 U
1,1-Dichloroethane	10 U	12 U	10 U	10 U
1,1-Dichloroethylene	10 U	12 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	12 U	10 U	10 U
1,2-Dichloroethane	10 U	12 U	10 U	10 U
1,2-Dichloropropane	10 U	12 U	10 U	10 U
2-Hexanone	10 U	12 U	10 U	10 U
Acetone	10 U	12 U	10 U	10 U
Benzene	10 U	12 U	10 U	10 U
Isopropylbenzene	10 U	12 U	10 U	10 U
Bromodichloromethane	10 U	12 U	10 U	10 U
Bromoform	10 U	12 U	10 U	10 U
Carbon disulfide	10 U	12 U	10 U	10 U
Carbon tetrachloride	10 U	12 U	10 U	10 U
Chlorobenzene	10 U	12 U	10 U	10 U
Chloroethane	10 U	12 U	10 U	10 U
Chloroform	10 U	12 U	10 U	10 U
cis-1,2-Dichloroethylene	10 U	12 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	12 U	10 U	10 U
Cyclohexane	10 U	12 U	10 U	10 U
Dibromochloropropane	10 U	12 U	10 U	10 U
Dibromochloromethane	10 U	12 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-5	RRAAGEO-6	RRAAGEO-6	RRAAGEO-6
TtFW Sample I.D.	LV-SB-RRAA-GEO5-22-24	LV-SS-RRAA-GE06-0-1	LV-SB-RRAA-GEO6-8-10	LV-SB-RRAA-GEO6-22-24
Sampling Date	10/07/03	09/16/03	10/06/03	10/06/03
Depth	22'-24'	0'-1'	8'-10'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	10 U	12 UJ	10 U	10 U
1,2-Dibromoethane	10 U	12 U	10 U	10 U
Ethylbenzene	10 U	12 U	10 U	10 U
Freon 113	10 U	12 U	10 U	10 U
m-Dichlorobenzene	10 U	12 U	10 U	10 U
Methyl Acetate	10 U	12 U	10 U	10 U
Methyl bromide	10 U	12 U	10 U	10 U
Methyl chloride	10 U	12 U	10 U	10 U
Methyl ethylketone	10 U	12 U	10 U	10 U
Methyl isobutyl ketone (MIBK)	10 U	12 U	10 U	10 U
Methyl tert-butyl ether	10 U	12 U	10 U	10 U
Methylcyclohexane	10 U	12 U	10 U	10 U
Methylene chloride	11 U	16 UJ	12 U	12 U
o-Dichlorobenzene	10 U	12 U	10 U	10 U
p-Dichlorobenzene	10 U	12 U	10 U	10 U
Styrene	10 U	12 U	10 U	10 U
Tetrachloroethylene	10 U	12 U	10 U	10 U
Toluene	10 U	12 U	10 U	10 U
trans-1,2-Dichloroethene	10 U	12 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	12 U	10 U	10 U
Trichloroethylene	10 U	12 U	10 U	10 U
Trichlorofluoromethane	10 UJ	12 U	10 U	10 U
Vinyl chloride	10 U	12 U	10 U	10 U
Xylene (total)	10 U	12 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-7	RRAAGEO-7	RRAAGEO-7	RRAAGEO-8
TtFW Sample I.D.	LV-SS-RRAA-GE07-0-1	LV-SB-RRAA-GEO7-10-12	LV-SB-RRAA-GEO7-18-20	LV-SS-RRAA-GE08-0-1
Sampling Date	09/16/03	09/25/03	09/25/03	09/17/03
Depth	0'-1'	10'-12'	18'-20'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	15 U	10 U	10 U	16 U
1,1,2,2-Tetrachloroethane	15 U	10 U	10 U	16 U
1,1,2-Trichloroethane	15 U	10 U	10 U	16 U
1,1-Dichloroethane	15 U	10 U	10 U	16 U
1,1-Dichloroethylene	15 U	10 UJ	10 UJ	16 U
1,2,4-Trichlorobenzene	15 U	10 U	10 U	16 U
1,2-Dichloroethane	15 U	10 U	10 U	16 U
1,2-Dichloropropane	15 U	10 U	10 U	16 U
2-Hexanone	15 U	10 U	10 U	16 U
Acetone	15 U	10 U	10 U	6 J
Benzene	15 U	10 U	10 U	16 U
Isopropylbenzene	15 U	10 U	10 U	16 U
Bromodichloromethane	15 U	10 U	10 U	16 U
Bromoform	15 U	10 U	10 U	16 U
Carbon disulfide	15 U	10 U	10 U	16 U
Carbon tetrachloride	15 U	10 U	10 U	16 U
Chlorobenzene	15 U	10 U	10 U	16 U
Chloroethane	15 U	10 U	10 U	16 U
Chloroform	15 U	10 U	10 U	16 U
cis-1,2-Dichloroethylene	15 U	10 U	10 U	16 U
cis-1,3-Dichloropropene	15 U	10 U	10 U	16 U
Cyclohexane	15 U	10 U	10 U	16 U
Dibromochloropropane	15 U	10 U	10 U	16 U
Dibromochloromethane	15 U	10 U	10 U	16 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-7	RRAAGEO-7	RRAAGEO-7	RRAAGEO-8
TtFW Sample I.D.	LV-SS-RRAA-GE07-0-1	LV-SB-RRAA-GEO7-10-12	LV-SB-RRAA-GEO7-18-20	LV-SS-RRAA-GE08-0-1
Sampling Date	09/16/03	09/25/03	09/25/03	09/17/03
Depth	0'-1'	10'-12'	18'-20'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	15 UJ	10 U	10 U	16 UJ
1,2-Dibromoethane	15 U	10 U	10 U	16 U
Ethylbenzene	15 U	10 U	10 U	16 U
Freon 113	15 U	10 UJ	10 UJ	16 U
m-Dichlorobenzene	15 U	10 U	10 U	16 U
Methyl Acetate	15 U	10 U	10 U	16 U
Methyl bromide	15 U	10 U	10 U	16 U
Methyl chloride	15 U	10 UJ	10 UJ	16 U
Methyl ethylketone	15 U	10 U	10 U	16 U
Methyl isobutyl ketone (MIBK)	15 U	10 U	10 U	16 U
Methyl tert-butyl ether	15 U	10 UJ	10 UJ	16 U
Methylcyclohexane	15 U	10 U	10 U	16 U
Methylene chloride	15 UJ	10 UJ	10 UJ	18 UJ
o-Dichlorobenzene	15 U	10 U	10 U	16 U
p-Dichlorobenzene	15 U	10 U	10 U	16 U
Styrene	15 U	10 U	10 U	16 U
Tetrachloroethylene	15 U	10 U	10 U	16 U
Toluene	15 U	10 U	10 U	16 U
trans-1,2-Dichloroethene	15 U	10 U	10 U	16 U
trans-1,3-Dichloropropene	15 U	10 U	10 U	16 U
Trichloroethylene	15 U	10 U	10 U	16 U
Trichlorofluoromethane	15 U	10 UJ	10 UJ	16 U
Vinyl chloride	15 U	10 U	10 U	16 U
Xylene (total)	15 U	10 U	10 U	16 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-8	RRAAGEO-8	RRAAGEO-8	RRAAGEO-9
	Duplicate			
TtFW Sample I.D.	LV-SS-RRAA-GEO14-0-1	LV-SB-RRAA-GEO8-10-12	LV-SB-RRAA-GEO8-20-22	LV-SS-RRAA-GE09-0-1
Sampling Date	09/17/03	09/29/03	09/29/03	09/17/03
Depth	0'-1'	10'-12'	20'-22'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	15 U	10 U	11 U	12 U
1,1,2,2-Tetrachloroethane	15 U	10 U	11 U	12 U
1,1,2-Trichloroethane	15 U	10 U	11 U	12 U
1,1-Dichloroethane	15 U	10 U	11 U	12 U
1,1-Dichloroethylene	15 U	10 U	11 U	12 U
1,2,4-Trichlorobenzene	15 U	10 U	11 U	12 U
1,2-Dichloroethane	15 U	10 U	11 U	12 U
1,2-Dichloropropane	15 U	10 U	11 U	12 U
2-Hexanone	15 U	10 U	11 U	12 U
Acetone	15 U	10 UJ	11 UJ	12 U
Benzene	15 U	10 U	11 U	12 U
Isopropylbenzene	15 U	10 U	11 U	12 U
Bromodichloromethane	15 U	10 U	11 U	12 U
Bromoform	15 U	10 U	11 U	12 U
Carbon disulfide	15 U	10 U	11 U	12 U
Carbon tetrachloride	15 U	10 U	11 U	12 U
Chlorobenzene	15 U	10 U	11 U	12 U
Chloroethane	15 U	10 U	11 U	12 U
Chloroform	15 U	10 U	11 U	12 U
cis-1,2-Dichloroethylene	15 U	10 U	11 U	12 U
cis-1,3-Dichloropropene	15 U	10 U	11 U	12 U
Cyclohexane	15 U	10 U	11 U	12 U
Dibromochloropropane	15 U	10 U	11 U	12 U
Dibromochloromethane	15 U	10 U	11 U	12 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-8 Duplicate	RRAAGEO-8	RRAAGEO-8	RRAAGEO-9
TtFW Sample I.D.	LV-SS-RRAA-GEO14-0-1	LV-SB-RRAA-GEO8-10-12	LV-SB-RRAA-GEO8-20-22	LV-SS-RRAA-GE09-0-1
Sampling Date	09/17/03	09/29/03	09/29/03	09/17/03
Depth	0'-1'	10'-12'	20'-22'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	15 UJ	10 U	11 U	12 UJ
1,2-Dibromoethane	15 U	10 U	11 U	12 U
Ethylbenzene	15 U	10 U	11 U	12 U
Freon 113	15 U	10 U	11 U	12 U
m-Dichlorobenzene	15 U	10 U	11 U	12 U
Methyl Acetate	15 U	10 U	11 U	12 U
Methyl bromide	15 U	10 U	11 U	12 U
Methyl chloride	15 U	10 U	11 U	12 U
Methyl ethylketone	15 U	10 U	11 U	12 U
Methyl isobutyl ketone (MIBK)	15 U	10 U	11 U	12 U
Methyl tert-butyl ether	15 U	10 U	11 U	12 U
Methylcyclohexane	15 U	10 U	11 U	12 U
Methylene chloride	15 UJ	20 UJ	17 UJ	12 UJ
o-Dichlorobenzene	15 U	10 U	11 U	12 U
p-Dichlorobenzene	15 U	10 U	11 U	12 U
Styrene	15 U	10 U	11 U	12 U
Tetrachloroethylene	15 U	10 U	11 U	12 U
Toluene	15 U	2 J	1 J	12 U
trans-1,2-Dichloroethene	15 U	10 U	11 U	12 U
trans-1,3-Dichloropropene	15 U	10 U	11 U	12 U
Trichloroethylene	15 U	10 U	11 U	12 U
Trichlorofluoromethane	2 J	3 J	3 J	12 U
Vinyl chloride	15 U	10 U	11 U	12 U
Xylene (total)	15 U	10 U	11 U	12 U

See Table D[illegible]r abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-9	RRAAGEO-9	RRAAGEO-10	RRAAGEO-10
TtFW Sample I.D.	LV-SB-RRAA-GEO9-10-12	LV-SB-RRAA-GEO9-18-20	LV-SS-RRAA-GE010-0-1	LV-SB-RRAA-GEO10-6-8
Sampling Date	10/01/03	10/01/03	09/17/03	09/30/03
Depth	10'-12'	18'-20'	0'-1'	6'-8'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	10 U	10 U	13 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	13 U	10 U
1,1,2-Trichloroethane	10 U	10 U	13 U	10 U
1,1-Dichloroethane	10 U	10 U	13 U	10 U
1,1-Dichloroethylene	10 U	10 U	13 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	13 U	10 U
1,2-Dichloroethane	10 U	10 U	13 U	10 U
1,2-Dichloropropane	10 U	10 U	13 U	10 U
2-Hexanone	10 U	10 U	13 U	10 U
Acetone	10 UJ	10 UJ	13 U	10 UJ
Benzene	10 U	10 U	13 U	10 U
Isopropylbenzene	10 U	10 U	13 U	10 U
Bromodichloromethane	10 U	10 U	13 U	10 U
Bromoform	10 U	10 U	13 U	10 U
Carbon disulfide	10 U	10 U	13 U	10 U
Carbon tetrachloride	10 U	10 U	13 U	10 U
Chlorobenzene	10 U	10 U	13 U	10 U
Chloroethane	10 U	10 U	13 U	10 U
Chloroform	10 U	10 U	13 U	10 U
cis-1,2-Dichloroethylene	10 U	10 U	13 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	13 U	10 U
Cyclohexane	10 U	10 U	13 U	10 U
Dibromochloropropane	10 U	10 U	13 U	10 U
Dibromochloromethane	10 U	10 U	13 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-9	RRAAGEO-9	RRAAGEO-10	RRAAGEO-10
TtFW Sample I.D.	LV-SB-RRAA-GEO9-10-12	LV-SB-RRAA-GEO9-18-20	LV-SS-RRAA-GE010-0-1	LV-SB-RRAA-GEO10-6-8
Sampling Date	10/01/03	10/01/03	09/17/03	09/30/03
Depth	10'-12'	18'-20'	0'-1'	6'-8'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	10 U	10 U	13 UJ	10 U
1,2-Dibromoethane	10 U	10 U	13 U	10 U
Ethylbenzene	10 U	10 U	13 U	10 U
Freon 113	10 U	10 U	13 U	10 U
m-Dichlorobenzene	10 U	10 U	13 U	10 U
Methyl Acetate	10 U	10 U	13 U	10 U
Methyl bromide	10 U	10 U	13 U	10 U
Methyl chloride	10 U	10 U	13 U	10 U
Methyl ethylketone	10 U	10 U	13 U	10 U
Methyl isobutyl ketone (MIBK)	10 U	10 U	13 U	10 U
Methyl tert-butyl ether	10 U	10 U	13 U	10 U
Methylcyclohexane	10 U	10 U	13 U	10 U
Methylene chloride	11 UJ	12 UJ	16 UJ	19 UJ
o-Dichlorobenzene	10 U	10 U	13 U	10 U
p-Dichlorobenzene	10 U	10 U	13 U	10 U
Styrene	10 U	10 U	13 U	10 U
Tetrachloroethylene	10 U	10 U	13 U	10 U
Toluene	10 U	10 U	13 U	10 U
trans-1,2-Dichloroethene	10 U	10 U	13 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	13 U	10 U
Trichloroethylene	10 U	10 U	13 U	10 U
Trichlorofluoromethane	5 J	4 J	13 U	3 J
Vinyl chloride	10 U	10 U	13 U	10 U
Xylene (total)	10 U	10 U	13 U	10 U

See Table D[illegible]r abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-10	RRAAGEO-11	RRAAGEO-11	RRAAGEO-11 Duplicate
TtFW Sample I.D.	LV-SB-RRAA-GEO10-20-22	LV-SS-RRAA-GE011-0-1	LV-SB-RRAA-GEO11-8-10	LV-SB-RRAA-GEO18-8-10
Sampling Date	09/30/03	09/17/03	10/08/03	10/08/03
Depth	20'-22'	0'-1'	8'-10'	8'-10'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U
1,1-Dichloroethylene	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U
Acetone	10 UJ	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U
Isopropylbenzene	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U	10 U
Carbon tetrachloride	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 UJ	10 UJ
Chloroform	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethylene	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Cyclohexane	10 U	10 U	10 U	10 U
Dibromochloropropane	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-10	RRAAGEO-11	RRAAGEO-11	RRAAGEO-11 Duplicate
TtFW Sample I.D.	LV-SB-RRAA-GEO10-20-22	LV-SS-RRAA-GE011-0-1	LV-SB-RRAA-GEO11-8-10	LV-SB-RRAA-GEO18-8-10
Sampling Date	09/30/03	09/17/03	10/08/03	10/08/03
Depth	20'-22'	0'-1'	8'-10'	8'-10'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	10 U	10 UJ	10 U	10 U
1,2-Dibromoethane	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U
Freon 113	10 U	10 U	10 U	10 U
m-Dichlorobenzene	10 U	10 U	10 U	10 U
Methyl Acetate	10 U	10 U	10 U	10 U
Methyl bromide	10 U	10 U	10 U	10 U
Methyl chloride	10 U	10 U	10 U	10 U
Methyl ethylketone	10 U	10 U	10 U	10 U
Methyl isobutyl ketone (MIBK)	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	10 U	10 U	10 U	10 U
Methylcyclohexane	10 U	10 U	10 U	10 U
Methylene chloride	25 UJ	15 UJ	11 U	11 U
o-Dichlorobenzene	10 U	10 U	10 U	10 U
p-Dichlorobenzene	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U
Tetrachloroethylene	10 U	10 U	10 U	10 U
Toluene	2 J	10 U	10 U	10 U
trans-1,2-Dichloroethene	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Trichloroethylene	10 U	10 U	10 U	10 U
Trichlorofluoromethane	3 J	10 U	10 UJ	10 UJ
Vinyl chloride	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U

See Table D- r abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-11	RRAAGEO-12	RRAAGEO-12	RRAAGEO-12
TtFW Sample I.D.	LV-SB-RRAA-GEO11-16-18	LV-SS-RRAA-GE012-0-1	LV-SB-RRAA-GEO12-10-12	LV-SB-RRAA-GEO12-22-24
Sampling Date	10/08/03	09/17/03	09/22/03	09/22/03
Depth	16'-18'	0'-1'	10'-12'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1-Trichloroethane	10 U	14 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	14 U	10 U	10 U
1,1,2-Trichloroethane	10 U	14 U	10 U	10 U
1,1-Dichloroethane	10 U	14 U	10 U	10 U
1,1-Dichloroethylene	10 U	14 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	14 U	10 U	10 U
1,2-Dichloroethane	10 U	14 U	10 U	10 U
1,2-Dichloropropane	10 U	14 U	10 U	10 U
2-Hexanone	10 U	14 U	10 UJ	10 UJ
Acetone	10 U	14 U	10 U	10 U
Benzene	10 U	14 U	10 U	10 U
Isopropylbenzene	10 U	14 U	10 U	10 U
Bromodichloromethane	10 U	14 U	10 U	10 U
Bromoform	10 U	14 U	10 U	10 U
Carbon disulfide	10 U	14 U	10 U	10 U
Carbon tetrachloride	10 U	14 U	10 U	10 U
Chlorobenzene	10 U	14 U	10 U	10 U
Chloroethane	10 UJ	14 U	10 U	10 U
Chloroform	10 U	14 U	10 U	10 U
cis-1,2-Dichloroethylene	10 U	14 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	14 U	10 U	10 U
Cyclohexane	10 U	14 U	4 J	10 U
Dibromochloropropane	10 U	14 U	10 U	10 U
Dibromochloromethane	10 U	14 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-6
Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-11	RRAAGEO-12	RRAAGEO-12	RRAAGEO-12
TtFW Sample I.D.	LV-SB-RRAA-GEO11-16-18	LV-SS-RRAA-GE012-0-1	LV-SB-RRAA-GEO12-10-12	LV-SB-RRAA-GEO12-22-24
Sampling Date	10/08/03	09/17/03	09/22/03	09/22/03
Depth	16'-18'	0'-1'	10'-12'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	10 U	14 UJ	10 U	10 U
1,2-Dibromoethane	10 U	14 U	10 U	10 U
Ethylbenzene	10 U	14 U	10 U	10 U
Freon 113	10 U	14 U	10 U	10 U
m-Dichlorobenzene	10 U	14 U	10 U	10 U
Methyl Acetate	10 U	14 U	10 U	10 U
Methyl bromide	10 U	14 U	10 U	10 U
Methyl chloride	10 U	14 U	10 U	10 U
Methyl ethylketone	10 U	14 U	10 U	10 U
Methyl isobutyl ketone (MIBK)	10 U	14 U	10 U	10 U
Methyl tert-butyl ether	10 U	14 U	10 U	10 U
Methylcyclohexane	10 U	14 U	2 J	10 U
Methylene chloride	14 U	15 UJ	10 UJ	10 UJ
o-Dichlorobenzene	10 U	14 U	10 U	10 U
p-Dichlorobenzene	10 U	14 U	10 U	10 U
Styrene	10 U	14 U	10 U	10 U
Tetrachloroethylene	10 U	14 U	10 U	10 U
Toluene	10 U	14 U	10 U	10 U
trans-1,2-Dichloroethene	10 U	14 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	14 U	10 U	10 U
Trichloroethylene	10 U	14 U	10 U	10 U
Trichlorofluoromethane	10 UJ	3 J	10 U	10 U
Vinyl chloride	10 U	14 U	10 U	10 U
Xylene (total)	10 U	14 U	1 J	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB101	SB101	SB101
TtFW Sample I.D.	LV-BIA-SB101-00	LV-BIA-SB101-04	LV-BIA-SB101-14	LV-BIA-SB101-24
Sampling Date	11/27/00	11/27/00	11/27/00	11/27/00
Depth	0'-2'	4'-6'	14'-16'	24'-26'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	420 U	360 U	350 U	360 U
Phenol	420 U	360 U	350 U	360 U
bis-(2-Chloroethyl) ether	420 U	360 U	350 U	360 U
2-Chlorophenol	420 U	360 U	350 U	360 U
2-Methylphenol	420 U	360 U	350 U	360 U
2,2'-oxybis(1-Chloropropane)	420 U	360 U	350 U	360 U
Acetophenone	420 U	360 U	350 U	360 U
4-Methylphenol	420 U	360 U	350 U	360 U
N-Nitroso-di-n-propylamine	420 U	360 U	350 U	360 U
Hexachloroethane	420 U	360 U	350 U	360 U
Nitrobenzene	420 U	360 U	350 U	360 U
Isophorone	420 U	360 U	350 U	360 U
2-Nitrophenol	420 U	360 U	350 U	360 U
2,4-Dimethylphenol	420 U	360 U	350 U	360 U
bis(2-Chloroethoxy)methane	420 U	360 U	350 U	360 U
2,4-Dichlorophenol	420 U	360 U	350 U	360 U
Naphthalene	420 U	360 U	350 U	360 U
4-Chloroaniline	420 U	360 U	350 U	360 U
Hexachlorobutadiene	420 U	360 U	350 U	360 U
Caprolactam	420 U	360 U	350 U	360 U
4-Chloro-3-methylphenol	420 U	360 U	350 U	360 U
2-Methylnaphthalene	420 U	360 U	350 U	360 U
Hexachlorocyclopentadiene	420 UJ	360 UJ	350 UJ	360 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB101	SB101	SB101
TtFW Sample I.D.	LV-BIA-SB101-00	LV-BIA-SB101-04	LV-BIA-SB101-14	LV-BIA-SB101-24
Sampling Date	11/27/00	11/27/00	11/27/00	11/27/00
Depth	0'-2'	4'-6'	14'-16'	24'-26'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,6-Trichlorophenol	420 U	360 U	350 U	360 U
2,4,5-Trichlorophenol	1100 U	910 U	870 U	900 U
1,1'-Biphenyl	420 U	360 U	350 U	360 U
2-Chloronaphthalene	420 U	360 U	350 U	360 U
2-Nitroaniline	1100 U	910 U	870 U	900 U
Dimethylphthalate	420 U	360 U	350 U	360 U
2,6-Dinitrotoluene	420 U	360 U	350 U	360 U
Acenaphthylene	420 U	360 U	350 U	360 U
3-Nitroaniline	1100 U	910 U	870 U	900 U
Acenaphthene	420 U	360 U	350 U	360 U
2,4-Dinitrophenol	1100 U	910 U	870 U	900 U
4-Nitrophenol	1100 U	910 U	870 U	900 U
Dibenzofuran	420 U	360 U	350 U	360 U
2,4-Dinitrotoluene	420 U	360 U	350 U	360 U
Diethylphthalate	420 U	360 U	350 U	360 U
Fluorene	420 U	360 U	350 U	360 U
4-Chlorophenyl-phenyl ether	420 U	360 U	350 U	360 U
4-Nitroaniline	1100 U	910 U	870 U	900 U
4,6-Dinitro-2-methylphenol	1100 U	910 U	870 U	900 U
N-Nitrosodiphenylamine	420 U	360 U	350 U	360 U
4-Bromophenyl-phenylether	420 U	360 U	350 U	360 U
Hexachlorobenzene	420 U	360 U	350 U	360 U
Atrazine	420 U	360 U	350 U	360 U

See Table D[illegible]r abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB101	SB101	SB101
TtFW Sample I.D.	LV-BIA-SB101-00	LV-BIA-SB101-04	LV-BIA-SB101-14	LV-BIA-SB101-24
Sampling Date	11/27/00	11/27/00	11/27/00	11/27/00
Depth	0'-2'	4'-6'	14'-16'	24'-26'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Pentachlorophenol	1100 U	910 U	870 U	900 U
Phenanthrene	420 U	360 U	350 U	360 U
Anthracene	420 U	360 U	350 U	360 U
Carbazole	420 U	360 U	350 U	360 U
Di-n-butylphthalate	420 U	360 U	350 U	39 J
Fluoranthene	420 U	360 U	350 U	360 U
Pyrene	420 U	360 U	350 U	360 U
Butylbenzylphthalate	420 U	360 U	350 U	360 U
3,3'-Dichlorobenzidine	420 U	360 U	350 U	360 U
Benzo(a)anthracene	420 U	360 U	350 U	360 U
Chrysene	420 U	360 U	350 U	360 U
bis(2-Ethylhexyl)phthalate	420 U	360 U	660	460
Di-n-octylphthalate	420 U	360 U	350 U	360 U
Benzo(b)fluoranthene	420 U	360 U	350 U	360 U
Benzo(k)fluoranthene	420 U	360 U	350 U	360 U
Benzo(a)pyrene	420 U	360 U	350 U	360 U
Indeno(1,2,3-cd)pyrene	420 U	360 U	350 U	360 U
Dibenzo(a,h)anthracene	420 U	360 U	350 U	360 U
Benzo(g,h,i)perylene	420 U	360 U	350 U	360 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB102	SB102	SB102
TtFW Sample I.D.	LV-BIA-SB101-34	LV-BIA-SB102-00	LV-BIA-SB102-04	LV-BIA-SB102-08
Sampling Date	11/27/00	11/28/00	11/28/00	11/28/00
Depth	34'-36'	0'-2'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	370 U	360 U	380 U	370 U
Phenol	370 U	360 U	380 U	370 U
bis-(2-Chloroethyl) ether	370 U	360 U	380 U	370 U
2-Chlorophenol	370 U	360 U	380 U	370 U
2-Methylphenol	370 U	360 U	380 U	370 U
2,2'-oxybis(1-Chloropropane)	370 U	360 U	380 U	370 U
Acetophenone	370 U	360 U	380 U	19 J
4-Methylphenol	370 U	360 U	380 U	370 U
N-Nitroso-di-n-propylamine	370 U	360 U	380 U	370 U
Hexachloroethane	370 U	360 U	380 U	370 U
Nitrobenzene	370 U	360 U	380 U	370 U
Isophorone	370 U	360 U	380 U	370 U
2-Nitrophenol	370 U	360 U	380 U	370 U
2,4-Dimethylphenol	370 U	360 U	380 U	370 U
bis(2-Chloroethoxy)methane	370 U	360 U	380 U	370 U
2,4-Dichlorophenol	370 U	360 U	380 U	370 U
Naphthalene	370 U	360 U	380 U	370 U
4-Chloroaniline	370 U	360 U	380 U	370 U
Hexachlorobutadiene	370 U	360 U	380 U	370 U
Caprolactam	370 U	360 U	380 U	370 U
4-Chloro-3-methylphenol	370 U	360 U	380 U	370 U
2-Methylnaphthalene	370 U	360 U	380 U	370 U
Hexachlorocyclopentadiene	370 UJ	360 UJ	380 UJ	370 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB102	SB102	SB102
TtFW Sample I.D.	LV-BIA-SB101-34	LV-BIA-SB102-00	LV-BIA-SB102-04	LV-BIA-SB102-08
Sampling Date	11/27/00	11/28/00	11/28/00	11/28/00
Depth	34'-36'	0'-2'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,6-Trichlorophenol	370 U	360 U	380 U	370 U
2,4,5-Trichlorophenol	940 U	900 U	960 U	920 U
1,1'-Biphenyl	370 U	360 U	380 U	370 U
2-Chloronaphthalene	370 U	360 U	380 U	370 U
2-Nitroaniline	940 U	900 U	960 U	920 U
Dimethylphthalate	370 U	360 U	380 U	370 U
2,6-Dinitrotoluene	370 U	360 U	380 U	370 U
Acenaphthylene	370 U	360 U	380 U	370 U
3-Nitroaniline	940 U	900 U	960 U	920 U
Acenaphthene	370 U	360 U	380 U	370 U
2,4-Dinitrophenol	940 U	900 U	960 U	920 U
4-Nitrophenol	940 U	900 U	960 U	920 U
Dibenzofuran	370 U	360 U	380 U	370 U
2,4-Dinitrotoluene	370 U	360 U	380 U	370 U
Diethylphthalate	370 U	360 U	380 U	370 U
Fluorene	370 U	360 U	380 U	370 U
4-Chlorophenyl-phenyl ether	370 U	360 U	380 U	370 U
4-Nitroaniline	940 U	900 U	960 U	920 U
4,6-Dinitro-2-methylphenol	940 U	900 U	960 U	920 U
N-Nitrosodiphenylamine	370 U	360 U	380 U	370 U
4-Bromophenyl-phenylether	370 U	360 U	380 U	370 U
Hexachlorobenzene	370 U	360 U	380 U	370 U
Atrazine	370 U	360 U	380 U	370 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB102	SB102	SB102
TtFW Sample I.D.	LV-BIA-SB101-34	LV-BIA-SB102-00	LV-BIA-SB102-04	LV-BIA-SB102-08
Sampling Date	11/27/00	11/28/00	11/28/00	11/28/00
Depth	34'-36'	0'-2'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Pentachlorophenol	940 U	900 U	960 U	920 U
Phenanthrene	20 J	24 J	380 U	370 U
Anthracene	370 U	360 U	380 U	370 U
Carbazole	370 U	360 U	380 U	370 U
Di-n-butylphthalate	31 J	360 U	380 U	27 J
Fluoranthene	370 U	34 J	380 U	370 U
Pyrene	370 U	28 J	380 U	370 U
Butylbenzylphthalate	370 U	23 J	380 U	370 U
3,3'-Dichlorobenzidine	370 U	360 U	380 U	370 U
Benzo(a)anthracene	370 U	360 U	380 U	370 U
Chrysene	370 U	20 J	380 U	370 U
bis(2-Ethylhexyl)phthalate	950	1200	450	370 U
Di-n-octylphthalate	370 U	40 J	380 U	370 U
Benzo(b)fluoranthene	370 U	22 J	380 U	370 U
Benzo(k)fluoranthene	370 U	360 U	380 U	370 U
Benzo(a)pyrene	370 U	360 U	380 U	370 U
Indeno(1,2,3-cd)pyrene	370 U	360 U	380 U	370 U
Dibenzo(a,h)anthracene	370 U	360 U	380 U	370 U
Benzo(g,h,i)perylene	370 U	360 U	380 U	370 U

See Table D[illegible] r abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB102	SB102	SB103	SB103
TtFW Sample I.D.	LV-BIA-SB102-14	LV-BIA-SB102-18	LV-BIA-SB103-00	LV-BIA-SB103-04
Sampling Date	11/28/00	11/28/00	11/28/00	11/28/00
Depth	14'-16'	18'-20'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	380 U	380 U	410 UJ	370 U
Phenol	380 U	380 U	410 U	370 U
bis-(2-Chloroethyl) ether	380 U	380 U	410 U	370 U
2-Chlorophenol	380 U	380 U	410 U	370 U
2-Methylphenol	380 U	380 U	410 U	370 U
2,2'-oxybis(1-Chloropropane)	380 U	380 U	410 U	370 U
Acetophenone	380 U	24 J	410 U	370 U
4-Methylphenol	380 U	380 U	410 U	370 U
N-Nitroso-di-n-propylamine	380 U	380 U	410 U	370 U
Hexachloroethane	380 U	380 U	410 U	370 U
Nitrobenzene	380 U	380 U	410 U	370 U
Isophorone	380 U	380 U	410 U	370 U
2-Nitrophenol	380 U	380 U	410 U	370 U
2,4-Dimethylphenol	380 U	380 U	410 U	370 U
bis(2-Chloroethoxy)methane	380 U	380 U	410 U	370 U
2,4-Dichlorophenol	380 U	380 U	410 U	370 U
Naphthalene	380 U	380 U	410 U	370 U
4-Chloroaniline	380 U	380 U	410 UJ	370 U
Hexachlorobutadiene	380 U	380 U	410 U	370 U
Caprolactam	380 U	380 U	410 U	370 U
4-Chloro-3-methylphenol	380 U	380 U	410 U	370 U
2-Methylnaphthalene	380 U	380 U	410 U	370 U
Hexachlorocyclopentadiene	380 UJ	380 UJ	410 U	370 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB102	SB102	SB103	SB103
TtFW Sample I.D.	LV-BIA-SB102-14	LV-BIA-SB102-18	LV-BIA-SB103-00	LV-BIA-SB103-04
Sampling Date	11/28/00	11/28/00	11/28/00	11/28/00
Depth	14'-16'	18'-20'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,6-Trichlorophenol	380 U	380 U	410 U	370 U
2,4,5-Trichlorophenol	950 U	960 U	1000 U	930 U
1,1'-Biphenyl	380 U	380 U	410 U	370 U
2-Chloronaphthalene	380 U	380 U	410 U	370 U
2-Nitroaniline	950 U	960 U	1000 U	930 U
Dimethylphthalate	380 U	380 U	410 U	370 U
2,6-Dinitrotoluene	380 U	380 U	410 U	370 U
Acenaphthylene	380 U	380 U	410 U	370 U
3-Nitroaniline	950 U	960 U	1000 U	930 U
Acenaphthene	380 U	380 U	410 U	370 U
2,4-Dinitrophenol	950 U	960 U	1000 U	930 U
4-Nitrophenol	950 U	960 U	1000 U	930 U
Dibenzofuran	380 U	380 U	410 U	370 U
2,4-Dinitrotoluene	380 U	380 U	410 U	370 U
Diethylphthalate	380 U	380 U	410 U	370 U
Fluorene	380 U	380 U	410 U	370 U
4-Chlorophenyl-phenyl ether	380 U	380 U	410 U	370 U
4-Nitroaniline	950 U	960 U	1000 U	930 U
4,6-Dinitro-2-methylphenol	950 U	960 U	1000 U	930 U
N-Nitrosodiphenylamine	380 U	380 U	410 U	370 U
4-Bromophenyl-phenylether	380 U	380 U	410 U	370 U
Hexachlorobenzene	380 U	380 U	410 U	370 U
Atrazine	380 U	380 U	410 U	370 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB102	SB102	SB103	SB103
TtFW Sample I.D.	LV-BIA-SB102-14	LV-BIA-SB102-18	LV-BIA-SB103-00	LV-BIA-SB103-04
Sampling Date	11/28/00	11/28/00	11/28/00	11/28/00
Depth	14'-16'	18'-20'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Pentachlorophenol	950 U	960 U	1000 U	930 U
Phenanthrene	380 U	380 U	34 J	370 U
Anthracene	380 U	380 U	410 U	370 U
Carbazole	380 U	380 U	410 U	370 U
Di-n-butylphthalate	380 U	380 U	49 J	34 J
Fluoranthene	380 U	380 U	64 J	22 J
Pyrene	380 U	380 U	61 J	370 U
Butylbenzylphthalate	380 U	380 U	110 J	370 U
3,3'-Dichlorobenzidine	380 U	380 U	410 U	370 U
Benzo(a)anthracene	380 U	380 U	34 J	370 U
Chrysene	380 U	380 U	47 J	370 U
bis(2-Ethylhexyl)phthalate	380 U	380 U	4400 D	1400
Di-n-octylphthalate	380 U	380 U	73 J	370 U
Benzo(b)fluoranthene	380 U	380 U	50 J	370 U
Benzo(k)fluoranthene	380 U	380 U	29 J	370 U
Benzo(a)pyrene	380 U	380 U	39 J	370 U
Indeno(1,2,3-cd)pyrene	380 U	380 U	36 J	370 U
Dibenzo(a,h)anthracene	380 U	380 U	410 U	370 U
Benzo(g,h,i)perylene	380 U	380 U	60 J	370 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site
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Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB103	SB103	SB103	SB104
TtFW Sample I.D.	LV-BIA-SB103-14	LV-BIA-SB103-18	LV-BIA-SB103-24	LV-BIA-SB104-00
Sampling Date	11/28/00	11/28/00	11/29/00	11/29/00
Depth	14'-16'	18'-20'	24'-26'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	380 U	360 UJ	330 UJ	430 UJ
Phenol	380 U	360 U	330 U	430 U
bis-(2-Chloroethyl) ether	380 U	360 U	330 U	430 U
2-Chlorophenol	380 U	360 U	330 U	430 U
2-Methylphenol	380 U	360 U	330 U	430 U
2,2'-oxybis(1-Chloropropane)	380 U	360 U	330 U	430 U
Acetophenone	20 J	360 U	330 U	430 U
4-Methylphenol	380 U	360 U	330 U	430 U
N-Nitroso-di-n-propylamine	380 U	360 U	330 U	430 U
Hexachloroethane	380 U	360 U	330 U	430 U
Nitrobenzene	380 U	360 U	330 U	430 U
Isophorone	380 U	360 U	330 U	430 U
2-Nitrophenol	380 U	360 U	330 U	430 U
2,4-Dimethylphenol	380 U	360 U	330 U	430 U
bis(2-Chloroethoxy)methane	380 U	360 U	330 U	430 U
2,4-Dichlorophenol	380 U	360 U	330 U	430 U
Naphthalene	380 U	360 U	330 U	430 U
4-Chloroaniline	380 U	360 UJ	330 U	430 U
Hexachlorobutadiene	380 U	360 U	330 U	430 U
Caprolactam	380 U	360 U	330 U	430 U
4-Chloro-3-methylphenol	380 U	360 U	330 U	430 U
2-Methylnaphthalene	380 U	360 U	330 U	430 U
Hexachlorocyclopentadiene	380 UJ	360 U	330 U	430 U

See Table D- for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB103	SB103	SB103	SB104
TtFW Sample I.D.	LV-BIA-SB103-14	LV-BIA-SB103-18	LV-BIA-SB103-24	LV-BIA-SB104-00
Sampling Date	11/28/00	11/28/00	11/29/00	11/29/00
Depth	14'-16'	18'-20'	24'-26'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,6-Trichlorophenol	380 U	360 U	330 U	430 U
2,4,5-Trichlorophenol	960 U	910 U	840 U	1100 U
1,1'-Biphenyl	380 U	360 U	330 U	430 U
2-Chloronaphthalene	380 U	360 U	330 U	430 U
2-Nitroaniline	960 U	910 U	840 U	1100 U
Dimethylphthalate	380 U	360 U	330 U	430 U
2,6-Dinitrotoluene	380 U	360 U	330 U	430 U
Acenaphthylene	380 U	360 U	330 U	430 U
3-Nitroaniline	960 U	910 U	840 U	1100 U
Acenaphthene	380 U	360 U	330 U	430 U
2,4-Dinitrophenol	960 U	910 U	840 UJ	1100 UJ
4-Nitrophenol	960 U	910 U	840 U	1100 U
Dibenzofuran	380 U	360 U	330 U	430 U
2,4-Dinitrotoluene	380 U	360 U	330 U	430 U
Diethylphthalate	380 U	360 U	21 J	22 J
Fluorene	380 U	360 U	330 U	430 U
4-Chlorophenyl-phenyl ether	380 U	360 U	330 U	430 U
4-Nitroaniline	960 U	910 U	840 UJ	1100 UJ
4,6-Dinitro-2-methylphenol	960 U	910 U	840 UJ	1100 UJ
N-Nitrosodiphenylamine	380 U	360 U	330 U	430 U
4-Bromophenyl-phenylether	380 U	360 U	330 U	430 U
Hexachlorobenzene	380 U	360 U	330 U	430 U
Atrazine	380 U	360 U	330 U	430 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB103	SB103	SB103	SB104
TtFW Sample I.D.	LV-BIA-SB103-14	LV-BIA-SB103-18	LV-BIA-SB103-24	LV-BIA-SB104-00
Sampling Date	11/28/00	11/28/00	11/29/00	11/29/00
Depth	14'-16'	18'-20'	24'-26'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Pentachlorophenol	960 U	910 U	840 U	1100 U
Phenanthrene	380 U	360 U	330 U	65 J
Anthracene	380 U	360 U	330 U	430 U
Carbazole	380 U	360 U	330 U	430 U
Di-n-butylphthalate	97 J	22 J	21 J	27 J
Fluoranthene	380 U	360 U	330 U	150 J
Pyrene	380 U	360 U	330 U	110 J
Butylbenzylphthalate	380 U	360 U	330 U	100 J
3,3'-Dichlorobenzidine	380 U	360 U	330 U	430 U
Benzo(a)anthracene	380 U	360 U	330 U	68 J
Chrysene	380 U	360 U	330 U	63 J
bis(2-Ethylhexyl)phthalate	430	360 U	330 U	8400 D
Di-n-octylphthalate	380 U	360 U	330 U	400 J
Benzo(b)fluoranthene	380 U	360 U	330 U	75 J
Benzo(k)fluoranthene	380 U	360 U	330 U	44 J
Benzo(a)pyrene	380 U	360 U	330 U	49 J
Indeno(1,2,3-cd)pyrene	380 U	360 U	330 U	430 U
Dibenzo(a,h)anthracene	380 U	360 U	330 U	430 U
Benzo(g,h,i)perylene	380 U	360 U	330 U	30 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB104	SB104	SB104 Duplicate of SB104-08	SB105
TtFW Sample I.D.	LV-BIA-SB104-04	LV-BIA-SB104-08	LV-BIA-SB104-09	LV-BIA-SB105-00
Sampling Date	11/29/00	11/29/00	11/29/00	11/29/00
Depth	4'-6'	8'-10'	8'-10'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	330 UJ	430 UJ	380 UJ	54 J
Phenol	330 U	430 U	380 U	350 U
bis-(2-Chloroethyl) ether	330 U	430 U	380 U	350 U
2-Chlorophenol	330 U	430 U	380 U	350 U
2-Methylphenol	330 U	430 U	380 U	350 U
2,2'-oxybis(1-Chloropropane)	330 U	430 U	380 U	350 U
Acetophenone	330 U	430 U	380 U	350 U
4-Methylphenol	330 U	430 U	380 U	350 U
N-Nitroso-di-n-propylamine	330 U	430 U	380 U	350 U
Hexachloroethane	330 U	430 U	380 U	350 U
Nitrobenzene	330 U	430 U	380 U	350 U
Isophorone	330 U	430 U	380 U	350 U
2-Nitrophenol	330 U	430 U	380 U	350 U
2,4-Dimethylphenol	330 U	430 U	380 U	350 U
bis(2-Chloroethoxy)methane	330 U	430 U	380 U	350 U
2,4-Dichlorophenol	330 U	430 U	380 U	350 U
Naphthalene	330 U	430 U	380 U	350 U
4-Chloroaniline	330 U	430 U	380 U	350 U
Hexachlorobutadiene	330 U	430 U	380 U	350 U
Caprolactam	330 U	430 U	380 U	350 U
4-Chloro-3-methylphenol	330 U	430 U	380 U	350 U
2-Methylnaphthalene	330 U	430 U	380 U	350 U
Hexachlorocyclopentadiene	330 U	430 U	380 U	350 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB104	SB104	SB104 Duplicate of SB104-08	SB105
TtFW Sample I.D.	LV-BIA-SB104-04	LV-BIA-SB104-08	LV-BIA-SB104-09	LV-BIA-SB105-00
Sampling Date	11/29/00	11/29/00	11/29/00	11/29/00
Depth	4'-6'	8'-10'	8'-10'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,6-Trichlorophenol	330 U	430 U	380 U	350 U
2,4,5-Trichlorophenol	840 U	1100 U	960 U	890 U
1,1'-Biphenyl	330 U	430 U	380 U	350 U
2-Chloronaphthalene	330 U	430 U	380 U	350 U
2-Nitroaniline	840 U	1100 U	960 U	890 U
Dimethylphthalate	330 U	430 U	380 U	350 U
2,6-Dinitrotoluene	330 U	430 U	380 U	350 U
Acenaphthylene	330 U	430 U	380 U	350 U
3-Nitroaniline	840 U	1100 U	960 U	890 U
Acenaphthene	330 U	430 U	380 U	350 U
2,4-Dinitrophenol	840 UJ	1100 UJ	960 UJ	890 UJ
4-Nitrophenol	840 U	1100 U	960 U	890 U
Dibenzofuran	330 U	430 U	380 U	350 U
2,4-Dinitrotoluene	330 U	430 U	380 U	350 U
Diethylphthalate	21 J	22 J	380 U	350 U
Fluorene	330 U	430 U	380 U	350 U
4-Chlorophenyl-phenyl ether	330 U	430 U	380 U	350 U
4-Nitroaniline	840 UJ	1100 UJ	960 UJ	890 UJ
4,6-Dinitro-2-methylphenol	840 UJ	1100 UJ	960 UJ	890 UJ
N-Nitrosodiphenylamine	330 U	430 U	380 U	350 U
4-Bromophenyl-phenylether	330 U	430 U	380 U	350 U
Hexachlorobenzene	330 U	430 U	380 U	350 U
Atrazine	330 U	430 U	380 U	350 U

See Table D- for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB104	SB104	SB104 Duplicate of SB104-08	SB105
TtFW Sample I.D.	LV-BIA-SB104-04	LV-BIA-SB104-08	LV-BIA-SB104-09	LV-BIA-SB105-00
Sampling Date	11/29/00	11/29/00	11/29/00	11/29/00
Depth	4'-6'	8'-10'	8'-10'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Pentachlorophenol	840 U	1100 U	960 U	890 U
Phenanthrene	330 U	65 J	380 U	350 U
Anthracene	330 U	430 U	380 U	350 U
Carbazole	330 U	430 U	380 U	350 U
Di-n-butylphthalate	21 J	27 J	380 U	350 U
Fluoranthene	330 U	150 J	380 U	350 U
Pyrene	330 U	110 J	380 U	350 U
Butylbenzylphthalate	330 U	100 J	380 U	350 U
3,3'-Dichlorobenzidine	330 U	430 U	380 U	350 U
Benzo(a)anthracene	330 U	68 J	380 U	350 U
Chrysene	330 U	63 J	380 U	350 U
bis(2-Ethylhexyl)phthalate	330 U	8400 D	380 U	350 U
Di-n-octylphthalate	330 U	400 J	380 U	350 U
Benzo(b)fluoranthene	330 U	75 J	380 U	350 U
Benzo(k)fluoranthene	330 U	44 J	380 U	350 U
Benzo(a)pyrene	330 U	49 J	380 U	350 U
Indeno(1,2,3-cd)pyrene	330 U	430 U	380 U	350 U
Dibenzo(a,h)anthracene	330 U	430 U	380 U	350 U
Benzo(g,h,i)perylene	330 U	30 J	380 U	350 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB105	SB105	SB105	SB106
TtFW Sample I.D.	LV-BIA-SB105-04	LV-BIA-SB105-08	LV-BIA-SB105-14	LV-BIA-SB106-00
Sampling Date	11/29/00	11/29/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	45 J	340 UJ	370 UJ	370 UJ
Phenol	360 U	340 U	370 U	370 U
bis-(2-Chloroethyl) ether	360 U	340 U	370 U	370 U
2-Chlorophenol	360 U	340 U	370 U	370 U
2-Methylphenol	360 U	340 U	370 U	370 U
2,2'-oxybis(1-Chloropropane)	360 U	340 U	370 U	370 U
Acetophenone	360 U	340 U	370 U	370 U
4-Methylphenol	360 U	340 U	370 U	370 U
N-Nitroso-di-n-propylamine	360 U	340 U	370 U	370 U
Hexachloroethane	360 U	340 U	370 U	370 U
Nitrobenzene	360 U	340 U	370 U	370 U
Isophorone	360 U	340 U	370 U	370 U
2-Nitrophenol	360 U	340 U	370 U	370 U
2,4-Dimethylphenol	360 U	340 U	370 U	370 U
bis(2-Chloroethoxy)methane	360 U	340 U	370 U	370 U
2,4-Dichlorophenol	360 U	340 U	370 U	370 U
Naphthalene	360 U	340 U	370 U	370 U
4-Chloroaniline	360 U	340 U	370 U	370 U
Hexachlorobutadiene	360 U	340 U	370 U	370 U
Caprolactam	360 U	340 U	370 U	370 U
4-Chloro-3-methylphenol	360 U	340 U	370 U	370 U
2-Methylnaphthalene	360 U	340 U	370 U	370 U
Hexachlorocyclopentadiene	360 U	340 U	370 U	370 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB105	SB105	SB105	SB106
TtFW Sample I.D.	LV-BIA-SB105-04	LV-BIA-SB105-08	LV-BIA-SB105-14	LV-BIA-SB106-00
Sampling Date	11/29/00	11/29/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,6-Trichlorophenol	360 U	340 U	370 U	370 U
2,4,5-Trichlorophenol	890 U	850 U	930 U	930 U
1,1'-Biphenyl	360 U	340 U	370 U	370 U
2-Chloronaphthalene	360 U	340 U	370 U	370 U
2-Nitroaniline	890 U	850 U	930 U	930 U
Dimethylphthalate	360 U	340 U	370 U	370 U
2,6-Dinitrotoluene	360 U	340 U	370 U	370 U
Acenaphthylene	360 U	340 U	370 U	370 U
3-Nitroaniline	890 U	850 U	930 U	930 U
Acenaphthene	360 U	340 U	370 U	370 U
2,4-Dinitrophenol	890 UJ	850 UJ	930 UJ	930 UJ
4-Nitrophenol	890 U	850 U	930 U	930 U
Dibenzofuran	360 U	340 U	370 U	370 U
2,4-Dinitrotoluene	360 U	340 U	370 U	370 U
Diethylphthalate	360 U	340 U	370 U	370 U
Fluorene	360 U	340 U	370 U	370 U
4-Chlorophenyl-phenyl ether	360 U	340 U	370 U	370 U
4-Nitroaniline	890 UJ	850 UJ	930 UJ	930 UJ
4,6-Dinitro-2-methylphenol	890 UJ	850 UJ	930 UJ	930 UJ
N-Nitrosodiphenylamine	360 U	340 U	370 U	370 U
4-Bromophenyl-phenylether	360 U	340 U	370 U	370 U
Hexachlorobenzene	360 U	340 U	370 U	370 U
Atrazine	360 U	340 U	370 U	370 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site
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Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB105	SB105	SB105	SB106
TtFW Sample I.D.	LV-BIA-SB105-04	LV-BIA-SB105-08	LV-BIA-SB105-14	LV-BIA-SB106-00
Sampling Date	11/29/00	11/29/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Pentachlorophenol	890 U	850 U	930 U	930 U
Phenanthrene	360 U	340 U	370 U	370 U
Anthracene	360 U	340 U	370 U	370 U
Carbazole	360 U	340 U	370 U	370 U
Di-n-butylphthalate	360 U	20 J	370 U	370 U
Fluoranthene	360 U	340 U	370 U	370 U
Pyrene	360 U	340 U	370 U	370 U
Butylbenzylphthalate	360 U	36 J	370 U	370 U
3,3'-Dichlorobenzidine	360 U	340 U	370 U	370 U
Benzo(a)anthracene	360 U	340 U	370 U	370 U
Chrysene	360 U	340 U	370 U	370 U
bis(2-Ethylhexyl)phthalate	360 U	4200 D	420	370 U
Di-n-octylphthalate	360 U	64 J	370 U	370 U
Benzo(b)fluoranthene	360 U	340 U	370 U	370 U
Benzo(k)fluoranthene	360 U	340 U	370 U	370 U
Benzo(a)pyrene	360 U	340 U	370 U	370 U
Indeno(1,2,3-cd)pyrene	360 U	340 U	370 U	370 U
Dibenzo(a,h)anthracene	360 U	340 U	370 U	370 U
Benzo(g,h,i)perylene	360 U	340 U	370 U	370 U

See Table D( )r abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB106	SB106	SB106	SB106
TtFW Sample I.D.	LV-BIA-SB106-04	LV-BIA-SB106-08	LV-BIA-SB106-14	LV-BIA-SB106-18
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	18'-20'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	370 UJ	360 UJ	390 UJ	370 UJ
Phenol	370 U	360 U	390 U	370 U
bis-(2-Chloroethyl) ether	370 U	360 U	390 U	370 U
2-Chlorophenol	370 U	360 U	390 U	370 U
2-Methylphenol	370 U	360 U	390 U	370 U
2,2'-oxybis(1-Chloropropane)	370 U	360 U	390 U	370 U
Acetophenone	370 U	360 U	390 U	370 U
4-Methylphenol	370 U	360 U	390 U	370 U
N-Nitroso-di-n-propylamine	370 U	360 U	390 U	370 U
Hexachloroethane	370 U	360 U	390 U	370 U
Nitrobenzene	370 U	360 U	390 U	370 U
Isophorone	370 U	360 U	390 U	370 U
2-Nitrophenol	370 U	360 U	390 U	370 U
2,4-Dimethylphenol	370 U	360 U	390 U	370 U
bis(2-Chloroethoxy)methane	370 U	360 U	390 U	370 U
2,4-Dichlorophenol	370 U	360 U	390 U	370 U
Naphthalene	370 U	360 U	42 J	370 U
4-Chloroaniline	370 U	360 U	390 U	370 U
Hexachlorobutadiene	370 U	360 U	390 U	370 U
Caprolactam	370 U	360 U	390 U	370 U
4-Chloro-3-methylphenol	370 U	360 U	390 U	370 U
2-Methylnaphthalene	370 U	360 U	390 U	370 U
Hexachlorocyclopentadiene	370 UJ	360 UJ	390 UJ	370 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB106	SB106	SB106	SB106
TtFW Sample I.D.	LV-BIA-SB106-04	LV-BIA-SB106-08	LV-BIA-SB106-14	LV-BIA-SB106-18
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	18'-20'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,6-Trichlorophenol	370 U	360 U	390 U	370 U
2,4,5-Trichlorophenol	930 U	900 U	990 U	940 U
1,1'-Biphenyl	370 U	360 U	390 U	370 U
2-Chloronaphthalene	370 U	360 U	390 U	370 U
2-Nitroaniline	930 UJ	900 UJ	990 UJ	940 UJ
Dimethylphthalate	370 U	360 U	390 U	370 U
2,6-Dinitrotoluene	370 UJ	360 UJ	390 UJ	370 UJ
Acenaphthylene	370 U	360 U	31 J	370 U
3-Nitroaniline	930 UJ	900 UJ	990 UJ	940 UJ
Acenaphthene	370 U	360 U	20 J	370 U
2,4-Dinitrophenol	930 UJ	900 UJ	990 UJ	940 UJ
4-Nitrophenol	930 U	900 U	990 U	940 U
Dibenzofuran	370 U	360 U	20 J	370 U
2,4-Dinitrotoluene	370 UJ	360 UJ	390 UJ	370 UJ
Diethylphthalate	370 U	360 U	390 U	370 U
Fluorene	370 U	360 U	27 J	370 U
4-Chlorophenyl-phenyl ether	370 U	360 U	390 U	370 U
4-Nitroaniline	930 UJ	900 UJ	990 UJ	940 UJ
4,6-Dinitro-2-methylphenol	930 UJ	900 UJ	990 UJ	940 UJ
N-Nitrosodiphenylamine	370 U	360 U	390 U	370 U
4-Bromophenyl-phenylether	370 U	360 U	390 U	370 U
Hexachlorobenzene	370 U	360 U	390 U	370 U
Atrazine	370 U	360 U	390 U	370 U

See Table D r abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB106	SB106	SB106	SB106
TtFW Sample I.D.	LV-BIA-SB106-04	LV-BIA-SB106-08	LV-BIA-SB106-14	LV-BIA-SB106-18
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	18'-20'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Pentachlorophenol	930 U	900 U	990 U	940 U
Phenanthrene	370 U	360 U	220 J	370 U
Anthracene	370 U	360 U	25 J	370 U
Carbazole	370 U	360 U	34 J	370 U
Di-n-butylphthalate	370 U	360 U	25 J	370 U
Fluoranthene	370 U	360 U	330 J	370 U
Pyrene	370 U	360 U	270 J	370 U
Butylbenzylphthalate	370 U	360 U	390 U	370 U
3,3'-Dichlorobenzidine	370 UJ	360 UJ	390 UJ	370 UJ
Benzo(a)anthracene	370 U	360 U	140 J	370 U
Chrysene	23 J	360 U	190 J	370 U
bis(2-Ethylhexyl)phthalate	610	2600	1400	1100
Di-n-octylphthalate	370 UJ	360 UJ	390 UJ	370 UJ
Benzo(b)fluoranthene	370 U	24 J	150 J	370 U
Benzo(k)fluoranthene	370 U	360 U	150 J	370 U
Benzo(a)pyrene	370 U	19 J	130 J	370 U
Indeno(1,2,3-cd)pyrene	370 U	360 U	91 J	370 U
Dibenzo(a,h)anthracene	370 U	360 U	37 J	370 U
Benzo(g,h,i)perylene	370 U	360 U	92 J	370 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB107	SB107	SB107	SB107
TtFW Sample I.D.	LV-BIA-SB107-00	LV-BIA-SB107-04	LV-BIA-SB107-08	LV-BIA-SB107-14
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	0'-2'	4'-6'	8'-10'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	370 UJ	380 UJ	360 UJ	440 UJ
Phenol	370 U	380 U	360 U	440 U
bis-(2-Chloroethyl) ether	370 U	380 U	360 U	440 U
2-Chlorophenol	370 U	380 U	360 U	440 U
2-Methylphenol	370 U	380 U	360 U	440 U
2,2'-oxybis(1-Chloropropane)	370 U	380 U	360 U	440 U
Acetophenone	370 U	380 U	360 U	440 U
4-Methylphenol	370 U	380 U	360 U	440 U
N-Nitroso-di-n-propylamine	370 U	380 U	360 U	440 U
Hexachloroethane	370 U	380 U	360 U	440 U
Nitrobenzene	370 U	380 U	360 U	440 U
Isophorone	370 U	380 U	360 U	440 U
2-Nitrophenol	370 U	380 U	360 U	440 U
2,4-Dimethylphenol	370 U	380 U	360 U	440 U
bis(2-Chloroethoxy)methane	370 U	380 U	360 U	440 U
2,4-Dichlorophenol	370 U	380 U	360 U	440 U
Naphthalene	370 U	380 U	360 U	440 U
4-Chloroaniline	370 U	380 U	360 U	440 U
Hexachlorobutadiene	370 U	380 U	360 U	440 U
Caprolactam	370 U	380 U	360 U	440 U
4-Chloro-3-methylphenol	370 U	380 U	360 U	440 U
2-Methylnaphthalene	370 U	380 U	360 U	440 U
Hexachlorocyclopentadiene	370 UJ	380 UJ	360 UJ	440 UJ

See Table D[illegible]r abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB107	SB107	SB107	SB107
TtFW Sample I.D.	LV-BIA-SB107-00	LV-BIA-SB107-04	LV-BIA-SB107-08	LV-BIA-SB107-14
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	0'-2'	4'-6'	8'-10'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,6-Trichlorophenol	370 U	380 U	360 U	440 U
2,4,5-Trichlorophenol	940 U	950 U	910 U	1100 U
1,1'-Biphenyl	370 U	380 U	360 U	440 U
2-Chloronaphthalene	370 U	380 U	360 U	440 U
2-Nitroaniline	940 UJ	950 UJ	910 UJ	1100 UJ
Dimethylphthalate	370 U	380 U	360 U	440 U
2,6-Dinitrotoluene	370 UJ	380 UJ	360 UJ	440 UJ
Acenaphthylene	370 U	380 U	360 U	440 U
3-Nitroaniline	940 UJ	950 UJ	910 UJ	1100 UJ
Acenaphthene	370 U	380 U	360 U	440 U
2,4-Dinitrophenol	940 UJ	950 UJ	910 UJ	1100 UJ
4-Nitrophenol	940 U	950 U	910 U	1100 U
Dibenzofuran	370 U	380 U	360 U	440 U
2,4-Dinitrotoluene	370 UJ	380 UJ	360 UJ	440 UJ
Diethylphthalate	370 U	380 U	360 U	440 U
Fluorene	370 U	380 U	360 U	29 J
4-Chlorophenyl-phenyl ether	370 U	380 U	360 U	440 U
4-Nitroaniline	940 UJ	950 UJ	910 UJ	1100 UJ
4,6-Dinitro-2-methylphenol	940 UJ	950 UJ	910 UJ	1100 UJ
N-Nitrosodiphenylamine	370 U	380 U	360 U	440 U
4-Bromophenyl-phenylether	370 U	380 U	360 U	440 U
Hexachlorobenzene	370 U	380 U	360 U	440 U
Atrazine	370 U	380 U	360 U	440 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB107	SB107	SB107	SB107
TtFW Sample I.D.	LV-BIA-SB107-00	LV-BIA-SB107-04	LV-BIA-SB107-08	LV-BIA-SB107-14
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	0'-2'	4'-6'	8'-10'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Pentachlorophenol	940 U	950 U	910 U	1100 U
Phenanthrene	370 U	380 U	360 U	250 J
Anthracene	370 U	380 U	360 U	58 J
Carbazole	370 U	380 U	360 U	440 U
Di-n-butylphthalate	370 U	380 U	360 U	440 U
Fluoranthene	370 U	380 U	360 U	320 J
Pyrene	370 U	380 U	360 U	230 J
Butylbenzylphthalate	83 J	380 U	23 J	440 U
3,3'-Dichlorobenzidine	370 UJ	380 UJ	360 UJ	440 UJ
Benzo(a)anthracene	370 U	380 U	360 U	130 J
Chrysene	370 U	380 U	360 U	120 J
bis(2-Ethylhexyl)phthalate	6500 D	830	590	600
Di-n-octylphthalate	31 J	380 UJ	360 UJ	440 UJ
Benzo(b)fluoranthene	370 U	380 U	360 U	95 J
Benzo(k)fluoranthene	370 U	380 U	360 U	93 J
Benzo(a)pyrene	370 U	380 U	360 U	96 J
Indeno(1,2,3-cd)pyrene	370 U	380 U	360 U	62 J
Dibenzo(a,h)anthracene	370 U	380 U	360 U	440 U
Benzo(g,h,i)perylene	370 U	380 U	360 U	58 J

See Table D(r abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB108	SB108	SB108	SB108
TtFW Sample I.D.	LV-BIA-SB108-00	LV-BIA-SB108-04	LV-BIA-SB108-10	LV-BIA-SB108-14
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	10'-12'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	380 UJ	390 UJ	360 U	390 U
Phenol	380 U	390 U	360 U	390 U
bis-(2-Chloroethyl) ether	380 U	390 U	360 UJ	390 UJ
2-Chlorophenol	380 U	390 U	360 U	390 U
2-Methylphenol	380 U	390 U	360 U	390 U
2,2'-oxybis(1-Chloropropane)	380 U	390 U	360 UJ	390 UJ
Acetophenone	380 U	390 U	360 U	390 U
4-Methylphenol	380 U	390 U	360 U	390 U
N-Nitroso-di-n-propylamine	380 U	390 U	360 UJ	390 UJ
Hexachloroethane	380 U	390 U	360 U	390 U
Nitrobenzene	380 U	390 U	360 U	390 U
Isophorone	380 U	390 U	360 U	390 U
2-Nitrophenol	380 U	390 U	360 U	390 U
2,4-Dimethylphenol	380 U	390 U	360 U	390 U
bis(2-Chloroethoxy)methane	380 U	390 U	360 U	390 U
2,4-Dichlorophenol	380 U	390 U	360 U	390 U
Naphthalene	380 U	390 U	360 U	390 U
4-Chloroaniline	380 U	390 U	360 U	390 U
Hexachlorobutadiene	380 U	390 U	360 U	390 U
Caprolactam	380 U	390 U	360 U	390 U
4-Chloro-3-methylphenol	380 U	390 U	360 U	390 U
2-Methylnaphthalene	380 U	390 U	360 U	390 U
Hexachlorocyclopentadiene	380 UJ	390 UJ	360 U	390 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB108	SB108	SB108	SB108
TtFW Sample I.D.	LV-BIA-SB108-00	LV-BIA-SB108-04	LV-BIA-SB108-10	LV-BIA-SB108-14
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	10'-12'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,6-Trichlorophenol	380 U	390 U	360 U	390 U
2,4,5-Trichlorophenol	940 U	970 U	900 U	970 U
1,1'-Biphenyl	380 U	390 U	360 U	390 U
2-Chloronaphthalene	380 U	390 U	360 U	390 U
2-Nitroaniline	940 UJ	970 UJ	900 UJ	970 UJ
Dimethylphthalate	380 U	390 U	360 U	390 U
2,6-Dinitrotoluene	380 UJ	390 UJ	360 U	390 U
Acenaphthylene	380 U	390 U	360 U	390 U
3-Nitroaniline	940 UJ	970 UJ	900 U	970 U
Acenaphthene	380 U	390 U	360 U	390 U
2,4-Dinitrophenol	940 UJ	970 UJ	900 U	970 U
4-Nitrophenol	940 U	970 U	900 U	970 U
Dibenzofuran	380 U	390 U	360 U	390 U
2,4-Dinitrotoluene	380 UJ	390 UJ	360 U	390 U
Diethylphthalate	380 U	390 U	360 U	390 U
Fluorene	380 U	390 U	360 U	390 U
4-Chlorophenyl-phenyl ether	380 U	390 U	360 U	390 U
4-Nitroaniline	940 UJ	970 UJ	900 U	970 U
4,6-Dinitro-2-methylphenol	940 UJ	970 UJ	900 U	970 U
N-Nitrosodiphenylamine	380 U	390 U	360 U	390 U
4-Bromophenyl-phenylether	380 U	390 U	360 U	390 U
Hexachlorobenzene	380 U	390 U	360 U	390 U
Atrazine	380 U	390 U	360 U	390 U

See Table D- r abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB108	SB108	SB108	SB108
TtFW Sample I.D.	LV-BIA-SB108-00	LV-BIA-SB108-04	LV-BIA-SB108-10	LV-BIA-SB108-14
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	10'-12'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Pentachlorophenol	940 U	970 U	900 U	970 U
Phenanthrene	35 J	390 U	360 U	390 U
Anthracene	380 U	390 U	360 U	390 U
Carbazole	380 U	390 U	360 U	390 U
Di-n-butylphthalate	380 U	390 U	360 U	390 U
Fluoranthene	43 J	390 U	360 U	390 U
Pyrene	30 J	390 U	360 U	390 U
Butylbenzylphthalate	380 U	390 U	360 UJ	390 UJ
3,3'-Dichlorobenzidine	380 UJ	390 UJ	360 U	390 U
Benzo(a)anthracene	21 J	390 U	360 U	390 U
Chrysene	20 J	390 U	360 U	390 U
bis(2-Ethylhexyl)phthalate	530	520	370	85 J
Di-n-octylphthalate	380 UJ	390 UJ	360 UJ	390 UJ
Benzo(b)fluoranthene	380 U	390 U	360 U	390 U
Benzo(k)fluoranthene	380 U	390 U	360 U	390 U
Benzo(a)pyrene	380 U	390 U	360 U	390 U
Indeno(1,2,3-cd)pyrene	380 U	390 U	360 U	390 U
Dibenzo(a,h)anthracene	380 U	390 U	360 U	390 U
Benzo(g,h,i)perylene	380 U	390 U	360 U	390 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	SB109 Duplicate of SB109-04	SB109
TtFW Sample I.D.	LV-BIA-SB109-00	LV-BIA-SB109-04	LV-BIA-SB109-05	LV-BIA-SB109-08
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	370 U	360 U	1900 UJ	350 U
Phenol	370 U	360 U	1900 U	350 U
bis-(2-Chloroethyl) ether	370 UJ	360 UJ	1900 UJ	350 UJ
2-Chlorophenol	370 U	360 U	1900 U	350 U
2-Methylphenol	370 U	360 U	1900 U	350 U
2,2'-oxybis(1-Chloropropane)	370 UJ	360 UJ	1900 UJ	350 UJ
Acetophenone	370 U	360 U	1900 U	350 U
4-Methylphenol	370 U	360 U	1900 U	350 U
N-Nitroso-di-n-propylamine	370 UJ	360 UJ	1900 UJ	350 UJ
Hexachloroethane	370 U	360 U	1900 U	350 U
Nitrobenzene	370 U	360 U	1900 U	350 U
Isophorone	370 U	360 U	1900 U	350 U
2-Nitrophenol	370 U	360 U	1900 U	350 U
2,4-Dimethylphenol	370 U	360 U	1900 U	350 U
bis(2-Chloroethoxy)methane	370 U	360 U	1900 U	350 U
2,4-Dichlorophenol	370 U	360 U	1900 U	350 U
Naphthalene	370 U	360 U	1900 U	350 U
4-Chloroaniline	370 U	360 U	1900 U	350 U
Hexachlorobutadiene	370 U	360 U	1900 U	350 U
Caprolactam	370 U	360 U	1900 U	350 U
4-Chloro-3-methylphenol	370 U	360 U	1900 U	350 U
2-Methylnaphthalene	370 U	360 U	1900 U	350 U
Hexachlorocyclopentadiene	370 U	360 U	1900 U	350 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	SB109 Duplicate of SB109-04	SB109
TtFW Sample I.D.	LV-BIA-SB109-00	LV-BIA-SB109-04	LV-BIA-SB109-05	LV-BIA-SB109-08
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,6-Trichlorophenol	370 U	360 U	1900 U	350 U
2,4,5-Trichlorophenol	920 U	890 U	4800 U	870 U
1,1'-Biphenyl	370 U	360 U	1900 U	350 U
2-Chloronaphthalene	370 U	360 U	1900 U	350 U
2-Nitroaniline	920 UJ	890 UJ	4800 UJ	870 UJ
Dimethylphthalate	370 U	360 U	1900 U	350 U
2,6-Dinitrotoluene	370 U	360 U	1900 U	350 U
Acenaphthylene	370 U	360 U	1900 U	350 U
3-Nitroaniline	920 U	890 U	4800 U	870 U
Acenaphthene	370 U	360 U	1900 U	350 U
2,4-Dinitrophenol	920 U	890 U	4800 U	870 U
4-Nitrophenol	920 U	890 U	4800 U	870 U
Dibenzofuran	370 U	360 U	1900 U	350 U
2,4-Dinitrotoluene	370 U	360 U	1900 U	350 U
Diethylphthalate	370 U	360 U	1900 U	350 U
Fluorene	370 U	360 U	1900 U	350 U
4-Chlorophenyl-phenyl ether	370 U	360 U	1900 U	350 U
4-Nitroaniline	920 U	890 U	4800 U	870 U
4,6-Dinitro-2-methylphenol	920 U	890 U	4800 U	870 U
N-Nitrosodiphenylamine	370 U	360 U	1900 U	350 U
4-Bromophenyl-phenylether	370 U	360 U	1900 U	350 U
Hexachlorobenzene	370 U	360 U	1900 U	350 U
Atrazine	370 U	360 U	1900 U	350 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	SB109 Duplicate of SB109-04	SB109
TtFW Sample I.D.	LV-BIA-SB109-00	LV-BIA-SB109-04	LV-BIA-SB109-05	LV-BIA-SB109-08
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Pentachlorophenol	920 U	890 U	4800 U	870 U
Phenanthrene	370 U	360 U	210 J	350 U
Anthracene	370 U	360 U	1900 U	350 U
Carbazole	370 U	360 U	1900 U	350 U
Di-n-butylphthalate	370 U	360 U	1900 U	350 U
Fluoranthene	370 U	360 U	290 J	350 U
Pyrene	370 U	360 U	240 J	350 U
Butylbenzylphthalate	370 UJ	360 UJ	1900 U	350 UJ
3,3'-Dichlorobenzidine	370 U	360 U	1900 U	350 U
Benzo(a)anthracene	370 U	360 U	1900 U	350 U
Chrysene	370 U	360 U	1900 U	350 U
bis(2-Ethylhexyl)phthalate	54 J	89 J	840 J	300 J
Di-n-octylphthalate	370 UJ	360 UJ	1900 U	350 UJ
Benzo(b)fluoranthene	370 U	360 U	1900 U	350 U
Benzo(k)fluoranthene	370 U	360 U	1900 U	350 U
Benzo(a)pyrene	370 U	360 U	1900 U	350 U
Indeno(1,2,3-cd)pyrene	370 U	360 U	1900 U	350 U
Dibenzo(a,h)anthracene	370 U	360 U	1900 U	350 U
Benzo(g,h,i)perylene	370 U	360 U	1900 U	350 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	MW8	MW8
TtFW Sample I.D.	LV-BIA-SB109-14	LV-BIA-SB109-24	LV-BIA-SBMW8-00	LV-BIA-SBMW8-04
Sampling Date	12/5/00	12/5/00	12/5/00	12/5/00
Depth	14'-16'	24'-26'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	340 U	360 U	360 U	370 U
Phenol	340 U	360 U	360 U	370 U
bis-(2-Chloroethyl) ether	340 UJ	360 UJ	360 UJ	370 UJ
2-Chlorophenol	340 U	360 U	360 U	370 U
2-Methylphenol	340 U	360 U	360 U	370 U
2,2'-oxybis(1-Chloropropane)	340 UJ	360 UJ	360 UJ	370 UJ
Acetophenone	340 U	360 U	360 U	370 U
4-Methylphenol	340 U	360 U	360 U	370 U
N-Nitroso-di-n-propylamine	340 UJ	360 UJ	360 UJ	370 UJ
Hexachloroethane	340 U	360 U	360 U	370 U
Nitrobenzene	340 U	360 U	360 U	370 U
Isophorone	340 U	360 U	360 U	370 U
2-Nitrophenol	340 U	360 U	360 U	370 U
2,4-Dimethylphenol	340 U	360 U	360 U	370 U
bis(2-Chloroethoxy)methane	340 U	360 U	360 U	370 U
2,4-Dichlorophenol	340 U	360 U	360 U	370 U
Naphthalene	340 U	360 U	360 U	370 U
4-Chloroaniline	340 U	360 U	360 U	370 U
Hexachlorobutadiene	340 U	360 U	360 U	370 U
Caprolactam	340 U	360 U	360 U	370 U
4-Chloro-3-methylphenol	340 U	360 U	360 U	370 U
2-Methylnaphthalene	340 U	360 U	360 U	370 U
Hexachlorocyclopentadiene	340 U	360 U	360 U	370 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	MW8	MW8
TtFW Sample I.D.	LV-BIA-SB109-14	LV-BIA-SB109-24	LV-BIA-SBMW8-00	LV-BIA-SBMW8-04
Sampling Date	12/5/00	12/5/00	12/5/00	12/5/00
Depth	14'-16'	24'-26'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,6-Trichlorophenol	340 U	360 U	360 U	370 U
2,4,5-Trichlorophenol	860 U	900 U	910 U	940 U
1,1'-Biphenyl	340 U	360 U	360 U	370 U
2-Chloronaphthalene	340 U	360 U	360 U	370 U
2-Nitroaniline	860 UJ	900 UJ	910 UJ	940 UJ
Dimethylphthalate	340 U	360 U	360 U	370 U
2,6-Dinitrotoluene	340 U	360 U	360 U	370 U
Acenaphthylene	340 U	360 U	360 U	370 U
3-Nitroaniline	860 U	900 U	910 U	940 U
Acenaphthene	340 U	360 U	360 U	370 U
2,4-Dinitrophenol	860 U	900 U	910 U	940 U
4-Nitrophenol	860 U	900 U	910 U	940 U
Dibenzofuran	340 U	360 U	360 U	370 U
2,4-Dinitrotoluene	340 U	360 U	360 U	370 U
Diethylphthalate	340 U	360 U	360 U	370 U
Fluorene	340 U	360 U	360 U	370 U
4-Chlorophenyl-phenyl ether	340 U	360 U	360 U	370 U
4-Nitroaniline	860 U	900 U	910 U	940 U
4,6-Dinitro-2-methylphenol	860 U	900 U	910 U	940 U
N-Nitrosodiphenylamine	340 U	360 U	360 U	370 U
4-Bromophenyl-phenylether	340 U	360 U	360 U	370 U
Hexachlorobenzene	340 U	360 U	360 U	370 U
Atrazine	340 U	360 U	360 U	370 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SB109		SB109		MW8		MW8	
TtFW Sample I.D.	LV-BIA-SB109-14		LV-BIA-SB109-24		LV-BIA-SBMW8-00		LV-BIA-SBMW8-04	
Sampling Date	12/5/00		12/5/00		12/5/00		12/5/00	
Depth	14'-16'		24'-26'		0'-2'		4'-6'	
Units	ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Pentachlorophenol	860	U	900	U	910	U	940	U
Phenanthrene	340	U	360	U	360	U	370	U
Anthracene	340	U	360	U	360	U	370	U
Carbazole	340	U	360	U	360	U	370	U
Di-n-butylphthalate	340	U	360	U	360	U	370	U
Fluoranthene	340	U	360	U	360	U	370	U
Pyrene	340	U	360	U	360	U	370	U
Butylbenzylphthalate	340	UJ	360	UJ	360	UJ	370	UJ
3,3'-Dichlorobenzidine	340	U	360	U	360	U	370	U
Benzo(a)anthracene	340	U	360	U	360	U	370	U
Chrysene	340	U	360	U	360	U	370	U
bis(2-Ethylhexyl)phthalate	210	J	240	J	360	U	48	J
Di-n-octylphthalate	340	UJ	360	UJ	360	UJ	370	UJ
Benzo(b)fluoranthene	340	U	360	U	360	U	370	U
Benzo(k)fluoranthene	340	U	360	U	360	U	370	U
Benzo(a)pyrene	340	U	360	U	360	U	370	U
Indeno(1,2,3-cd)pyrene	340	U	360	U	360	U	370	U
Dibenzo(a,h)anthracene	340	U	360	U	360	U	370	U
Benzo(g,h,i)perylene	340	U	360	U	360	U	370	U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW8	MW8 Duplicate of MW8-08	MW8	MW8
TtFW Sample I.D.	LV-BIA-SBMW8-08	LV-BIA-SBMW8-09	LV-BIA-SBMW8-18	LV-BIA-SBMW8-34
Sampling Date	12/5/00	12/5/00	12/6/00	12/6/00
Depth	8'-10'	8'-10'	18'-20'	34'-36'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	480 UJ	360 U	360 UJ	360 UJ
Phenol	480 U	360 U	360 U	360 U
bis-(2-Chloroethyl) ether	480 UJ	360 UJ	360 UJ	360 UJ
2-Chlorophenol	480 U	360 U	360 U	360 U
2-Methylphenol	480 U	360 U	360 U	360 U
2,2'-oxybis(1-Chloropropane)	480 UJ	360 UJ	360 UJ	360 UJ
Acetophenone	480 U	360 U	360 U	360 U
4-Methylphenol	480 U	360 U	360 U	360 U
N-Nitroso-di-n-propylamine	480 UJ	360 UJ	360 UJ	360 UJ
Hexachloroethane	480 U	360 U	360 U	360 U
Nitrobenzene	480 U	360 U	360 U	360 U
Isophorone	480 U	360 U	360 U	360 U
2-Nitrophenol	480 U	360 U	360 U	360 U
2,4-Dimethylphenol	480 U	360 U	360 U	360 U
bis(2-Chloroethoxy)methane	480 U	360 U	360 U	360 U
2,4-Dichlorophenol	480 U	360 U	360 U	360 U
Naphthalene	480 U	360 U	360 U	360 U
4-Chloroaniline	480 U	360 U	360 U	360 U
Hexachlorobutadiene	480 U	360 U	360 U	360 U
Caprolactam	480 U	360 U	360 U	360 U
4-Chloro-3-methylphenol	480 U	360 U	360 U	360 U
2-Methylnaphthalene	480 U	360 U	360 U	360 U
Hexachlorocyclopentadiene	480 U	360 U	360 U	360 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW8	MW8 Duplicate of MW8-08	MW8	MW8
TtFW Sample I.D.	LV-BIA-SBMW8-08	LV-BIA-SBMW8-09	LV-BIA-SBMW8-18	LV-BIA-SBMW8-34
Sampling Date	12/5/00	12/5/00	12/6/00	12/6/00
Depth	8'-10'	8'-10'	18'-20'	34'-36'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,6-Trichlorophenol	480 U	360 U	360 U	360 U
2,4,5-Trichlorophenol	1200 U	890 U	900 U	910 U
1,1'-Biphenyl	480 U	360 U	360 U	360 U
2-Chloronaphthalene	480 U	360 U	360 U	360 U
2-Nitroaniline	1200 UJ	890 UJ	900 UJ	910 UJ
Dimethylphthalate	480 U	360 U	360 U	360 U
2,6-Dinitrotoluene	480 U	360 U	360 U	360 U
Acenaphthylene	480 U	360 U	360 U	360 U
3-Nitroaniline	1200 U	890 U	900 U	910 U
Acenaphthene	480 U	360 U	360 U	360 U
2,4-Dinitrophenol	1200 U	890 U	900 U	910 U
4-Nitrophenol	1200 U	890 U	900 U	910 U
Dibenzofuran	480 U	360 U	360 U	360 U
2,4-Dinitrotoluene	480 U	360 U	360 U	360 U
Diethylphthalate	480 U	360 U	360 U	360 U
Fluorene	480 U	360 U	360 U	360 U
4-Chlorophenyl-phenyl ether	480 U	360 U	360 U	360 U
4-Nitroaniline	1200 U	890 U	900 U	910 U
4,6-Dinitro-2-methylphenol	1200 U	890 U	900 U	910 U
N-Nitrosodiphenylamine	480 U	360 U	360 U	360 U
4-Bromophenyl-phenylether	480 U	360 U	360 U	360 U
Hexachlorobenzene	480 U	360 U	360 U	360 U
Atrazine	480 U	360 U	360 U	360 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-7
Semi-Volatile Organic Compounds - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW8	MW8 Duplicate of MW8-08	MW8	MW8
TtFW Sample I.D.	LV-BIA-SBMW8-08	LV-BIA-SBMW8-09	LV-BIA-SBMW8-18	LV-BIA-SBMW8-34
Sampling Date	12/5/00	12/5/00	12/6/00	12/6/00
Depth	8'-10'	8'-10'	18'-20'	34'-36'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Pentachlorophenol	1200 U	890 U	900 U	910 U
Phenanthrene	480 U	360 U	360 U	360 U
Anthracene	480 U	360 U	360 U	360 U
Carbazole	480 U	360 U	360 U	360 U
Di-n-butylphthalate	480 U	360 U	360 U	360 U
Fluoranthene	480 U	360 U	360 U	360 U
Pyrene	480 U	360 U	360 U	360 U
Butylbenzylphthalate	480 U	360 UJ	360 U	360 U
3,3'-Dichlorobenzidine	480 U	360 U	360 U	360 U
Benzo(a)anthracene	480 U	360 U	360 U	360 U
Chrysene	480 U	360 U	360 U	360 U
bis(2-Ethylhexyl)phthalate	68 J	45 J	45 J	360 U
Di-n-octylphthalate	480 U	360 UJ	360 U	360 U
Benzo(b)fluoranthene	480 U	360 U	360 U	360 U
Benzo(k)fluoranthene	480 U	360 U	360 U	360 U
Benzo(a)pyrene	480 U	360 U	360 U	360 U
Indeno(1,2,3-cd)pyrene	480 U	360 U	360 U	360 U
Dibenzo(a,h)anthracene	480 U	360 U	360 U	360 U
Benzo(g,h,i)perylene	480 U	360 U	360 U	360 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-1	CCAGEO-1	CCAGEO-1	CCAGEO-1
TtFW Sample I.D.	LV-SS-CCA-GEO1-0-1	LV-SB-CCA-GEO1-6-8	LV-SB-GEO1-16-18	LV-SB-CCA-GEO1-26-28
Sampling Date	09/10/03	09/08/03	09/08/03	09/08/03
Depth	0'-1'	6'-8'	16'-18'	26'-28'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	400 U	410 U	410 U	400 U
2,4,6-Trichlorophenol	400 U	410 U	410 U	400 U
2,4-Dichlorophenol	400 U	410 U	410 U	400 U
2,4-Dimethylphenol	400 U	410 U	410 U	400 U
2,4-Dinitrophenol	990 U	1000 U	1000 U	990 U
2,4-Dinitrotoluene	400 U	410 U	410 U	400 U
2,6-Dinitrotoluene	400 U	410 U	410 U	400 U
2-Chloronaphthalene	400 U	410 U	410 U	400 U
2-Chlorophenol	400 U	410 U	410 U	400 U
2-Methylnaphthalene	400 U	410 U	410 U	400 U
3,3-Dichlorobenzidine	400 U	410 U	410 U	400 U
4,6-Dinitro-o-cresol	400 U	410 U	410 U	400 U
4-Bromophenyl phenyl ether	400 U	410 U	410 U	400 U
4-Chlorophenyl phenyl ether	400 U	410 U	410 U	400 U
Acenaphthene	400 U	410 U	410 U	400 U
Acenaphthylene	400 U	410 U	410 U	400 U
Acetophenone	400 U	410 U	410 U	400 U
Anthracene	400 U	410 U	410 U	400 U
Atrazine	400 U	410 U	410 U	400 U
Benzaldehyde	400 U	410 U	410 U	400 U
Benzo(a)anthracene	1100	410 U	410 U	400 U
Benzo(a)pyrene	850	410 U	410 U	400 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-1	CCAGEO-1	CCAGEO-1	CCAGEO-1
TtFW Sample I.D.	LV-SS-CCA-GEO1-0-1	LV-SB-CCA-GEO1-6-8	LV-SB-GEO1-16-18	LV-SB-CCA-GEO1-26-28
Sampling Date	09/10/03	09/08/03	09/08/03	09/08/03
Depth	0'-1'	6'-8'	16'-18'	26'-28'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	1300	410 U	410 U	400 U
Benzo(ghi)perylene	400 U	410 U	410 U	400 U
Benzo(k)fluoranthene	480	410 U	410 U	400 U
Biphenyl	400 U	410 U	410 U	400 U
Bis(2-chloro-1-methylethyl)ether	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	400 U	410 U	410 U	400 U
Bis(2-chloroethyl)ether	400 U	410 U	410 U	400 U
Bis(2-chloroisopropyl)ether	400 U	410 U	410 U	400 U
Bis(2-ethylhexyl)phthalate (BEHP)	470	410 U	410 U	400 U
Butyl benzyl phthalate	400 U	410 U	410 U	400 U
Caprolactam	400 U	410 U	410 U	400 U
Carbazole	400 U	410 U	410 U	400 U
Chrysene	1300	410 U	410 U	400 U
Dibenzo(a,h)anthracene	400 U	410 U	410 U	400 U
Dibenzofuran	400 U	410 U	410 U	400 U
Diethyl phthalate	400 U	410 U	410 U	400 U
Dimethyl phthalate	400 U	410 U	410 U	400 U
Di-n-butyl phthalate	400 U	410 U	410 U	400 U
Di-n-octyl phthalate	400 U	410 U	410 U	400 U
Fluoranthene	2000	410 U	410 U	400 U
Fluorene	400 U	410 U	410 U	400 U
Hexachlorobenzene	400 U	410 U	410 U	400 U

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-1	CCAGEO-1	CCAGEO-1	CCAGEO-1
TtFW Sample I.D.	LV-SS-CCA-GEO1-0-1	LV-SB-CCA-GEO1-6-8	LV-SB-GEO1-16-18	LV-SB-CCA-GEO1-26-28
Sampling Date	09/10/03	09/08/03	09/08/03	09/08/03
Depth	0'-1'	6'-8'	16'-18'	26'-28'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	400 U	410 U	410 U	400 U
Hexachlorocyclopentadiene	400 U	410 U	410 U	400 U
Hexachloroethane	400 U	410 U	410 U	400 U
Indeno(1,2,3-cd)pyrene	400 U	410 U	410 U	400 U
Isophorone	400 U	410 U	410 U	400 U
m-Nitroaniline	400 U	410 U	410 U	400 U
Naphthalene	400 U	410 U	410 U	400 U
Nitrobenzene	400 U	410 U	410 U	400 U
N-Nitrosodiphenylamine	400 U	410 U	410 U	400 U
N-Nitrosodipropylamine	400 U	410 U	410 U	400 U
o-Cresol	400 U	410 U	410 U	400 U
o-Nitroaniline	400 U	410 U	410 U	400 U
o-Nitrophenol	400 U	410 U	410 U	400 U
p-Chloroaniline	400 U	410 U	410 U	400 U
p-Chloro-m-cresol	400 U	410 U	410 U	400 U
Pentachlorophenol	400 U	410 U	410 U	400 U
p-Cresol	400 U	410 U	410 U	400 U
Phenanthrene	1600	410 U	410 U	400 U
Phenol	400 U	410 U	410 U	400 U
p-Nitroaniline	400 U	410 U	410 U	400 U
p-Nitrophenol	400 U	410 U	410 U	400 U
Pyrene	1600	410 U	410 U	400 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-2	CCAGEO-2	CCAGEO-2	CCAGEO-2
TtFW Sample I.D.	LV-SS-CCA-GEO2-0-1	LV-SB-CCA-GEO2-6-8	LV-SB-CCA-GEO2-18-20	LV-SB-CCA-GEO2-25-27
Sampling Date	09/10/03	09/09/03	09/09/03	09/09/03
Depth	0'-1'	6'-8'	18'-20'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	2000 U	410 U	410 U	410 U
2,4,6-Trichlorophenol	2000 U	410 U	410 U	410 U
2,4-Dichlorophenol	2000 U	410 U	410 U	410 U
2,4-Dimethylphenol	2000 U	410 U	410 U	410 U
2,4-Dinitrophenol	5000 U	1000 U	1000 U	1000 U
2,4-Dinitrotoluene	2000 U	410 U	410 U	410 U
2,6-Dinitrotoluene	2000 U	410 U	410 U	410 U
2-Chloronaphthalene	2000 U	410 U	410 U	410 U
2-Chlorophenol	2000 U	410 U	410 U	410 U
2-Methylnaphthalene	2000 U	410 U	410 U	410 U
3,3-Dichlorobenzidine	2000 U	410 U	410 U	410 U
4,6-Dinitro-o-cresol	2000 U	410 U	410 U	410 U
4-Bromophenyl phenyl ether	2000 U	410 U	410 U	410 U
4-Chlorophenyl phenyl ether	2000 U	410 U	410 U	410 U
Acenaphthene	2000 U	410 U	410 U	410 U
Acenaphthylene	2000 U	410 U	410 U	410 U
Acetophenone	2000 U	410 U	410 U	410 U
Anthracene	2000 U	410 U	410 U	410 U
Atrazine	2000 U	410 U	410 U	410 U
Benzaldehyde	2000 U	410 U	410 U	410 U
Benzo(a)anthracene	2000 U	410 U	410 U	410 U
Benzo(a)pyrene	2000 U	410 U	410 U	410 U

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-2	CCAGEO-2	CCAGEO-2	CCAGEO-2
TtFW Sample I.D.	LV-SS-CCA-GEO2-0-1	LV-SB-CCA-GEO2-6-8	LV-SB-CCA-GEO2-18-20	LV-SB-CCA-GEO2-25-27
Sampling Date	09/10/03	09/09/03	09/09/03	09/09/03
Depth	0'-1'	6'-8'	18'-20'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	2000 U	410 U	410 U	410 U
Benzo(ghi)perylene	2000 U	410 U	410 U	410 U
Benzo(k)fluoranthene	2000 U	410 U	410 U	410 U
Biphenyl	2000 U	410 U	410 U	410 U
Bis(2-chloro-1-methylethyl)ether	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	2000 U	410 U	410 U	410 U
Bis(2-chloroethyl)ether	2000 U	410 U	410 U	410 U
Bis(2-chloroisopropyl)ether	2000 U	410 U	410 U	410 U
Bis(2-ethylhexyl)phthalate (BEHP)	2000 U	410 U	410 U	410 U
Butyl benzyl phthalate	2000 U	410 U	410 U	410 U
Caprolactam	2000 U	410 U	410 U	410 U
Carbazole	2000 U	410 U	410 U	410 U
Chrysene	2000 U	410 U	410 U	410 U
Dibenzo(a,h)anthracene	2000 U	410 U	410 U	410 U
Dibenzofuran	2000 U	410 U	410 U	410 U
Diethyl phthalate	2000 U	410 U	410 U	410 U
Dimethyl phthalate	2000 U	410 U	410 U	410 U
Di-n-butyl phthalate	2000 U	410 U	410 U	410 U
Di-n-octyl phthalate	2000 U	410 U	410 U	410 U
Fluoranthene	590	410 U	410 U	410 U
Fluorene	2000 U	410 U	410 U	410 U
Hexachlorobenzene	2000 U	410 U	410 U	410 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-2	CCAGEO-2	CCAGEO-2	CCAGEO-2
TtFW Sample I.D.	LV-SS-CCA-GEO2-0-1	LV-SB-CCA-GEO2-6-8	LV-SB-CCA-GEO2-18-20	LV-SB-CCA-GEO2-25-27
Sampling Date	09/10/03	09/09/03	09/09/03	09/09/03
Depth	0'-1'	6'-8'	18'-20'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	2000 U	410 U	410 U	410 U
Hexachlorocyclopentadiene	2000 U	410 U	410 U	410 U
Hexachloroethane	2000 U	410 U	410 U	410 U
Indeno(1,2,3-cd)pyrene	2000 U	410 U	410 U	410 U
Isophorone	2000 U	410 U	410 U	410 U
m-Nitroaniline	2000 U	410 U	410 U	410 U
Naphthalene	2000 U	410 U	410 U	410 U
Nitrobenzene	2000 U	410 U	410 U	410 U
N-Nitrosodiphenylamine	2000 U	410 U	410 U	410 U
N-Nitrosodipropylamine	2000 U	410 U	410 U	410 U
o-Cresol	2000 U	410 U	410 U	410 U
o-Nitroaniline	2000 U	410 U	410 U	410 U
o-Nitrophenol	2000 U	410 U	410 U	410 U
p-Chloroaniline	2000 U	410 U	410 U	410 U
p-Chloro-m-cresol	2000 U	410 U	410 U	410 U
Pentachlorophenol	2000 U	410 U	410 U	410 U
p-Cresol	2000 U	410 U	410 U	410 U
Phenanthrene	2000 U	410 U	410 U	410 U
Phenol	2000 U	410 U	410 U	410 U
p-Nitroaniline	2000 U	410 U	410 U	410 U
p-Nitrophenol	2000 U	410 U	410 U	410 U
Pyrene	560	410 U	410 U	410 U

See Table D for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-3	CCAGEO-3	CCAGEO-3	CCAGEO-3
TtFW Sample I.D.	LV-SS-CCA-GEO3-0-1	LV-SB-CCA-GEO3-8-10	LV-SB-CCA-GEO3-20-22	LV-SB-CCA-GEO3-25-27
Sampling Date	09/10/03	09/09/03	09/09/03	09/09/03
Depth	0'-1'	8'-10'	20'-22'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	9700 U	410 U	400 U	420 U
2,4,6-Trichlorophenol	9700 U	410 U	400 U	420 U
2,4-Dichlorophenol	9700 U	410 U	400 U	420 U
2,4-Dimethylphenol	9700 U	410 U	400 U	420 U
2,4-Dinitrophenol	24000 U	1000 U	990 U	1100 U
2,4-Dinitrotoluene	9700 U	410 U	400 U	420 U
2,6-Dinitrotoluene	9700 U	410 U	400 U	420 U
2-Chloronaphthalene	9700 U	410 U	400 U	420 U
2-Chlorophenol	9700 U	410 U	400 U	420 U
2-Methylnaphthalene	9700 U	410 U	400 U	420 U
3,3-Dichlorobenzidine	9700 U	410 U	400 U	420 U
4,6-Dinitro-o-cresol	9700 U	410 U	400 U	420 U
4-Bromophenyl phenyl ether	9700 U	410 U	400 U	420 U
4-Chlorophenyl phenyl ether	9700 U	410 U	400 U	420 U
Acenaphthene	9700 U	410 U	400 U	420 U
Acenaphthylene	9700 U	410 U	400 U	420 U
Acetophenone	9700 U	410 U	400 U	420 U
Anthracene	9700 U	410 U	400 U	420 U
Atrazine	9700 U	410 U	400 U	420 U
Benzaldehyde	9700 U	410 U	400 U	420 U
Benzo(a)anthracene	9700 U	410 U	400 U	420 U
Benzo(a)pyrene	9700 U	410 U	400 U	420 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-3	CCAGEO-3	CCAGEO-3	CCAGEO-3
TtFW Sample I.D.	LV-SS-CCA-GEO3-0-1	LV-SB-CCA-GEO3-8-10	LV-SB-CCA-GEO3-20-22	LV-SB-CCA-GEO3-25-27
Sampling Date	09/10/03	09/09/03	09/09/03	09/09/03
Depth	0'-1'	8'-10'	20'-22'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	9700 U	410 U	400 U	420 U
Benzo(ghi)perylene	9700 U	410 U	400 U	420 U
Benzo(k)fluoranthene	9700 U	410 U	400 U	420 U
Biphenyl	9700 U	410 U	400 U	420 U
Bis(2-chloro-1-methylethyl)ether	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	9700 U	410 U	400 U	420 U
Bis(2-chloroethyl)ether	9700 U	410 U	400 U	420 U
Bis(2-chloroisopropyl)ether	9700 U	410 U	400 U	420 U
Bis(2-ethylhexyl)phthalate (BEHP)	9700 U	410 U	400 U	420 U
Butyl benzyl phthalate	9700 U	410 U	400 U	420 U
Caprolactam	9700 U	410 U	400 U	420 U
Carbazole	9700 U	410 U	400 U	420 U
Chrysene	9700 U	410 U	400 U	420 U
Dibenzo(a,h)anthracene	9700 U	410 U	400 U	420 U
Dibenzofuran	9700 U	410 U	400 U	420 U
Diethyl phthalate	9700 U	410 U	400 U	420 U
Dimethyl phthalate	9700 U	410 U	400 U	420 U
Di-n-butyl phthalate	9700 U	410 U	400 U	420 U
Di-n-octyl phthalate	9700 U	410 U	400 U	420 U
Fluoranthene	9700 U	410 U	400 U	420 U
Fluorene	9700 U	410 U	400 U	420 U
Hexachlorobenzene	9700 U	410 U	400 U	420 U

See Table D- for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-3	CCAGEO-3	CCAGEO-3	CCAGEO-3
TtFW Sample I.D.	LV-SS-CCA-GEO3-0-1	LV-SB-CCA-GEO3-8-10	LV-SB-CCA-GEO3-20-22	LV-SB-CCA-GEO3-25-27
Sampling Date	09/10/03	09/09/03	09/09/03	09/09/03
Depth	0'-1'	8'-10'	20'-22'	25'-27'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	9700 U	410 U	400 U	420 U
Hexachlorocyclopentadiene	9700 U	410 U	400 U	420 U
Hexachloroethane	9700 U	410 U	400 U	420 U
Indeno(1,2,3-cd)pyrene	9700 U	410 U	400 U	420 U
Isophorone	9700 U	410 U	400 U	420 U
m-Nitroaniline	9700 U	410 U	400 U	420 U
Naphthalene	9700 U	410 U	400 U	420 U
Nitrobenzene	9700 U	410 U	400 U	420 U
N-Nitrosodiphenylamine	9700 U	410 U	400 U	420 U
N-Nitrosodipropylamine	9700 U	410 U	400 U	420 U
o-Cresol	9700 U	410 U	400 U	420 U
o-Nitroaniline	9700 U	410 U	400 U	420 U
o-Nitrophenol	9700 U	410 U	400 U	420 U
p-Chloroaniline	9700 U	410 U	400 U	420 U
p-Chloro-m-cresol	9700 U	410 U	400 U	420 U
Pentachlorophenol	9700 U	410 U	400 U	420 U
p-Cresol	9700 U	410 U	400 U	420 U
Phenanthrene	9700 U	410 U	400 U	420 U
Phenol	9700 U	410 U	400 U	420 U
p-Nitroaniline	9700 U	410 U	400 U	420 U
p-Nitrophenol	9700 U	410 U	400 U	420 U
Pyrene	9700 U	410 U	400 U	420 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-4	CCAGEO-4	CCAGEO-4	CCAGEO-4
TtFW Sample I.D.	LV-SS-CCA-GEO4-0-1	LV-SB-CCA-GEO4-8-10	LV-SB-CCA-GEO4-16-18	LV-SB-CCA-GEO4-22-24
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	0'-1'	8'-10'	16'-18'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	2300 U	380 U	390 U	410 U
2,4,6-Trichlorophenol	2300 U	380 U	390 U	410 U
2,4-Dichlorophenol	2300 U	380 U	390 U	410 U
2,4-Dimethylphenol	2300 U	380 U	390 U	410 U
2,4-Dinitrophenol	5700 U	950 U	980 U	1000 U
2,4-Dinitrotoluene	2300 U	380 U	390 U	410 U
2,6-Dinitrotoluene	2300 U	380 U	390 U	410 U
2-Chloronaphthalene	2300 U	380 U	390 U	410 U
2-Chlorophenol	2300 U	380 U	390 U	410 U
2-Methylnaphthalene	2300 U	380 U	430	410 U
3,3-Dichlorobenzidine	2300 U	380 U	390 U	410 U
4,6-Dinitro-o-cresol	2300 U	380 U	390 U	410 U
4-Bromophenyl phenyl ether	2300 U	380 U	390 U	410 U
4-Chlorophenyl phenyl ether	2300 U	380 U	390 U	410 U
Acenaphthene	2300 U	380 U	530	410 U
Acenaphthylene	2300 U	380 U	390 U	410 U
Acetophenone	2300 U	380 U	390 U	410 U
Anthracene	2300 U	380 U	1100	410 U
Atrazine	2300 U	380 U	390 U	410 U
Benzaldehyde	2300 U	380 U	390 U	410 U
Benzo(a)anthracene	2300 U	380 U	1400	410 U
Benzo(a)pyrene	2300 U	380 U	1200	410 U

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-4	CCAGEO-4	CCAGEO-4	CCAGEO-4
TtFW Sample I.D.	LV-SS-CCA-GEO4-0-1	LV-SB-CCA-GEO4-8-10	LV-SB-CCA-GEO4-16-18	LV-SB-CCA-GEO4-22-24
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	0'-1'	8'-10'	16'-18'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	2300 U	380 U	1700	410 U
Benzo(ghi)perylene	2300 U	380 U	710	410
Benzo(k)fluoranthene	2300 U	380 U	660	410 U
Biphenyl	2300 U	380 U	390 U	410 U
Bis(2-chloro-1-methylethyl)ether	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	2300 U	380 U	390 U	410 U
Bis(2-chloroethyl)ether	2300 U	380 U	390 U	410 U
Bis(2-chloroisopropyl)ether	2300 U	380 U	390 U	410 U
Bis(2-ethylhexyl)phthalate (BEHP)	11000	380 U	390 U	410 U
Butyl benzyl phthalate	2300 U	380 U	390 U	410 U
Caprolactam	2300 U	380 U	390 U	410 U
Carbazole	2300 U	380 U	390 U	410 U
Chrysene	2300 U	380 U	1700	410 U
Dibenzo(a,h)anthracene	2300 U	380 U	390 U	410 U
Dibenzofuran	2300 U	380 U	390	410 U
Diethyl phthalate	2300 U	380 U	390 U	410 U
Dimethyl phthalate	2300 U	380 U	390 U	410 U
Di-n-butyl phthalate	2300 U	380 U	390 U	410 U
Di-n-octyl phthalate	2300 U	380 U	390 U	410 U
Fluoranthene	2300 U	380 U	3300	410 U
Fluorene	2300 U	380 U	530	410 U
Hexachlorobenzene	2300 U	380 U	390 U	410 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-4	CCAGEO-4	CCAGEO-4	CCAGEO-4
TtFW Sample I.D.	LV-SS-CCA-GEO4-0-1	LV-SB-CCA-GEO4-8-10	LV-SB-CCA-GEO4-16-18	LV-SB-CCA-GEO4-22-24
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	0'-1'	8'-10'	16'-18'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	2300 U	380 U	390 U	410 U
Hexachlorocyclopentadiene	2300 U	380 U	390 U	410 U
Hexachloroethane	2300 U	380 U	390 U	410 U
Indeno(1,2,3-cd)pyrene	2300 U	380 U	710	410 U
Isophorone	2300 U	380 U	390 U	410 U
m-Nitroaniline	2300 U	380 U	390 U	410 U
Naphthalene	2300 U	380 U	760	410 U
Nitrobenzene	2300 U	380 U	390 U	410 U
N-Nitrosodiphenylamine	2300 U	380 U	390 U	410 U
N-Nitrosodipropylamine	2300 U	380 U	390 U	410 U
o-Cresol	2300 U	380 U	390 U	410 U
o-Nitroaniline	2300 U	380 U	390 U	410 U
o-Nitrophenol	2300 U	380 U	390 U	410 U
p-Chloroaniline	2300 U	380 U	390 U	410 U
p-Chloro-m-cresol	2300 U	380 U	390 U	410 U
Pentachlorophenol	2300 U	380 U	390 U	410 U
p-Cresol	2300 U	380 U	390 U	410 U
Phenanthrene	2300 U	380 U	2800	410 U
Phenol	2300 U	380 U	390 U	410 U
p-Nitroaniline	2300 U	380 U	390 U	410 U
p-Nitrophenol	2300 U	380 U	390 U	410 U
Pyrene	2900	380 U	2900	410 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-5	CCAGEO-5 Duplicate	CCAGEO-5	CCAGEO-5
TtFW Sample I.D.	LV-SS-CCA-GEO5-0-1	LV-SS-CCA-GEO7-0-1	LV-SB-CCA-GEO5-2-4	LV-SB-CCA-GEO5-6-8
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	0'-1'	0'-1'	2'-4'	6'-8'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	400 U	420 U	450 U	390 U
2,4,6-Trichlorophenol	400 U	420 U	450 U	390 U
2,4-Dichlorophenol	400 U	420 U	450 U	390 U
2,4-Dimethylphenol	400 U	420 U	450 U	390 U
2,4-Dinitrophenol	1000 U	1000 U	1100 U	970 U
2,4-Dinitrotoluene	400 U	420 U	450 U	390 U
2,6-Dinitrotoluene	400 U	420 U	450 U	390 U
2-Chloronaphthalene	400 U	420 U	450 U	390 U
2-Chlorophenol	400 U	420 U	450 U	390 U
2-Methylnaphthalene	400 U	420 U	830	390 U
3,3-Dichlorobenzidine	400 U	420 U	450 U	390 U
4,6-Dinitro-o-cresol	400 U	420 U	450 U	390 U
4-Bromophenyl phenyl ether	400 U	420 U	450 U	390 U
4-Chlorophenyl phenyl ether	400 U	420 U	450 U	390 U
Acenaphthene	400 U	420 U	660	390 U
Acenaphthylene	400 U	420 U	450 U	390 U
Acetophenone	400 U	420 U	450 U	390 U
Anthracene	400 U	420 U	2800	390 U
Atrazine	400 U	420 U	450 U	390 U
Benzaldehyde	400 U	420 U	450 U	390 U
Benzo(a)anthracene	430	430	5700	390 U
Benzo(a)pyrene	410	420 U	4300	390 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-5	CCAGEO-5 Duplicate	CCAGEO-5	CCAGEO-5
TtFW Sample I.D.	LV-SS-CCA-GEO5-0-1	LV-SS-CCA-GEO7-0-1	LV-SB-CCA-GEO5-2-4	LV-SB-CCA-GEO5-6-8
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	0'-1'	0'-1'	2'-4'	6'-8'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	740	800	5800	390 U
Benzo(ghi)perylene	400 U	420 U	1700	390 U
Benzo(k)fluoranthene	400 U	420 U	2300	390 U
Biphenyl	400 U	420 U	450 U	390 U
Bis(2-chloro-1-methylethyl)ether	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	400 U	420 U	450 U	390 U
Bis(2-chloroethyl)ether	400 U	420 U	450 U	390 U
Bis(2-chloroisopropyl)ether	400 U	420 U	450 U	390 U
Bis(2-ethylhexyl)phthalate (BEHP)	400 U	430	450 U	390 U
Butyl benzyl phthalate	400 U	420 U	450 U	390 U
Caprolactam	400 U	420 U	450 U	390 U
Carbazole	400 U	420 U	2200	390 U
Chrysene	530	580	5400	390 U
Dibenzo(a,h)anthracene	400 U	420 U	450 U	390 U
Dibenzofuran	400 U	420 U	860	390 U
Diethyl phthalate	400 U	420 U	450 U	390 U
Dimethyl phthalate	400 U	420 U	450 U	390 U
Di-n-butyl phthalate	400 U	420 U	450 U	390 U
Di-n-octyl phthalate	400 U	420 U	450 U	390 U
Fluoranthene	820	640	10000	390 U
Fluorene	400 U	420 U	1500	390 U
Hexachlorobenzene	400 U	420 U	450 U	390 U

See Table D- for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-5	CCAGEO-5 Duplicate	CCAGEO-5	CCAGEO-5
TtFW Sample I.D.	LV-SS-CCA-GEO5-0-1	LV-SS-CCA-GEO7-0-1	LV-SB-CCA-GEO5-2-4	LV-SB-CCA-GEO5-6-8
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	0'-1'	0'-1'	2'-4'	6'-8'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	400 U	420 U	450 U	390 U
Hexachlorocyclopentadiene	400 U	420 U	450 U	390 U
Hexachloroethane	400 U	420 U	450 U	390 U
Indeno(1,2,3-cd)pyrene	400 U	420 U	2200	390 U
Isophorone	400 U	420 U	450 U	390 U
m-Nitroaniline	400 U	420 U	450 U	390 U
Naphthalene	400 U	420 U	1100	390 U
Nitrobenzene	400 U	420 U	450 U	390 U
N-Nitrosodiphenylamine	400 U	420 U	450 U	390 U
N-Nitrosodipropylamine	400 U	420 U	450 U	390 U
o-Cresol	400 U	420 U	450 U	390 U
o-Nitroaniline	400 U	420 U	450 U	390 U
o-Nitrophenol	400 U	420 U	450 U	390 U
p-Chloroaniline	400 U	420 U	450 U	390 U
p-Chloro-m-cresol	400 U	420 U	450 U	390 U
Pentachlorophenol	400 U	420 U	450 U	390 U
p-Cresol	400 U	420 U	450 U	390 U
Phenanthrene	720	600	9100	390 U
Phenol	400 U	420 U	450 U	390 U
p-Nitroaniline	400 U	420 U	450 U	390 U
p-Nitrophenol	400 U	420 U	450 U	390 U
Pyrene	700	580	8600	390 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-5	CCAGEO-6	CCAGEO-6	CCAGEO-6
TtFW Sample I.D.	LV-SB-CCA-GEO5-20-22	LV-SS-CCA-GEO6-0-1	LV-SB-CCA-GEO6-1-2	LV-SB-CCA-GEO6-12-14
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	20'-22'	0'-1'	1'-2'	12'-14'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	420 U	430 U	440 U	430 U
2,4,6-Trichlorophenol	420 U	430 U	440 U	430 U
2,4-Dichlorophenol	420 U	430 U	440 U	430 U
2,4-Dimethylphenol	420 U	430 U	440 U	430 U
2,4-Dinitrophenol	1000 U	1100 U	1100 U	1100 U
2,4-Dinitrotoluene	420 U	430 U	440 U	430 U
2,6-Dinitrotoluene	420 U	430 U	440 U	430 U
2-Chloronaphthalene	420 U	430 U	440 U	430 U
2-Chlorophenol	420 U	430 U	440 U	430 U
2-Methylnaphthalene	420 U	670	4000	430 U
3,3-Dichlorobenzidine	420 U	430 U	440 U	430 U
4,6-Dinitro-o-cresol	420 U	430 U	440 U	430 U
4-Bromophenyl phenyl ether	420 U	430 U	440 U	430 U
4-Chlorophenyl phenyl ether	420 U	430 U	440 U	430 U
Acenaphthene	420 U	430 U	3300	430 U
Acenaphthylene	420 U	430 U	1900	430 U
Acetophenone	420 U	430 U	440 U	430 U
Anthracene	420	430 U	7300	430 U
Atrazine	420 U	430 U	440 U	430 U
Benzaldehyde	420 U	430 U	440 U	430 U
Benzo(a)anthracene	610	430 U	29000	430 U
Benzo(a)pyrene	470	430 U	29000	430 U

See Table D[illegible]r abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-5	CCAGEO-6	CCAGEO-6	CCAGEO-6
TtFW Sample I.D.	LV-SB-CCA-GEO5-20-22	LV-SS-CCA-GEO6-0-1	LV-SB-CCA-GEO6-1-2	LV-SB-CCA-GEO6-12-14
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	20'-22'	0'-1'	1'-2'	12'-14'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	650	510	44000	430 U
Benzo(ghi)perylene	420 U	430 U	8300	430 U
Benzo(k)fluoranthene	420 U	430 U	18000	430 U
Biphenyl	420 U	430 U	860	430 U
Bis(2-chloro-1-methylethyl)ether	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	420 U	430 U	440 U	430 U
Bis(2-chloroethyl)ether	420 U	430 U	440 U	430 U
Bis(2-chloroisopropyl)ether	420 U	430 U	440 U	430 U
Bis(2-ethylhexyl)phthalate (BEHP)	420 U	430 U	440 U	430 U
Butyl benzyl phthalate	420 U	430 U	440 U	430 U
Caprolactam	420 U	430 U	440 U	430 U
Carbazole	420 U	430 U	1900	430 U
Chrysene	620	500	40000	430 U
Dibenzo(a,h)anthracene	420 U	430 U	940	430 U
Dibenzofuran	420 U	430 U	2700	430 U
Diethyl phthalate	420 U	430 U	440 U	430 U
Dimethyl phthalate	420 U	430 U	440 U	430 U
Di-n-butyl phthalate	420 U	430 U	440 U	430 U
Di-n-octyl phthalate	420 U	430 U	440	430 U
Fluoranthene	1100	510	45000	430 U
Fluorene	420 U	430 U	3000	430 U
Hexachlorobenzene	420 U	430 U	440 U	430 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-5	CCAGEO-6	CCAGEO-6	CCAGEO-6
TtFW Sample I.D.	LV-SB-CCA-GEO5-20-22	LV-SS-CCA-GEO6-0-1	LV-SB-CCA-GEO6-1-2	LV-SB-CCA-GEO6-12-14
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	20'-22'	0'-1'	1'-2'	12'-14'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	420 U	430 U	440 U	430 U
Hexachlorocyclopentadiene	420 U	430 U	440 U	430 U
Hexachloroethane	420 U	430 U	440 U	430 U
Indeno(1,2,3-cd)pyrene	420 U	430 U	10000	430 U
Isophorone	420 U	430 U	440 U	430 U
m-Nitroaniline	420 U	430 U	440 U	430 U
Naphthalene	420 U	430 U	8500	430 U
Nitrobenzene	420 U	430 U	440 U	430 U
N-Nitrosodiphenylamine	420 U	430 U	440 U	430 U
N-Nitrosodipropylamine	420 U	430 U	440 U	430 U
o-Cresol	420 U	430 U	440 U	430 U
o-Nitroaniline	420 U	430 U	440 U	430 U
o-Nitrophenol	420 U	430 U	440 U	430 U
p-Chloroaniline	420 U	430 U	440 U	430 U
p-Chloro-m-cresol	420 U	430 U	440 U	430 U
Pentachlorophenol	420 U	430 U	440 U	430 U
p-Cresol	420 U	430 U	440 U	430 U
Phenanthrene	630	720	20000	430 U
Phenol	420 U	430 U	440 U	430 U
p-Nitroaniline	420 U	430 U	440 U	430 U
p-Nitrophenol	420 U	430 U	440 U	430 U
Pyrene	860	490	43000	430 U

See Table D[illegible]or abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	CCAGEO-6	RRAAGEO-1	RRAAGEO-1 Duplicate	RRAAGEO-1
TtFW Sample I.D.	LV-SB-CCA-GEO6-22-24	LV-SS-RRAA-GEO1-0-1	LV-SS-RRAA-GEO13-0-1	LV-SB-RRAA-GEO1-10-12
Sampling Date	09/10/03	09/11/03	09/11/03	09/11/03
Depth	22'-24'	0'-1'	0'-1'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	400 U	440 U	430 U	380 U
2,4,6-Trichlorophenol	400 U	440 U	430 U	380 U
2,4-Dichlorophenol	400 U	440 U	430 U	380 U
2,4-Dimethylphenol	400 U	440 U	430 U	380 U
2,4-Dinitrophenol	1000 U	1100 U	1100 U	950 U
2,4-Dinitrotoluene	400 U	440 U	430 U	380 U
2,6-Dinitrotoluene	400 U	440 U	430 U	380 U
2-Chloronaphthalene	400 U	440 U	430 U	380 U
2-Chlorophenol	400 U	440 U	430 U	380 U
2-Methylnaphthalene	400 U	440 U	430 U	380 U
3,3-Dichlorobenzidine	400 U	440 U	430 U	380 U
4,6-Dinitro-o-cresol	400 U	440 U	430 U	380 U
4-Bromophenyl phenyl ether	400 U	440 U	430 U	380 U
4-Chlorophenyl phenyl ether	400 U	440 U	430 U	380 U
Acenaphthene	400 U	440 U	430 U	380 U
Acenaphthylene	400 U	440 U	430 U	380 U
Acetophenone	400 U	440 U	430 U	380 U
Anthracene	400 U	440 U	430 U	380 U
Atrazine	400 U	440 U	430 U	380 U
Benzaldehyde	400 U	440 U	430 U	380 U
Benzo(a)anthracene	400 U	440 U	430 U	380 U
Benzo(a)pyrene	400 U	440 U	430 U	380 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	CCAGEO-6	RRAAGEO-1	RRAAGEO-1 Duplicate	RRAAGEO-1
TtFW Sample I.D.	LV-SB-CCA-GEO6-22-24	LV-SS-RRAA-GEO1-0-1	LV-SS-RRAA-GEO13-0-1	LV-SB-RRAA-GEO1-10-12
Sampling Date	09/10/03	09/11/03	09/11/03	09/11/03
Depth	22'-24'	0'-1'	0'-1'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	400 U	440 U	430 U	380 U
Benzo(ghi)perylene	400 U	440 U	430 U	380 U
Benzo(k)fluoranthene	400 U	440 U	430 U	380 U
Biphenyl	400 U	440 U	430 U	380 U
Bis(2-chloro-1-methylethyl)ether	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	400 U	440 U	430 U	380 U
Bis(2-chloroethyl)ether	400 U	440 U	430 U	380 U
Bis(2-chloroisopropyl)ether	400 U	440 U	430 U	380 U
Bis(2-ethylhexyl)phthalate (BEHP)	400 U	520	650	380 U
Butyl benzyl phthalate	400 U	440 U	430 U	380 U
Caprolactam	400 U	440 U	430 U	380 U
Carbazole	400 U	440 U	430 U	380 U
Chrysene	400 U	440 U	430 U	380 U
Dibenzo(a,h)anthracene	400 U	440 U	430 U	380 U
Dibenzofuran	400 U	440 U	430 U	380 U
Diethyl phthalate	400 U	440 U	430 U	380 U
Dimethyl phthalate	400 U	440 U	430 U	380 U
Di-n-butyl phthalate	400 U	440 U	430 U	380 U
Di-n-octyl phthalate	400 U	440 U	430 U	380 U
Fluoranthene	400 U	440 U	430 U	380 U
Fluorene	400 U	440 U	430 U	380 U
Hexachlorobenzene	400 U	440 U	430 U	380 U

See Table D- for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	CCAGEO-6	RRAAGEO-1	RRAAGEO-1 Duplicate	RRAAGEO-1
TtFW Sample I.D.	LV-SB-CCA-GEO6-22-24	LV-SS-RRAA-GEO1-0-1	LV-SS-RRAA-GEO13-0-1	LV-SB-RRAA-GEO1-10-12
Sampling Date	09/10/03	09/11/03	09/11/03	09/11/03
Depth	22'-24'	0'-1'	0'-1'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	400 U	440 U	430 U	380 U
Hexachlorocyclopentadiene	400 U	440 U	430 U	380 U
Hexachloroethane	400 U	440 U	430 U	380 U
Indeno(1,2,3-cd)pyrene	400 U	440 U	430 U	380 U
Isophorone	400 U	440 U	430 U	380 U
m-Nitroaniline	400 U	440 U	430 U	380 U
Naphthalene	400 U	440 U	430 U	380 U
Nitrobenzene	400 U	440 U	430 U	380 U
N-Nitrosodiphenylamine	400 U	440 U	430 U	380 U
N-Nitrosodipropylamine	400 U	440 U	430 U	380 U
o-Cresol	400 U	440 U	430 U	380 U
o-Nitroaniline	400 U	440 U	430 U	380 U
o-Nitrophenol	400 U	440 U	430 U	380 U
p-Chloroaniline	400 U	440 U	430 U	380 U
p-Chloro-m-cresol	400 U	440 U	430 U	380 U
Pentachlorophenol	400 U	440 U	430 U	380 U
p-Cresol	400 U	440 U	430 U	380 U
Phenanthrene	400 U	440 U	430 U	380 U
Phenol	400 U	440 U	430 U	380 U
p-Nitroaniline	400 U	440 U	430 U	380 U
p-Nitrophenol	400 U	440 U	430 U	380 U
Pyrene	400 U	440 U	430 U	380 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-1	RRAAGEO-2	RRAAGEO-2	RRAAGEO-2
TtFW Sample I.D.	LV-SB-RRAA-GEO1-20-22	LV-SS-RRAA-GE02-0-1	LV-SB-RRAA-GEO2-10-12	LV-SB-RRAA-GEO2-18-20
Sampling Date	09/11/03	09/16/03	09/23/03	09/23/03
Depth	20'-22'	0'-1'	10'-12'	18'-20'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	390 U	870 U	400 U	420 U
2,4,6-Trichlorophenol	390 U	350 U	400 U	420 U
2,4-Dichlorophenol	390 U	350 U	400 U	420 U
2,4-Dimethylphenol	390 U	350 U	400 U	420 U
2,4-Dinitrophenol	970 U	870 UJ	1000 U	1000 U
2,4-Dinitrotoluene	390 U	350 U	400 U	420 U
2,6-Dinitrotoluene	390 U	350 U	400 U	420 U
2-Chloronaphthalene	390 U	350 U	400 U	420 U
2-Chlorophenol	390 U	350 U	400 U	420 U
2-Methylnaphthalene	390 U	350 U	400 U	420 U
3,3-Dichlorobenzidine	390 U	350 U	400 U	420 U
4,6-Dinitro-o-cresol	390 U	870 UJ	400 U	420 U
4-Bromophenyl phenyl ether	390 U	350 U	400 U	420 U
4-Chlorophenyl phenyl ether	390 U	350 U	400 U	420 U
Acenaphthene	390 U	350 U	400 U	420 U
Acenaphthylene	390 U	350 U	400 U	420 U
Acetophenone	390 U	350 U	400 U	420 U
Anthracene	390 U	350 U	400 U	420 U
Atrazine	390 U	350 U	400 U	420 U
Benzaldehyde	390 U	350 U	400 U	420 U
Benzo(a)anthracene	390 U	44 J	400 U	420 U
Benzo(a)pyrene	390 U	57 J	400 U	420 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-1	RRAAGEO-2	RRAAGEO-2	RRAAGEO-2
TtFW Sample I.D.	LV-SB-RRAA-GEO1-20-22	LV-SS-RRAA-GE02-0-1	LV-SB-RRAA-GEO2-10-12	LV-SB-RRAA-GEO2-18-20
Sampling Date	09/11/03	09/16/03	09/23/03	09/23/03
Depth	20'-22'	0'-1'	10'-12'	18'-20'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	390 U	71 J	400 U	420 U
Benzo(ghi)perylene	390 U	47 J	400 U	420 U
Benzo(k)fluoranthene	390 U	53 J	400 U	420 U
Biphenyl	390 U	350 U	400 U	420 U
Bis(2-chloro-1-methylethyl)ether	NA	350 U	NA	NA
Bis(2-chloroethoxy)methane	390 U	350 U	400 U	420 U
Bis(2-chloroethyl)ether	390 U	350 U	400 U	420 U
Bis(2-chloroisopropyl)ether	390 U	NA	400 U	420 U
Bis(2-ethylhexyl)phthalate (BEHP)	390 U	8700 D	400 U	420 U
Butyl benzyl phthalate	390 U	350 U	400 U	420 U
Caprolactam	390 U	350 U	400 U	420 U
Carbazole	390 U	350 U	400 U	420 U
Chrysene	390 U	60 J	400 U	420 U
Dibenzo(a,h)anthracene	390 U	350 U	400 U	420 U
Dibenzofuran	390 U	350 U	400 U	420 U
Diethyl phthalate	390 U	350 U	400 U	420 U
Dimethyl phthalate	390 U	350 U	400 U	420 U
Di-n-butyl phthalate	390 U	350 U	400 U	420 U
Di-n-octyl phthalate	390 U	350 U	400 U	420 U
Fluoranthene	390 U	98 J	400 U	420 U
Fluorene	390 U	350 U	400 U	420 U
Hexachlorobenzene	390 U	350 U	400 U	420 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-1	RRAAGEO-2	RRAAGEO-2	RRAAGEO-2
TtFW Sample I.D.	LV-SB-RRAA-GEO1-20-22	LV-SS-RRAA-GE02-0-1	LV-SB-RRAA-GEO2-10-12	LV-SB-RRAA-GEO2-18-20
Sampling Date	09/11/03	09/16/03	09/23/03	09/23/03
Depth	20'-22'	0'-1'	10'-12'	18'-20'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	390 U	350 U	400 U	420 U
Hexachlorocyclopentadiene	390 U	350 U	400 U	420 U
Hexachloroethane	390 U	350 U	400 U	420 U
Indeno(1,2,3-cd)pyrene	390 U	46 J	400 U	420 U
Isophorone	390 U	350 U	400 U	420 U
m-Nitroaniline	390 U	870 U	400 U	420 U
Naphthalene	390 U	350 U	400 U	420 U
Nitrobenzene	390 U	350 U	400 U	420 U
N-Nitrosodiphenylamine	390 U	350 U	400 U	420 U
N-Nitrosodipropylamine	390 U	350 U	400 U	420 U
o-Cresol	390 U	350 U	400 U	420 U
o-Nitroaniline	390 U	870 U	400 U	420 U
o-Nitrophenol	390 U	350 U	400 U	420 U
p-Chloroaniline	390 U	350 U	400 U	420 U
p-Chloro-m-cresol	390 U	350 U	400 U	420 U
Pentachlorophenol	390 U	870 U	400 U	420 U
p-Cresol	390 U	350 U	400 U	420 U
Phenanthrene	390 U	42 J	400 U	420 U
Phenol	390 U	350 U	400 U	420 U
p-Nitroaniline	390 U	870 U	400 U	420 U
p-Nitrophenol	390 U	870 U	400 U	420 U
Pyrene	390 U	91 J	400 U	420 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-3	RRAAGEO-3	RRAAGEO-3	RRAAGEO-4
TtFW Sample I.D.	LV-SS-RRAA-GE03-0-1	LV-SB-RRAA-GEO3-8-10	LV-SB-RRAA-GEO3-18-20	LV-SS-RRAA-GE04-0-1
Sampling Date	09/16/03	09/17/03	09/17/03	09/16/03
Depth	0'-1'	8'-10'	18'-20'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	1000 U	910 UJ	970 U	1100 U
2,4,6-Trichlorophenol	410 U	370 U	390 U	440 U
2,4-Dichlorophenol	410 U	370 U	390 U	440 U
2,4-Dimethylphenol	410 U	370 U	390 U	440 U
2,4-Dinitrophenol	1000 UJ	910 U	970 U	1100 UJ
2,4-Dinitrotoluene	410 U	370 U	390 U	440 U
2,6-Dinitrotoluene	410 U	370 U	390 U	440 U
2-Chloronaphthalene	410 U	370 U	390 U	440 U
2-Chlorophenol	410 U	370 U	390 U	440 U
2-Methylnaphthalene	410 U	370 U	390 U	440 U
3,3-Dichlorobenzidine	410 U	370 U	390 U	440 U
4,6-Dinitro-o-cresol	1000 UJ	910 UJ	970 UJ	1100 UJ
4-Bromophenyl phenyl ether	410 U	370 U	390 U	440 U
4-Chlorophenyl phenyl ether	410 U	370 U	390 U	440 U
Acenaphthene	410 U	370 U	390 U	440 U
Acenaphthylene	410 U	370 U	390 U	440 U
Acetophenone	410 U	370 U	390 U	440 U
Anthracene	410 U	370 U	390 U	440 U
Atrazine	410 U	370 U	390 U	440 U
Benzaldehyde	410 U	370 U	390 U	440 U
Benzo(a)anthracene	70 J	370 U	390 U	67 J
Benzo(a)pyrene	82 J	370 U	390 U	79 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-3	RRAAGEO-3	RRAAGEO-3	RRAAGEO-4
TtFW Sample I.D.	LV-SS-RRAA-GE03-0-1	LV-SB-RRAA-GEO3-8-10	LV-SB-RRAA-GEO3-18-20	LV-SS-RRAA-GE04-0-1
Sampling Date	09/16/03	09/17/03	09/17/03	09/16/03
Depth	0'-1'	8'-10'	18'-20'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	110 J	370 U	390 U	180 J
Benzo(ghi)perylene	59 J	370 U	390 U	58 J
Benzo(k)fluoranthene	74 J	370 U	390 U	93 J
Biphenyl	410 U	370 U	390 U	440 U
Bis(2-chloro-1-methylethyl)ether	410 U	370 U	390 U	440 U
Bis(2-chloroethoxy)methane	410 U	370 U	390 U	440 U
Bis(2-chloroethyl)ether	410 U	370 U	390 U	440 U
Bis(2-chloroisopropyl)ether	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate (BEHP)	830	370 U	390 U	440 U
Butyl benzyl phthalate	410 U	370 U	390 U	440 U
Caprolactam	410 U	370 U	390 U	440 U
Carbazole	410 U	370 U	390 U	440 U
Chrysene	100 J	370 U	390 U	170 J
Dibenzo(a,h)anthracene	410 U	370 U	390 U	440 U
Dibenzofuran	410 U	370 U	390 U	440 U
Diethyl phthalate	410 U	370 U	390 U	440 U
Dimethyl phthalate	410 U	370 U	390 U	440 U
Di-n-butyl phthalate	410 U	370 U	390 U	440 U
Di-n-octyl phthalate	410 U	370 U	390 U	440 U
Fluoranthene	190 J	370 U	390 U	98 J
Fluorene	410 U	370 U	390 U	440 U
Hexachlorobenzene	410 U	370 U	390 U	440 U

See Table D- for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-3	RRAAGEO-3	RRAAGEO-3	RRAAGEO-4
TtFW Sample I.D.	LV-SS-RRAA-GE03-0-1	LV-SB-RRAA-GEO3-8-10	LV-SB-RRAA-GEO3-18-20	LV-SS-RRAA-GE04-0-1
Sampling Date	09/16/03	09/17/03	09/17/03	09/16/03
Depth	0'-1'	8'-10'	18'-20'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	410 U	370 U	390 U	440 U
Hexachlorocyclopentadiene	410 U	370 U	390 U	440 U
Hexachloroethane	410 U	370 U	390 U	440 U
Indeno(1,2,3-cd)pyrene	63 J	370 U	390 U	66 J
Isophorone	410 U	370 U	390 U	440 U
m-Nitroaniline	1000 U	910 U	970 U	1100 U
Naphthalene	410 U	370 U	390 U	440 U
Nitrobenzene	410 U	370 U	390 U	440 U
N-Nitrosodiphenylamine	410 U	370 U	390 U	440 U
N-Nitrosodipropylamine	410 U	370 U	390 U	440 U
o-Cresol	410 U	370 U	390 U	440 U
o-Nitroaniline	1000 U	910 U	970 U	1100 U
o-Nitrophenol	410 U	370 U	390 U	440 U
p-Chloroaniline	410 U	370 U	390 U	440 U
p-Chloro-m-cresol	410 U	370 U	390 U	440 U
Pentachlorophenol	1000 U	910 U	970 U	1100 U
p-Cresol	410 U	370 U	390 U	440 U
Phenanthrene	110 J	370 U	390 U	49 J
Phenol	410 U	370 U	390 U	440 U
p-Nitroaniline	1000 U	910 U	970 U	1100 U
p-Nitrophenol	1000 U	910 U	970 UJ	1100 U
Pyrene	160 J	370 U	390 U	85 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-4	RRAAGEO-4	RRAAGEO-5	RRAAGEO-5
TtFW Sample I.D.	LV-SB-RRAA-GEO4-14-16	LV-SB-RRAA-GEO4-22-24	LV-SS-RRAA-GE05-0-1	LV-SB-RRAA-GEO5-10-12
Sampling Date	09/24/03	09/24/03	09/16/03	10/06/03
Depth	14'-16'	22'-24'	0'-1'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	390 U	410 U	1100 U	830 U
2,4,6-Trichlorophenol	390 U	410 U	420 U	330 U
2,4-Dichlorophenol	390 U	410 U	420 U	330 U
2,4-Dimethylphenol	390 U	410 U	420 U	330 U
2,4-Dinitrophenol	980 U	1000 U	1100 UJ	R
2,4-Dinitrotoluene	390 U	410 U	420 U	330 U
2,6-Dinitrotoluene	390 U	410 U	420 U	330 U
2-Chloronaphthalene	390 U	410 U	420 U	330 U
2-Chlorophenol	390 U	410 U	420 U	330 U
2-Methylnaphthalene	390 U	410 U	420 U	330 U
3,3-Dichlorobenzidine	390 U	410 U	420 U	330 U
4,6-Dinitro-o-cresol	390 U	410 U	1100 UJ	R
4-Bromophenyl phenyl ether	390 U	410 U	420 U	330 U
4-Chlorophenyl phenyl ether	390 U	410 U	420 U	330 U
Acenaphthene	390 U	410 U	420 U	330 U
Acenaphthylene	390 U	410 U	83 J	330 U
Acetophenone	390 U	410 U	420 U	330 U
Anthracene	390 U	410 U	420 U	330 U
Atrazine	390 U	410 U	420 U	330 U
Benzaldehyde	390 U	410 U	420 U	330 U
Benzo(a)anthracene	390 U	410 U	220 J	330 U
Benzo(a)pyrene	390 U	410 U	250 J	330 U

See Table D- for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-4	RRAAGEO-4	RRAAGEO-5	RRAAGEO-5
TtFW Sample I.D.	LV-SB-RRAA-GEO4-14-16	LV-SB-RRAA-GEO4-22-24	LV-SS-RRAA-GE05-0-1	LV-SB-RRAA-GEO5-10-12
Sampling Date	09/24/03	09/24/03	09/16/03	10/06/03
Depth	14'-16'	22'-24'	0'-1'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	390 U	410 U	360 J	330 U
Benzo(ghi)perylene	390 U	410 U	200 J	330 U
Benzo(k)fluoranthene	390 U	410 U	250 J	330 U
Biphenyl	390 U	410 U	420 U	330 U
Bis(2-chloro-1-methylethyl)ether	NA	NA	420 U	330 U
Bis(2-chloroethoxy)methane	390 U	410 U	420 U	330 U
Bis(2-chloroethyl)ether	390 U	410 U	420 U	330 U
Bis(2-chloroisopropyl)ether	390 U	410 U	NA	NA
Bis(2-ethylhexyl)phthalate (BEHP)	390 U	410 U	490	330 U
Butyl benzyl phthalate	390 U	410 U	420 U	330 U
Caprolactam	390 U	410 U	420 U	330 UJ
Carbazole	390 U	410 U	420 U	330 U
Chrysene	390 U	410 U	310 J	330 U
Dibenzo(a,h)anthracene	390 U	410 U	420 U	330 U
Dibenzofuran	390 U	410 U	420 U	330 U
Diethyl phthalate	390 U	410 U	420 U	330 U
Dimethyl phthalate	390 U	410 U	420 U	330 U
Di-n-butyl phthalate	390 U	970	420 U	330 U
Di-n-octyl phthalate	390 U	410 U	420 U	330 U
Fluoranthene	390 U	410 U	510	330 U
Fluorene	390 U	410 U	420 U	330 U
Hexachlorobenzene	390 U	410 U	420 U	330 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-4	RRAAGEO-4	RRAAGEO-5	RRAAGEO-5
TtFW Sample I.D.	LV-SB-RRAA-GEO4-14-16	LV-SB-RRAA-GEO4-22-24	LV-SS-RRAA-GE05-0-1	LV-SB-RRAA-GEO5-10-12
Sampling Date	09/24/03	09/24/03	09/16/03	10/06/03
Depth	14'-16'	22'-24'	0'-1'	10'-12'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	390 U	410 U	420 U	330 U
Hexachlorocyclopentadiene	390 U	410 U	420 U	330 U
Hexachloroethane	390 U	410 U	420 U	330 U
Indeno(1,2,3-cd)pyrene	390 U	410 U	210 J	330 U
Isophorone	390 U	410 U	420 U	330 U
m-Nitroaniline	390 U	410 U	1100 U	830 U
Naphthalene	390 U	410 U	420 U	330 U
Nitrobenzene	390 U	410 U	420 U	330 U
N-Nitrosodiphenylamine	390 U	410 U	420 U	330 U
N-Nitrosodipropylamine	390 U	410 U	420 U	330 U
o-Cresol	390 U	410 U	420 U	330 U
o-Nitroaniline	390 U	410 U	1100 U	830 U
o-Nitrophenol	390 U	410 U	420 U	330 U
p-Chloroaniline	390 U	410 U	420 U	330 U
p-Chloro-m-cresol	390 U	410 U	420 U	330 U
Pentachlorophenol	390 U	410 U	1100 U	830 UJ
p-Cresol	390 U	410 U	420 U	330 U
Phenanthrene	390 U	410 U	250 J	330 U
Phenol	390 U	410 U	420 U	330 U
p-Nitroaniline	390 U	410 U	1100 U	830 U
p-Nitrophenol	390 U	410 U	1100 U	830 U
Pyrene	390 U	410 U	440	330 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-5	RRAAGEO-6	RRAAGEO-6	RRAAGEO-6
TtFW Sample I.D.	LV-SB-RRAA-GEO5-22-24	LV-SS-RRAA-GE06-0-1	LV-SB-RRAA-GEO6-8-10	LV-SB-RRAA-GEO6-22-24
Sampling Date	10/07/03	09/16/03	10/06/03	10/06/03
Depth	22'-24'	0'-1'	8'-10'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	840 U	1000 U	850 U	850 U
2,4,6-Trichlorophenol	330 U	420 U	340 U	340 U
2,4-Dichlorophenol	330 U	420 U	340 U	340 U
2,4-Dimethylphenol	330 U	420 U	340 U	340 U
2,4-Dinitrophenol	R	1000 UJ	R	R
2,4-Dinitrotoluene	330 U	420 U	340 U	340 U
2,6-Dinitrotoluene	330 U	420 U	340 U	340 U
2-Chloronaphthalene	330 U	420 U	340 U	340 U
2-Chlorophenol	330 U	420 U	340 U	340 U
2-Methylnaphthalene	330 U	420 U	340 U	340 U
3,3-Dichlorobenzidine	330 U	420 U	340 U	340 U
4,6-Dinitro-o-cresol	R	1000 UJ	R	R
4-Bromophenyl phenyl ether	330 U	420 U	340 U	340 U
4-Chlorophenyl phenyl ether	330 U	420 U	340 U	340 U
Acenaphthene	330 U	420 U	340 U	340 U
Acenaphthylene	330 U	77 J	340 U	340 U
Acetophenone	330 U	420 U	340 U	340 U
Anthracene	330 U	420 U	340 U	340 U
Atrazine	330 U	420 U	340 U	340 U
Benzaldehyde	330 U	420 U	340 U	340 U
Benzo(a)anthracene	330 U	220 J	340 U	340 U
Benzo(a)pyrene	330 U	240 J	340 U	340 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-5	RRAAGEO-6	RRAAGEO-6	RRAAGEO-6
TtFW Sample I.D.	LV-SB-RRAA-GEO5-22-24	LV-SS-RRAA-GE06-0-1	LV-SB-RRAA-GEO6-8-10	LV-SB-RRAA-GEO6-22-24
Sampling Date	10/07/03	09/16/03	10/06/03	10/06/03
Depth	22'-24'	0'-1'	8'-10'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	330 U	300 J	340 U	340 U
Benzo(ghi)perylene	330 U	180 J	340 U	340 U
Benzo(k)fluoranthene	330 U	260 J	340 U	340 U
Biphenyl	330 U	420 U	340 U	340 U
Bis(2-chloro-1-methylethyl)ether	330 U	420 U	340 U	340 U
Bis(2-chloroethoxy)methane	330 U	420 U	340 U	340 U
Bis(2-chloroethyl)ether	330 U	420 U	340 U	340 U
Bis(2-chloroisopropyl)ether	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate (BEHP)	330 U	880	340 U	340 U
Butyl benzyl phthalate	330 U	420 U	340 U	340 U
Caprolactam	330 UJ	420 U	340 U	340 U
Carbazole	330 U	420 U	340 U	340 U
Chrysene	330 U	310 J	340 U	340 U
Dibenzo(a,h)anthracene	330 U	80 J	340 U	340 U
Dibenzofuran	330 U	420 U	340 U	340 U
Diethyl phthalate	330 U	420 U	340 U	340 U
Dimethyl phthalate	330 U	420 U	340 U	340 U
Di-n-butyl phthalate	330 U	420 U	340 U	340 U
Di-n-octyl phthalate	330 U	420 U	340 U	340 U
Fluoranthene	330 U	490	340 U	340 U
Fluorene	330 U	420 U	340 U	340 U
Hexachlorobenzene	330 U	420 U	340 U	340 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-5	RRAAGEO-6	RRAAGEO-6	RRAAGEO-6
TtFW Sample I.D.	LV-SB-RRAA-GEO5-22-24	LV-SS-RRAA-GE06-0-1	LV-SB-RRAA-GEO6-8-10	LV-SB-RRAA-GEO6-22-24
Sampling Date	10/07/03	09/16/03	10/06/03	10/06/03
Depth	22'-24'	0'-1'	8'-10'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	330 U	420 U	340 U	340 U
Hexachlorocyclopentadiene	330 U	420 U	340 U	340 U
Hexachloroethane	330 U	420 U	340 U	340 U
Indeno(1,2,3-cd)pyrene	330 U	200 J	340 U	340 U
Isophorone	330 U	420 U	340 U	340 U
m-Nitroaniline	840 U	1000 U	850 U	850 U
Naphthalene	330 U	420 U	340 U	340 U
Nitrobenzene	330 U	420 U	340 U	340 U
N-Nitrosodiphenylamine	330 U	420 U	340 U	340 U
N-Nitrosodipropylamine	330 U	420 U	340 U	340 U
o-Cresol	330 U	420 U	340 U	340 U
o-Nitroaniline	840 U	1000 U	850 U	850 U
o-Nitrophenol	330 U	420 U	340 U	340 U
p-Chloroaniline	330 U	420 U	340 U	340 U
p-Chloro-m-cresol	330 U	420 U	340 U	340 U
Pentachlorophenol	840 UJ	1000 U	850 U	850 U
p-Cresol	330 U	420 U	340 U	340 U
Phenanthrene	330 U	250 J	340 U	340 U
Phenol	330 U	420 U	340 U	340 U
p-Nitroaniline	840 U	1000 U	850 U	850 U
p-Nitrophenol	840 U	1000 U	850 U	850 U
Pyrene	330 U	400 J	340 U	340 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-7	RRAAGEO-7	RRAAGEO-7	RRAAGEO-8
TtFW Sample I.D.	LV-SS-RRAA-GE07-0-1	LV-SB-RRAA-GEO7-10-12	LV-SB-RRAA-GEO7-18-20	LV-SS-RRAA-GE08-0-1
Sampling Date	09/16/03	09/25/03	09/25/03	09/17/03
Depth	0'-1'	10'-12'	18'-20'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	1200 U	390 U	400 U	1200 U
2,4,6-Trichlorophenol	480 U	390 U	400 U	460 U
2,4-Dichlorophenol	480 U	390 U	400 U	460 U
2,4-Dimethylphenol	480 U	390 U	400 U	460 U
2,4-Dinitrophenol	1200 UJ	980 U	990 U	1200 U
2,4-Dinitrotoluene	480 U	390 U	400 U	460 U
2,6-Dinitrotoluene	480 U	390 U	400 U	460 U
2-Chloronaphthalene	480 U	390 U	400 U	460 U
2-Chlorophenol	480 U	390 U	400 U	460 U
2-Methylnaphthalene	480 U	390 U	400 U	460 U
3,3-Dichlorobenzidine	480 U	390 U	400 U	460 U
4,6-Dinitro-o-cresol	1200 UJ	390 U	400 U	1200 U
4-Bromophenyl phenyl ether	480 U	390 U	400 U	460 U
4-Chlorophenyl phenyl ether	480 U	390 U	400 U	460 U
Acenaphthene	480 U	390 U	400 U	460 U
Acenaphthylene	480 U	390 U	400 U	88 J
Acetophenone	480 U	390 U	400 U	460 U
Anthracene	480 U	390 U	400 U	63 J
Atrazine	480 U	390 U	400 U	460 UJ
Benzaldehyde	480 U	390 U	400 U	460 U
Benzo(a)anthracene	71 J	390 U	400 U	410 J
Benzo(a)pyrene	84 J	390 U	400 U	430 J

See Table D[illegible]r abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-7	RRAAGEO-7	RRAAGEO-7	RRAAGEO-8
TtFW Sample I.D.	LV-SS-RRAA-GE07-0-1	LV-SB-RRAA-GEO7-10-12	LV-SB-RRAA-GEO7-18-20	LV-SS-RRAA-GE08-0-1
Sampling Date	09/16/03	09/25/03	09/25/03	09/17/03
Depth	0'-1'	10'-12'	18'-20'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	94 J	390 U	400 U	420 J
Benzo(ghi)perylene	61 J	390 U	400 U	230 J
Benzo(k)fluoranthene	89 J	390 U	400 U	400 J
Biphenyl	480 U	390 U	400 U	460 U
Bis(2-chloro-1-methylethyl)ether	480 U	NA	NA	460 U
Bis(2-chloroethoxy)methane	480 U	390 U	400 U	460 U
Bis(2-chloroethyl)ether	480 U	390 U	400 U	460 U
Bis(2-chloroisopropyl)ether	NA	390 U	400 U	NA
Bis(2-ethylhexyl)phthalate (BEHP)	490	390 U	400 U	590
Butyl benzyl phthalate	480 U	390 U	400 U	460 U
Caprolactam	480 U	390 U	400 U	460 U
Carbazole	480 U	390 U	400 U	50 J
Chrysene	92 J	390 U	400 U	520
Dibenzo(a,h)anthracene	480 U	390 U	400 U	110 J
Dibenzofuran	480 U	390 U	400 U	460 U
Diethyl phthalate	480 U	390 U	400 U	460 U
Dimethyl phthalate	480 U	390 U	400 U	460 U
Di-n-butyl phthalate	480 U	1300	930	460 U
Di-n-octyl phthalate	480 U	390 U	400 U	460 UJ
Fluoranthene	160 J	390 U	400 U	810
Fluorene	480 U	390 U	400 U	460 U
Hexachlorobenzene	480 U	390 U	400 U	460 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-7	RRAAGEO-7	RRAAGEO-7	RRAAGEO-8
TtFW Sample I.D.	LV-SS-RRAA-GE07-0-1	LV-SB-RRAA-GEO7-10-12	LV-SB-RRAA-GEO7-18-20	LV-SS-RRAA-GE08-0-1
Sampling Date	09/16/03	09/25/03	09/25/03	09/17/03
Depth	0'-1'	10'-12'	18'-20'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	480 U	390 U	400 U	460 U
Hexachlorocyclopentadiene	480 U	390 U	400 U	460 UJ
Hexachloroethane	480 U	390 U	400 U	460 U
Indeno(1,2,3-cd)pyrene	70 J	390 U	400 U	300 J
Isophorone	480 U	390 U	400 U	460 U
m-Nitroaniline	1200 U	390 U	400 U	1200 U
Naphthalene	480 U	390 U	400 U	460 U
Nitrobenzene	480 U	390 U	400 U	460 U
N-Nitrosodiphenylamine	480 U	390 U	400 U	460 U
N-Nitrosodipropylamine	480 U	390 U	400 U	460 U
o-Cresol	480 U	390 U	400 U	460 U
o-Nitroaniline	1200 U	390 U	400 U	1200 U
o-Nitrophenol	480 U	390 U	400 U	460 U
p-Chloroaniline	480 U	390 U	400 U	460 U
p-Chloro-m-cresol	480 U	390 U	400 U	460 U
Pentachlorophenol	1200 U	390 U	400 U	1200 U
p-Cresol	480 U	390 U	400 U	460 U
Phenanthrene	82 J	390 U	400 U	370 J
Phenol	480 U	390 U	400 U	460 U
p-Nitroaniline	1200 U	390 U	400 U	1200 U
p-Nitrophenol	1200 U	390 U	400 U	1200 U
Pyrene	130 J	390 U	400 U	880

See Table D- for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-8 Duplicate	RRAAGEO-8	RRAAGEO-8	RRAAGEO-9
TtFW Sample I.D.	LV-SS-RRAA-GEO14-0-1	LV-SB-RRAA-GEO8-10-12	LV-SB-RRAA-GEO8-20-22	LV-SS-RRAA-GE09-0-1
Sampling Date	09/17/03	09/29/03	09/29/03	09/17/03
Depth	0'-1'	10'-12'	20'-22'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	1100 U	390 U	400 U	1000 U
2,4,6-Trichlorophenol	440 U	390 U	400 U	410 U
2,4-Dichlorophenol	440 U	390 U	400 U	410 U
2,4-Dimethylphenol	440 U	390 U	400 U	410 U
2,4-Dinitrophenol	1100 U	970 U	1000 U	1000 U
2,4-Dinitrotoluene	440 U	390 U	400 U	410 U
2,6-Dinitrotoluene	440 U	390 U	400 U	410 U
2-Chloronaphthalene	440 U	390 U	400 U	410 U
2-Chlorophenol	440 U	390 U	400 U	410 U
2-Methylnaphthalene	440 U	390 U	400 U	110 J
3,3-Dichlorobenzidine	440 U	390 U	400 U	410 U
4,6-Dinitro-o-cresol	1100 U	390 U	400 U	1000 U
4-Bromophenyl phenyl ether	440 U	390 U	400 U	410 U
4-Chlorophenyl phenyl ether	440 U	390 U	400 U	410 U
Acenaphthene	440 U	390 U	400 U	410 U
Acenaphthylene	76 J	390 U	400 U	500
Acetophenone	440 U	390 U	400 U	410 U
Anthracene	62 J	390 U	400 U	390 J
Atrazine	440 UJ	390 U	400 U	410 UJ
Benzaldehyde	440 U	390 U	400 U	410 U
Benzo(a)anthracene	310 J	390 U	400 U	1600
Benzo(a)pyrene	340 J	390 U	400 U	1600

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-8 Duplicate	RRAAGEO-8	RRAAGEO-8	RRAAGEO-9
TtFW Sample I.D.	LV-SS-RRAA-GEO14-0-1	LV-SB-RRAA-GEO8-10-12	LV-SB-RRAA-GEO8-20-22	LV-SS-RRAA-GE09-0-1
Sampling Date	09/17/03	09/29/03	09/29/03	09/17/03
Depth	0'-1'	10'-12'	20'-22'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	330 J	390 U	400 U	1500
Benzo(ghi)perylene	200 J	390 U	400 U	830
Benzo(k)fluoranthene	320 J	390 U	400 U	1600
Biphenyl	440 U	390 U	400 U	410 U
Bis(2-chloro-1-methylethyl)ether	440 U	NA	NA	410 U
Bis(2-chloroethoxy)methane	440 U	390 U	400 U	410 U
Bis(2-chloroethyl)ether	440 U	390 U	400 U	410 U
Bis(2-chloroisopropyl)ether	NA	390 U	400 U	NA
Bis(2-ethylhexyl)phthalate (BEHP)	610	390 U	400 U	500
Butyl benzyl phthalate	440 U	390 U	400 U	410 U
Caprolactam	440 U	390 U	400 U	410 U
Carbazole	440 U	390 U	400 U	170 J
Chrysene	390 J	390 U	400 U	1800
Dibenzo(a,h)anthracene	81 J	390 U	400 U	430
Dibenzofuran	440 U	390 U	400 U	96 J
Diethyl phthalate	440 U	390 U	400 U	410 U
Dimethyl phthalate	440 U	390 U	400 U	410 U
Di-n-butyl phthalate	440 U	390 U	400 U	410 U
Di-n-octyl phthalate	440 UJ	390 U	400 U	410 UJ
Fluoranthene	670	390 U	400 U	2800
Fluorene	440 U	390 U	400 U	190 J
Hexachlorobenzene	440 U	390 U	400 U	410 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-8 Duplicate	RRAAGEO-8	RRAAGEO-8	RRAAGEO-9
TtFW Sample I.D.	LV-SS-RRAA-GEO14-0-1	LV-SB-RRAA-GEO8-10-12	LV-SB-RRAA-GEO8-20-22	LV-SS-RRAA-GE09-0-1
Sampling Date	09/17/03	09/29/03	09/29/03	09/17/03
Depth	0'-1'	10'-12'	20'-22'	0'-1'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	440 U	390 U	400 U	410 U
Hexachlorocyclopentadiene	440 UJ	390 U	400 U	410 UJ
Hexachloroethane	440 U	390 U	400 U	410 U
Indeno(1,2,3-cd)pyrene	230 J	390 U	400 U	1200
Isophorone	440 U	390 U	400 U	410 U
m-Nitroaniline	1100 U	390 U	400 U	1000 U
Naphthalene	440 U	390 U	400 U	64 J
Nitrobenzene	440 U	390 U	400 U	410 U
N-Nitrosodiphenylamine	440 U	390 U	400 U	410 U
N-Nitrosodipropylamine	440 U	390 U	400 U	410 U
o-Cresol	440 U	390 U	400 U	410 U
o-Nitroaniline	1100 U	390 U	400 U	1000 U
o-Nitrophenol	440 U	390 U	400 U	410 U
p-Chloroaniline	440 U	390 U	400 U	410 U
p-Chloro-m-cresol	440 U	390 U	400 U	410 U
Pentachlorophenol	1100 U	390 U	400 U	1000 U
p-Cresol	440 U	390 U	400 U	410 U
Phenanthrene	350 J	390 U	400 U	2000
Phenol	440 U	390 U	400 U	410 U
p-Nitroaniline	1100 U	390 U	400 U	1000 U
p-Nitrophenol	1100 U	390 U	400 U	1000 U
Pyrene	710	390 U	400 U	3000

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-9	RRAAGEO-9	RRAAGEO-10	RRAAGEO-10
TtFW Sample I.D.	LV-SB-RRAA-GEO9-10-12	LV-SB-RRAA-GEO9-18-20	LV-SS-RRAA-GE010-0-1	LV-SB-RRAA-GEO10-6-8
Sampling Date	10/01/03	10/01/03	09/17/03	09/30/03
Depth	10'-12'	18'-20'	0'-1'	6'-8'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	410 U	390 U	1100 U	400 U
2,4,6-Trichlorophenol	410 U	390 U	440 U	400 U
2,4-Dichlorophenol	410 U	390 U	440 U	400 U
2,4-Dimethylphenol	410 U	390 U	440 U	400 U
2,4-Dinitrophenol	1000 U	970 U	1100 UJ	990 U
2,4-Dinitrotoluene	410 U	390 U	440 U	400 U
2,6-Dinitrotoluene	410 U	390 U	440 U	400 U
2-Chloronaphthalene	410 U	390 U	440 U	400 U
2-Chlorophenol	410 U	390 U	440 U	400 U
2-Methylnaphthalene	410 U	390 U	440 U	400 U
3,3-Dichlorobenzidine	410 U	390 U	440 U	400 U
4,6-Dinitro-o-cresol	410 U	390 U	1100 UJ	400 U
4-Bromophenyl phenyl ether	410 U	390 U	440 U	400 U
4-Chlorophenyl phenyl ether	410 U	390 U	440 U	400 U
Acenaphthene	410 U	390 U	440 U	400 U
Acenaphthylene	410 U	390 U	61 J	400 U
Acetophenone	410 U	390 U	440 U	400 U
Anthracene	410 U	390 U	440 U	400 U
Atrazine	410 U	390 U	440 U	400 U
Benzaldehyde	410 U	390 U	440 U	400 U
Benzo(a)anthracene	410 U	390 U	190 J	400 U
Benzo(a)pyrene	410 U	390 U	200 J	400 U

See Table D, r abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-9	RRAAGEO-9	RRAAGEO-10	RRAAGEO-10
TtFW Sample I.D.	LV-SB-RRAA-GEO9-10-12	LV-SB-RRAA-GEO9-18-20	LV-SS-RRAA-GE010-0-1	LV-SB-RRAA-GEO10-6-8
Sampling Date	10/01/03	10/01/03	09/17/03	09/30/03
Depth	10'-12'	18'-20'	0'-1'	6'-8'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	410 U	390 U	190 J	400 U
Benzo(ghi)perylene	410 U	390 U	150 J	400 U
Benzo(k)fluoranthene	410 U	390 U	230 J	400 U
Biphenyl	410 U	390 U	440 U	400 U
Bis(2-chloro-1-methylethyl)ether	NA	NA	440 U	NA
Bis(2-chloroethoxy)methane	410 U	390 U	440 U	400 U
Bis(2-chloroethyl)ether	410 U	390 U	440 U	400 U
Bis(2-chloroisopropyl)ether	410 U	390 U	NA	400 U
Bis(2-ethylhexyl)phthalate (BEHP)	410 U	390 U	440 U	400 U
Butyl benzyl phthalate	410 U	390 U	440 U	400 U
Caprolactam	410 U	390 U	440 U	400 U
Carbazole	410 U	390 U	440 U	400 U
Chrysene	410 U	390 U	220 J	400 U
Dibenzo(a,h)anthracene	410 U	390 U	440 U	400 U
Dibenzofuran	410 U	390 U	440 U	400 U
Diethyl phthalate	410 U	390 U	440 U	400 U
Dimethyl phthalate	410 U	390 U	440 U	400 U
Di-n-butyl phthalate	410 U	390 U	440 U	400 U
Di-n-octyl phthalate	410 U	390 U	440 U	400 U
Fluoranthene	410 U	390 U	440	400 U
Fluorene	410 U	390 U	440 U	400 U
Hexachlorobenzene	410 U	390 U	440 U	400 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-9	RRAAGEO-9	RRAAGEO-10	RRAAGEO-10
TtFW Sample I.D.	LV-SB-RRAA-GEO9-10-12	LV-SB-RRAA-GEO9-18-20	LV-SS-RRAA-GE010-0-1	LV-SB-RRAA-GEO10-6-8
Sampling Date	10/01/03	10/01/03	09/17/03	09/30/03
Depth	10'-12'	18'-20'	0'-1'	6'-8'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	410 U	390 U	440 U	400 U
Hexachlorocyclopentadiene	410 U	390 U	440 U	400 U
Hexachloroethane	410 U	390 U	440 U	400 U
Indeno(1,2,3-cd)pyrene	410 U	390 U	170 J	400 U
Isophorone	410 U	390 U	440 U	400 U
m-Nitroaniline	410 U	390 U	1100 U	400 U
Naphthalene	410 U	390 U	440 U	400 U
Nitrobenzene	410 U	390 U	440 U	400 U
N-Nitrosodiphenylamine	410 U	390 U	440 U	400 U
N-Nitrosodipropylamine	410 U	390 U	440 U	400 U
o-Cresol	410 U	390 U	440 U	400 U
o-Nitroaniline	410 U	390 U	1100 U	400 U
o-Nitrophenol	410 U	390 U	440 U	400 U
p-Chloroaniline	410 U	390 U	440 U	400 U
p-Chloro-m-cresol	410 U	390 U	440 U	400 U
Pentachlorophenol	410 U	390 U	1100 U	400 U
p-Cresol	410 U	390 U	440 U	400 U
Phenanthrene	410 U	390 U	220 J	400 U
Phenol	410 U	390 U	440 U	400 U
p-Nitroaniline	410 U	390 U	1100 U	400 U
p-Nitrophenol	410 U	390 U	1100 U	400 U
Pyrene	410 U	390 U	340 J	400 U

See Table D[illegible]r abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-10	RRAAGEO-11	RRAAGEO-11	RRAAGEO-11 Duplicate
TtFW Sample I.D.	LV-SB-RRAA-GEO10-20-22	LV-SS-RRAA-GE011-0-1	LV-SB-RRAA-GEO11-8-10	LV-SB-RRAA-GEO18-8-10
Sampling Date	09/30/03	09/17/03	10/08/03	10/08/03
Depth	20'-22'	0'-1'	8'-10'	8'-10'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	390 U	880 U	850 U	850 U
2,4,6-Trichlorophenol	390 U	350 U	340 U	340 U
2,4-Dichlorophenol	390 U	350 U	340 U	340 U
2,4-Dimethylphenol	390 U	350 U	340 U	340 U
2,4-Dinitrophenol	980 U	880 UJ	R	R
2,4-Dinitrotoluene	390 U	350 U	340 U	340 U
2,6-Dinitrotoluene	390 U	350 U	340 U	340 U
2-Chloronaphthalene	390 U	350 U	340 U	340 U
2-Chlorophenol	390 U	350 U	340 U	340 U
2-Methylnaphthalene	390 U	350 U	340 U	340 U
3,3-Dichlorobenzidine	390 U	350 U	340 U	340 U
4,6-Dinitro-o-cresol	390 U	880 UJ	R	R
4-Bromophenyl phenyl ether	390 U	350 U	340 U	340 U
4-Chlorophenyl phenyl ether	390 U	350 U	340 U	340 U
Acenaphthene	390 U	350 U	340 U	340 U
Acenaphthylene	390 U	350 U	340 U	340 U
Acetophenone	390 U	350 U	340 U	340 U
Anthracene	390 U	350 U	340 U	340 U
Atrazine	390 U	350 U	340 U	340 U
Benzaldehyde	390 U	350 U	340 U	340 U
Benzo(a)anthracene	390 U	45 J	340 U	340 U
Benzo(a)pyrene	390 U	50 J	340 U	340 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-10	RRAAGEO-11	RRAAGEO-11	RRAAGEO-11 Duplicate
TtFW Sample I.D.	LV-SB-RRAA-GEO10-20-22	LV-SS-RRAA-GE011-0-1	LV-SB-RRAA-GEO11-8-10	LV-SB-RRAA-GEO18-8-10
Sampling Date	09/30/03	09/17/03	10/08/03	10/08/03
Depth	20'-22'	0'-1'	8'-10'	8'-10'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	390 U	60 J	340 U	340 U
Benzo(ghi)perylene	390 U	38 J	340 U	340 U
Benzo(k)fluoranthene	390 U	51 J	340 U	340 U
Biphenyl	390 U	350 U	340 U	340 U
Bis(2-chloro-1-methylethyl)ether	NA	350 U	340 U	340 U
Bis(2-chloroethoxy)methane	390 U	350 U	340 U	340 U
Bis(2-chloroethyl)ether	390 U	350 U	340 U	340 U
Bis(2-chloroisopropyl)ether	390 U	NA	NA	NA
Bis(2-ethylhexyl)phthalate (BEHP)	390 U	1600	340 U	340 U
Butyl benzyl phthalate	390 U	350 U	340 U	340 U
Caprolactam	390 U	350 U	340 UJ	340 U
Carbazole	390 U	350 U	340 U	340 U
Chrysene	390 U	57 J	340 U	340 U
Dibenzo(a,h)anthracene	390 U	350 U	340 U	340 U
Dibenzofuran	390 U	350 U	340 U	340 U
Diethyl phthalate	390 U	350 U	340 U	340 U
Dimethyl phthalate	390 U	350 U	340 U	340 U
Di-n-butyl phthalate	390 U	350 U	340 U	340 U
Di-n-octyl phthalate	390 U	350 U	340 U	340 U
Fluoranthene	390 U	110 J	340 U	340 U
Fluorene	390 U	350 U	340 U	340 U
Hexachlorobenzene	390 U	350 U	340 U	340 U

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-10	RRAAGEO-11	RRAAGEO-11	RRAAGEO-11 Duplicate
TtFW Sample I.D.	LV-SB-RRAA-GEO10-20-22	LV-SS-RRAA-GE011-0-1	LV-SB-RRAA-GEO11-8-10	LV-SB-RRAA-GEO18-8-10
Sampling Date	09/30/03	09/17/03	10/08/03	10/08/03
Depth	20'-22'	0'-1'	8'-10'	8'-10'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	390 U	350 U	340 U	340 U
Hexachlorocyclopentadiene	390 U	350 U	340 U	340 U
Hexachloroethane	390 U	350 U	340 U	340 U
Indeno(1,2,3-cd)pyrene	390 U	40 J	340 U	340 U
Isophorone	390 U	350 U	340 U	340 U
m-Nitroaniline	390 U	880 U	850 U	850 U
Naphthalene	390 U	350 U	340 U	340 U
Nitrobenzene	390 U	350 U	340 U	340 U
N-Nitrosodiphenylamine	390 U	350 U	340 U	340 U
N-Nitrosodipropylamine	390 U	350 U	340 U	340 U
o-Cresol	390 U	350 U	340 U	340 U
o-Nitroaniline	390 U	880 U	850 U	850 U
o-Nitrophenol	390 U	350 U	340 U	340 U
p-Chloroaniline	390 U	350 U	340 U	340 U
p-Chloro-m-cresol	390 U	350 U	340 U	340 U
Pentachlorophenol	390 U	880 U	850 UJ	850 U
p-Cresol	390 U	350 U	340 U	340 U
Phenanthrene	390 U	55 J	340 U	340 U
Phenol	390 U	350 U	340 U	340 U
p-Nitroaniline	390 U	880 U	850 U	850 U
p-Nitrophenol	390 U	880 U	850 U	850 U
Pyrene	390 U	83 J	340 U	340 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-11	RRAAGEO-12	RRAAGEO-12	RRAAGEO-12
TtFW Sample I.D.	LV-SB-RRAA-GEO11-16-18	LV-SS-RRAA-GE012-0-1	LV-SB-RRAA-GEO12-10-12	LV-SB-RRAA-GEO12-22-24
Sampling Date	10/08/03	09/17/03	09/22/03	09/22/03
Depth	16'-18'	0'-1'	10'-12'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
2,4,5-Trichlorophenol	860 U	2100 U	410 U	400 U
2,4,6-Trichlorophenol	340 U	850 U	410 U	400 U
2,4-Dichlorophenol	340 U	850 U	410 U	400 U
2,4-Dimethylphenol	340 U	850 U	410 U	400 U
2,4-Dinitrophenol	R	2100 U	1000 U	1000 U
2,4-Dinitrotoluene	340 U	850 U	410 U	400 U
2,6-Dinitrotoluene	340 U	850 U	410 U	400 U
2-Chloronaphthalene	340 U	850 U	410 U	400 U
2-Chlorophenol	340 U	850 U	410 U	400 U
2-Methylnaphthalene	340 U	850 U	410 U	400 U
3,3-Dichlorobenzidine	340 U	850 U	410 U	400 U
4,6-Dinitro-o-cresol	R	2100 U	410 U	400 U
4-Bromophenyl phenyl ether	340 U	850 U	410 U	400 U
4-Chlorophenyl phenyl ether	340 U	850 U	410 U	400 U
Acenaphthene	340 U	850 U	410 U	400 U
Acenaphthylene	340 U	370 J	410 U	400 U
Acetophenone	340 U	850 U	410 U	400 U
Anthracene	340 U	150 J	410 U	400 U
Atrazine	340 U	850 UJ	410 U	400 U
Benzaldehyde	340 U	110 J	410 U	400 U
Benzo(a)anthracene	340 U	920	410 U	400 U
Benzo(a)pyrene	340 U	1100	410 U	400 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-11	RRAAGEO-12	RRAAGEO-12	RRAAGEO-12
TtFW Sample I.D.	LV-SB-RRAA-GEO11-16-18	LV-SS-RRAA-GE012-0-1	LV-SB-RRAA-GEO12-10-12	LV-SB-RRAA-GEO12-22-24
Sampling Date	10/08/03	09/17/03	09/22/03	09/22/03
Depth	16'-18'	0'-1'	10'-12'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	340 U	1200	410 U	400 U
Benzo(ghi)perylene	340 U	570 J	410 U	400 U
Benzo(k)fluoranthene	340 U	990	410 U	400 U
Biphenyl	340 U	850 U	410 U	400 U
Bis(2-chloro-1-methylethyl)ether	340 U	850 U	NA	NA
Bis(2-chloroethoxy)methane	340 U	850 U	410 U	400 U
Bis(2-chloroethyl)ether	340 U	850 U	410 U	400 U
Bis(2-chloroisopropyl)ether	NA	NA	410 U	400 U
Bis(2-ethylhexyl)phthalate (BEHP)	340 U	1100	410 U	400 U
Butyl benzyl phthalate	340 U	850 U	410 U	400 U
Caprolactam	340 U	850 U	410 U	400 U
Carbazole	340 U	100 J	410 U	400 U
Chrysene	340 U	1200	410 U	400 U
Dibenzo(a,h)anthracene	340 U	290 J	410 U	400 U
Dibenzofuran	340 U	850 U	410 U	400 U
Diethyl phthalate	340 U	850 U	410 U	400 U
Dimethyl phthalate	340 U	850 U	410 U	400 U
Di-n-butyl phthalate	340 U	850 U	410 U	400 U
Di-n-octyl phthalate	340 U	850 UJ	410 U	400 U
Fluoranthene	340 U	1900	410 U	400 U
Fluorene	340 U	850 U	410 U	400 U
Hexachlorobenzene	340 U	850 U	410 U	400 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-8
Semi-Volatile Organic Compounds - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-11	RRAAGEO-12	RRAAGEO-12	RRAAGEO-12
TtFW Sample I.D.	LV-SB-RRAA-GEO11-16-18	LV-SS-RRAA-GE012-0-1	LV-SB-RRAA-GEO12-10-12	LV-SB-RRAA-GEO12-22-24
Sampling Date	10/08/03	09/17/03	09/22/03	09/22/03
Depth	16'-18'	0'-1'	10'-12'	22'-24'
Units	ug/kg	ug/kg	ug/kg	ug/kg
Hexachlorobutadiene	340 U	850 U	410 U	400 U
Hexachlorocyclopentadiene	340 U	850 UJ	410 U	400 U
Hexachloroethane	340 U	850 U	410 U	400 U
Indeno(1,2,3-cd)pyrene	340 U	800 J	410 U	400 U
Isophorone	340 U	850 U	410 U	400 U
m-Nitroaniline	860 U	2100 U	410 U	400 U
Naphthalene	340 U	850 U	410 U	400 U
Nitrobenzene	340 U	850 U	410 U	400 U
N-Nitrosodiphenylamine	340 U	850 U	410 U	400 U
N-Nitrosodipropylamine	340 U	850 U	410 U	400 U
o-Cresol	340 U	850 U	410 U	400 U
o-Nitroaniline	860 U	2100 U	410 U	400 U
o-Nitrophenol	340 U	850 U	410 U	400 U
p-Chloroaniline	340 U	850 U	410 U	400 U
p-Chloro-m-cresol	340 U	850 U	410 U	400 U
Pentachlorophenol	860 U	2100 U	410 U	400 U
p-Cresol	340 U	850 U	410 U	400 U
Phenanthrene	340 U	870	410 U	400 U
Phenol	340 U	850 U	410 U	400 U
p-Nitroaniline	860 U	2100 U	410 U	400 U
p-Nitrophenol	860 U	2100 U	410 U	400 U
Pyrene	340 U	2000	410 U	400 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB101	SB101	SB101
TtFW Sample I.D.	LV-BIA-SB101-00	LV-BIA-SB101-04	LV-BIA-SB101-14	LV-BIA-SB101-24
Sampling Date	11/27/00	11/27/00	11/27/00	11/27/00
Depth	0'-2'	4'-6'	14'-16'	24'-26'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	2.2 U	1.9 U	1.8 U	1.8 U
beta-BHC	2.2 U	1.9 U	1.8 U	1.8 U
delta-BHC	2.2 U	1.9 U	1.8 U	1.8 U
gamma-BHC (Lindane)	2.2 U	1.9 U	1.8 U	1.8 U
Heptachlor	2.2 U	1.9 U	1.8 U	1.8 U
Aldrin	2.2 U	1.9 U	1.8 U	1.8 U
Heptachlor epoxide	2.2 U	1.9 U	1.8 U	1.8 U
Endosulfan I	2.2 U	1.9 U	1.8 U	1.8 U
Dieldrin	4.2 U	3.7 U	3.5 U	3.5 U
4,4'-DDE	4.2 U	3.7 U	3.5 U	3.5 U
Endrin	4.2 U	3.7 U	3.5 U	3.5 U
Endosulfan II	4.2 U	3.7 U	3.5 U	3.5 U
4,4'-DDD	4.2 U	3.7 U	3.5 U	3.5 U
Endosulfan sulfate	4.2 U	3.7 U	3.5 U	3.5 U
4,4'-DDT	4.2 UJ	3.7 UJ	3.5 UJ	3.5 UJ
Methoxychlor	22 U	19 U	18 U	18 U
Endrin ketone	4.2 U	3.7 U	3.5 U	3.5 U
Endrin aldehyde	4.2 U	3.7 U	3.5 U	3.5 U
alpha-Chlordane	2.2 U	1.9 U	1.8 U	1.8 U
gamma-Chlordane	2.2 U	1.9 U	1.8 U	1.8 U
Toxaphene	220 U	190 U	180 U	180 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB101	SB101	SB101
TtFW Sample I.D.	LV-BIA-SB101-00	LV-BIA-SB101-04	LV-BIA-SB101-14	LV-BIA-SB101-24
Sampling Date	11/27/00	11/27/00	11/27/00	11/27/00
Depth	0'-2'	4'-6'	14'-16'	24'-26'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	42 U	37 U	35 U	35 U
Aroclor-1221	85 U	74 U	70 U	72 U
Aroclor-1232	42 U	37 U	35 U	35 U
Aroclor-1242	42 U	37 U	35 U	35 U
Aroclor-1248	42 U	37 U	35 U	35 U
Aroclor-1254	42 U	16 J	35 U	35 U
Aroclor-1260	42 U	37 U	35 U	35 U

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB102	SB102	SB102
TtFW Sample I.D.	LV-BIA-SB101-34	LV-BIA-SB102-00	LV-BIA-SB102-04	LV-BIA-SB102-08
Sampling Date	11/27/00	11/28/00	11/28/00	11/28/00
Depth	34'-36'	0'-2'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	1.9 U	1.9 U	2.0 U	1.9 U
beta-BHC	1.9 U	1.9 U	2.0 U	1.9 U
delta-BHC	1.9 U	1.9 UJ	2.0 UJ	1.9 UJ
gamma-BHC (Lindane)	1.9 U	1.9 U	2.0 U	1.9 U
Heptachlor	1.9 U	1.9 U	2.0 U	1.9 U
Aldrin	1.9 U	1.9 U	2.0 U	1.9 U
Heptachlor epoxide	1.9 U	1.9 U	2.0 U	0.92 J
Endosulfan I	1.9 U	1.9 U	2.0 U	1.9 U
Dieldrin	3.8 U	1.6 J	3.9 U	3.7 U
4,4'-DDE	3.8 U	0.94 J	3.9 UJ	3.7 UJ
Endrin	3.8 U	3.6 U	3.9 U	3.7 U
Endosulfan II	3.8 U	3.6 U	3.9 U	3.7 U
4,4'-DDD	3.8 U	3.6 U	3.9 U	3.7 U
Endosulfan sulfate	3.8 U	3.6 U	3.9 U	3.7 U
4,4'-DDT	3.8 UJ	3.6 U	3.9 U	3.7 U
Methoxychlor	19 U	19 U	20 U	19 U
Endrin ketone	3.8 U	3.6 U	3.9 U	3.7 U
Endrin aldehyde	3.8 U	3.6 U	3.9 U	3.7 U
alpha-Chlordane	1.9 U	1.9 U	2.0 U	1.9 U
gamma-Chlordane	1.9 U	1.9 U	2.0 U	1.9 U
Toxaphene	190 U	190 U	200 U	190 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB102	SB102	SB102
TtFW Sample I.D.	LV-BIA-SB101-34	LV-BIA-SB102-00	LV-BIA-SB102-04	LV-BIA-SB102-08
Sampling Date	11/27/00	11/28/00	11/28/00	11/28/00
Depth	34'-36'	0'-2'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	38 U	36 U	39 U	37 U
Aroclor-1221	76 U	73 U	79 U	75 U
Aroclor-1232	38 U	36 U	39 U	37 U
Aroclor-1242	38 U	36 U	39 U	37 U
Aroclor-1248	38 U	36 U	39 U	37 U
Aroclor-1254	38 U	36 U	39 U	37 U
Aroclor-1260	38 U	36 U	39 U	37 U

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB102	SB102	SB103	SB103
TtFW Sample I.D.	LV-BIA-SB102-14	LV-BIA-SB102-18	LV-BIA-SB103-00	LV-BIA-SB103-04
Sampling Date	11/28/00	11/28/00	11/28/00	11/28/00
Depth	14'-16'	18'-20'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	2.0 U	2.0 U	2.1 U	1.9 U
beta-BHC	2.0 U	2.0 U	2.1 U	1.9 U
delta-BHC	2.0 UJ	2.0 UJ	2.1 UJ	0.22 J
gamma-BHC (Lindane)	2.0 U	2.0 U	2.1 U	1.9 U
Heptachlor	2.0 UJ	2.0 UJ	2.1 U	1.9 U
Aldrin	2.0 U	2.0 U	2.1 U	1.9 U
Heptachlor epoxide	2.0 U	2.0 U	2.1 U	1.9 U
Endosulfan I	2.0 U	2.0 U	2.1 U	1.9 U
Dieldrin	3.8 U	3.8 U	2.1 U	3.7 U
4,4'-DDE	3.8 UJ	3.8 UJ	0.89 J	3.7 UJ
Endrin	3.8 U	3.8 U	4.1 U	3.7 U
Endosulfan II	3.8 U	3.8 U	4.1 U	3.7 U
4,4'-DDD	3.8 U	3.8 U	4.1 U	3.7 U
Endosulfan sulfate	3.8 U	3.8 U	4.1 U	3.7 U
4,4'-DDT	3.8 U	3.8 U	4.1 U	3.7 U
Methoxychlor	20 U	20 U	21 U	19 U
Endrin ketone	3.8 U	3.8 U	4.1 U	3.7 U
Endrin aldehyde	3.8 U	3.8 U	4.1 U	3.7 U
alpha-Chlordane	2.0 U	2.0 U	2.1 U	1.9 U
gamma-Chlordane	2.0 U	2.0 U	2.1 U	1.9 U
Toxaphene	200 U	200 U	210 U	190 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB102	SB102	SB103	SB103
TtFW Sample I.D.	LV-BIA-SB102-14	LV-BIA-SB102-18	LV-BIA-SB103-00	LV-BIA-SB103-04
Sampling Date	11/28/00	11/28/00	11/28/00	11/28/00
Depth	14'-16'	18'-20'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	38 U	38 U	41 U	37 U
Aroclor-1221	78 U	78 U	83 U	75 U
Aroclor-1232	38 U	38 U	41 U	37 U
Aroclor-1242	38 U	38 U	41 U	37 U
Aroclor-1248	38 U	38 U	41 U	37 U
Aroclor-1254	38 U	38 U	41 U	37 U
Aroclor-1260	38 U	38 U	41 U	37 U

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB103	SB103	SB103	SB104
TtFW Sample I.D.	LV-BIA-SB103-14	LV-BIA-SB103-18	LV-BIA-SB103-24	LV-BIA-SB104-00
Sampling Date	11/28/00	11/28/00	11/29/00	11/29/00
Depth	14'-16'	18'-20'	24'-26'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	1.9 U	1.8 U	1.7 U	2.2 U
beta-BHC	1.9 U	1.8 U	1.7 U	2.2 U
delta-BHC	1.9 UJ	1.8 UJ	1.7 UJ	2.2 UJ
gamma-BHC (Lindane)	1.9 U	1.8 U	1.7 U	2.2 U
Heptachlor	1.9 U	1.8 U	1.7 U	2.2 U
Aldrin	1.9 U	1.8 U	1.7 U	2.2 U
Heptachlor epoxide	1.9 U	1.8 U	1.7 U	2.2 U
Endosulfan I	1.9 U	1.8 U	1.7 U	2.2 U
Dieldrin	3.8 U	3.6 U	3.3 U	4.2 U
4,4'-DDE	1.7 J	3.6 UJ	3.3 UJ	4.2 UJ
Endrin	3.8 U	3.6 U	3.3 U	4.2 U
Endosulfan II	3.8 U	3.6 U	3.3 U	4.2 U
4,4'-DDD	3.8 U	3.6 U	3.3 U	4.2 U
Endosulfan sulfate	3.8 U	3.6 U	3.3 U	4.2 U
4,4'-DDT	3.8 U	3.6 U	3.3 U	4.2 U
Methoxychlor	19 U	18 U	17 U	22 U
Endrin ketone	3.8 U	3.6 U	3.3 U	4.2 U
Endrin aldehyde	3.8 U	3.6 U	3.3 U	4.2 U
alpha-Chlordane	1.9 U	1.8 U	1.7 U	2.2 U
gamma-Chlordane	1.9 U	1.8 U	1.7 U	2.2 U
Toxaphene	190 U	180 U	170 U	220 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB103	SB103	SB103	SB104
TtFW Sample I.D.	LV-BIA-SB103-14	LV-BIA-SB103-18	LV-BIA-SB103-24	LV-BIA-SB104-00
Sampling Date	11/28/00	11/28/00	11/29/00	11/29/00
Depth	14'-16'	18'-20'	24'-26'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	38 U	36 U	33 U	42 U
Aroclor-1221	77 U	73 U	68 U	86 U
Aroclor-1232	38 U	36 U	33 U	42 U
Aroclor-1242	38 U	36 U	33 U	42 U
Aroclor-1248	38 U	36 U	33 U	42 U
Aroclor-1254	38 U	36 U	33 U	42 U
Aroclor-1260	38 U	36 U	33 U	42 U

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB104	SB104	SB104 Duplicate of SB104-08	SB105
TtFW Sample I.D.	LV-BIA-SB104-04	LV-BIA-SB104-08	LV-BIA-SB104-09	LV-BIA-SB105-00
Sampling Date	11/29/00	11/29/00	11/29/00	11/29/00
Depth	4'-6'	8'-10'	8'-10'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	2.0 U	1.8 U	1.8 U	1.7 U
beta-BHC	2.0 U	1.8 U	1.8 U	1.7 U
delta-BHC	2.0 UJ	1.8 UJ	1.8 UJ	1.7 UJ
gamma-BHC (Lindane)	2.0 U	1.8 U	1.8 U	1.7 U
Heptachlor	2.0 UJ	1.8 UJ	1.8 UJ	1.8 U
Aldrin	2.0 U	1.8 U	1.8 U	1.7 U
Heptachlor epoxide	2.0 U	1.8 U	1.8 U	1.7 U
Endosulfan I	2.0 U	1.8 U	1.8 U	1.7 U
Dieldrin	3.8 U	3.5 U	3.6 U	3.4 U
4,4'-DDE	3.8 UJ	3.5 UJ	3.6 UJ	3.4 UJ
Endrin	3.8 U	3.5 U	3.6 U	3.4 U
Endosulfan II	3.8 U	3.5 U	3.6 U	3.4 U
4,4'-DDD	3.8 U	3.5 U	3.6 U	3.4 U
Endosulfan sulfate	3.8 U	3.5 U	3.6 U	3.4 U
4,4'-DDT	3.8 U	3.5 U	3.6 U	3.4 U
Methoxychlor	20 U	18 U	18 U	17 U
Endrin ketone	3.8 U	3.5 U	3.6 U	3.4 U
Endrin aldehyde	3.8 U	3.5 U	3.6 U	3.4 U
alpha-Chlordane	2.0 U	1.8 U	1.8 U	1.7 U
gamma-Chlordane	2.0 U	1.8 U	1.8 U	1.7 U
Toxaphene	200 U	180 U	180 U	170 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB104	SB104	SB104 Duplicate of SB104-08	SB105
TtFW Sample I.D.	LV-BIA-SB104-04	LV-BIA-SB104-08	LV-BIA-SB104-09	LV-BIA-SB105-00
Sampling Date	11/29/00	11/29/00	11/29/00	11/29/00
Depth	4'-6'	8'-10'	8'-10'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	38 U	35 U	36 U	34 U
Aroclor-1221	78 U	72 U	73 U	69 U
Aroclor-1232	38 U	35 U	36 U	34 U
Aroclor-1242	38 U	35 U	36 U	34 U
Aroclor-1248	38 U	35 U	36 U	34 U
Aroclor-1254	38 U	35 U	36 U	34 U
Aroclor-1260	38 U	35 U	36 U	34 U

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB105	SB105	SB105	SB106
TtFW Sample I.D.	LV-BIA-SB105-04	LV-BIA-SB105-08	LV-BIA-SB105-14	LV-BIA-SB106-00
Sampling Date	11/29/00	11/29/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	1.9 U	1.9 U	1.9 U	1.8 U
beta-BHC	1.9 U	1.9 U	1.9 U	1.8 U
delta-BHC	1.9 UJ	1.9 UJ	1.9 UJ	1.8 UJ
gamma-BHC (Lindane)	1.9 U	1.9 U	1.9 U	1.8 U
Heptachlor	1.9 U	1.9 U	2.6 U	2.3 U
Aldrin	1.9 U	1.9 U	1.9 U	1.8 U
Heptachlor epoxide	1.9 U	1.9 U	1.9 U	1.8 U
Endosulfan I	1.9 U	1.9 U	1.9 U	1.8 U
Dieldrin	3.7 U	3.7 U	3.7 U	3.6 U
4,4'-DDE	3.7 UJ	3.7 UJ	3.7 U	3.6 U
Endrin	3.7 U	3.7 U	3.7 U	3.6 U
Endosulfan II	3.7 U	3.7 U	3.7 U	3.6 U
4,4'-DDD	3.7 U	3.7 U	3.7 U	3.6 U
Endosulfan sulfate	3.7 U	3.7 U	3.7 U	3.6 U
4,4'-DDT	3.7 U	3.7 U	3.7 U	3.6 U
Methoxychlor	19 U	19 U	19 U	18 U
Endrin ketone	3.7 U	3.7 U	3.7 U	3.6 U
Endrin aldehyde	3.7 U	3.7 U	3.7 U	3.6 U
alpha-Chlordane	1.9 U	1.9 U	1.9 U	1.8 U
gamma-Chlordane	1.9 U	1.9 U	1.9 U	1.8 U
Toxaphene	190 U	190 U	190 U	180 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB105	SB105	SB105	SB106
TtFW Sample I.D.	LV-BIA-SB105-04	LV-BIA-SB105-08	LV-BIA-SB105-14	LV-BIA-SB106-00
Sampling Date	11/29/00	11/29/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	0'-2'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	37 U	37 U	37 U	36 U
Aroclor-1221	76 U	75 U	75 U	72 U
Aroclor-1232	37 U	37 U	37 U	36 U
Aroclor-1242	37 U	37 U	37 U	36 U
Aroclor-1248	37 U	37 U	37 U	36 U
Aroclor-1254	37 U	37 U	37 U	36 U
Aroclor-1260	37 U	37 U	37 U	36 U

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB106	SB106	SB106	SB106
TtFW Sample I.D.	LV-BIA-SB106-04	LV-BIA-SB106-08	LV-BIA-SB106-14	LV-BIA-SB106-18
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	18'-20'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	2.0 UJ	1.9 U	1.9 U	1.9 U
beta-BHC	2.0 UJ	1.9 U	1.9 U	1.9 U
delta-BHC	2.0 UJ	1.9 UJ	1.9 UJ	1.9 UJ
gamma-BHC (Lindane)	2.0 UJ	1.9 U	1.9 U	1.9 U
Heptachlor	2.0 UJ	1.9 U	2.3 U	2.3 U
Aldrin	2.0 UJ	1.9 U	1.9 U	1.9 U
Heptachlor epoxide	2.0 UJ	1.9 U	1.9 U	1.9 U
Endosulfan I	2.0 UJ	1.9 U	1.9 U	1.9 U
Dieldrin	3.9 UJ	3.7 U	3.7 U	3.7 U
4,4'-DDE	8.2 J	3.7 U	3.7 U	3.7 U
Endrin	3.9 UJ	3.7 U	3.7 U	3.7 U
Endosulfan II	3.9 UJ	3.7 U	3.7 U	3.7 U
4,4'-DDD	15 J	3.7 U	3.7 U	3.7 U
Endosulfan sulfate	3.9 UJ	3.7 U	3.7 U	3.7 U
4,4'-DDT	1.3 J	3.7 U	3.7 U	3.7 U
Methoxychlor	20 UJ	19 U	19 U	19 U
Endrin ketone	3.9 UJ	3.7 U	3.7 U	3.7 U
Endrin aldehyde	3.9 UJ	3.7 U	3.7 U	3.7 U
alpha-Chlordane	2.0 UJ	1.9 U	1.9 U	1.9 U
gamma-Chlordane	2.0 UJ	1.9 U	1.9 U	1.9 UJ
Toxaphene	200 UJ	190 U	190 U	190 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB106	SB106	SB106	SB106
TtFW Sample I.D.	LV-BIA-SB106-04	LV-BIA-SB106-08	LV-BIA-SB106-14	LV-BIA-SB106-18
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	4'-6'	8'-10'	14'-16'	18'-20'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	39 UJ	37 U	37 U	37 U
Aroclor-1221	80 UJ	76 U	76 U	76 U
Aroclor-1232	39 UJ	37 U	37 U	37 U
Aroclor-1242	39 UJ	37 U	37 U	37 U
Aroclor-1248	39 UJ	37 U	37 U	37 U
Aroclor-1254	39 UJ	37 U	37 U	37 U
Aroclor-1260	39 UJ	37 U	37 U	37 U

See Table D[illegible] for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB107	SB107	SB107	SB107
TtFW Sample I.D.	LV-BIA-SB107-00	LV-BIA-SB107-04	LV-BIA-SB107-08	LV-BIA-SB107-14
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	0'-2'	4'-6'	8'-10'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	1.9 U	2.3 U	1.9 U	2.0 U
beta-BHC	1.9 U	2.3 U	1.9 U	2.0 U
delta-BHC	1.9 UJ	2.3 UJ	1.9 UJ	2.0 UJ
gamma-BHC (Lindane)	1.9 U	2.3 U	1.9 U	2.0 U
Heptachlor	1.9 U	2.3 U	1.9 U	2.7 U
Aldrin	1.9 U	2.3 U	1.9 U	2.0 U
Heptachlor epoxide	1.9 U	2.3 U	1.9 U	2.0 U
Endosulfan I	1.9 U	2.3 U	1.9 U	2.0 U
Dieldrin	3.6 U	4.4 U	3.8 U	3.8 U
4,4'-DDE	3.6 U	4.4 U	1.7 J	3.8 U
Endrin	3.6 U	4.4 U	3.8 U	3.8 U
Endosulfan II	3.6 U	4.4 U	3.8 U	3.8 U
4,4'-DDD	3.6 U	4.4 U	3.0 J	3.8 U
Endosulfan sulfate	3.6 U	4.4 U	3.8 U	3.8 U
4,4'-DDT	3.6 U	4.4 U	3.8 U	3.8 U
Methoxychlor	19 U	23 U	19 U	20 U
Endrin ketone	3.6 U	4.4 U	3.8 U	3.8 U
Endrin aldehyde	3.6 U	4.4 U	3.8 U	3.8 U
alpha-Chlordane	1.9 U	2.3 U	1.9 U	2.0 U
gamma-Chlordane	1.9 U	2.3 U	1.9 U	2.0 U
Toxaphene	190 U	230 U	190 U	200 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB107	SB107	SB107	SB107
TtFW Sample I.D.	LV-BIA-SB107-00	LV-BIA-SB107-04	LV-BIA-SB107-08	LV-BIA-SB107-14
Sampling Date	11/30/00	11/30/00	11/30/00	11/30/00
Depth	0'-2'	4'-6'	8'-10'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	36 U	44 U	38 U	38 U
Aroclor-1221	73 U	89 U	77 U	78 U
Aroclor-1232	36 U	44 U	38 U	38 U
Aroclor-1242	36 U	44 U	38 U	38 U
Aroclor-1248	36 U	44 U	38 U	38 U
Aroclor-1254	36 U	44 U	38 U	38 U
Aroclor-1260	36 U	44 U	38 U	38 U

See Table D- for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB108	SB108	SB108	SB108
TtFW Sample I.D.	LV-BIA-SB108-00	LV-BIA-SB108-04	LV-BIA-SB108-10	LV-BIA-SB108-14
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	10'-12'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	1.8 U	2.0 U	1.9 U	1.8 U
beta-BHC	1.8 U	2.0 U	1.9 U	1.8 U
delta-BHC	1.8 U	2.0 U	1.9 U	1.8 U
gamma-BHC (Lindane)	1.8 U	2.0 U	1.9 U	1.8 U
Heptachlor	1.8 U	2.0 U	1.9 U	1.8 U
Aldrin	1.8 U	2.0 U	1.9 U	1.8 U
Heptachlor epoxide	1.8 U	2.0 U	1.9 U	1.8 U
Endosulfan I	1.8 U	2.0 U	1.9 U	1.8 U
Dieldrin	3.5 U	3.9 U	3.6 U	3.6 U
4,4'-DDE	3.5 U	3.9 U	3.6 U	3.6 U
Endrin	3.5 U	3.9 U	3.6 U	3.6 U
Endosulfan II	3.5 U	3.9 U	3.6 U	3.6 U
4,4'-DDD	3.5 U	3.9 U	3.6 U	3.6 U
Endosulfan sulfate	3.5 U	3.9 U	3.6 U	3.6 U
4,4'-DDT	3.5 U	3.9 U	3.6 U	3.6 U
Methoxychlor	18 U	20 U	19 U	18 U
Endrin ketone	3.5 U	3.9 U	3.6 U	3.6 U
Endrin aldehyde	3.5 U	3.9 U	3.6 U	3.6 U
alpha-Chlordane	1.8 U	2.0 U	1.9 U	1.8 U
gamma-Chlordane	1.8 U	2.0 U	1.9 U	1.8 U
Toxaphene	180 U	200 U	190 U	180 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB108	SB108	SB108	SB108
TtFW Sample I.D.	LV-BIA-SB108-00	LV-BIA-SB108-04	LV-BIA-SB108-10	LV-BIA-SB108-14
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	10'-12'	14'-16'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	35 U	39 U	36 U	36 U
Aroclor-1221	72 U	78 U	74 U	72 U
Aroclor-1232	35 U	39 U	36 U	36 U
Aroclor-1242	35 U	39 U	36 U	36 U
Aroclor-1248	35 U	39 U	36 U	36 U
Aroclor-1254	35 U	39 U	36 U	36 U
Aroclor-1260	35 U	39 U	36 U	36 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	SB109	SB109
			Duplicate of SB109-04	
TtFW Sample I.D.	LV-BIA-SB109-00	LV-BIA-SB109-04	LV-BIA-SB109-05	LV-BIA-SB109-08
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	1.9 U	1.8 U	1.8 U	1.8 U
beta-BHC	1.9 U	1.8 U	1.8 U	1.8 U
delta-BHC	1.9 U	1.8 U	1.8 U	1.8 U
gamma-BHC (Lindane)	1.9 U	1.8 U	1.8 U	1.8 U
Heptachlor	1.9 U	1.8 U	1.8 U	1.8 U
Aldrin	1.9 U	1.8 U	1.8 U	1.8 U
Heptachlor epoxide	1.9 U	1.8 U	1.8 U	1.8 U
Endosulfan I	1.9 U	1.8 U	1.8 U	1.8 U
Dieldrin	3.8 U	3.5 U	3.4 U	3.6 U
4,4'-DDE	3.8 U	3.5 U	3.4 U	3.6 U
Endrin	3.8 U	3.5 U	3.4 U	3.6 U
Endosulfan II	3.8 U	3.5 U	3.4 U	3.6 U
4,4'-DDD	3.8 U	3.5 U	3.4 U	3.6 U
Endosulfan sulfate	3.8 U	3.5 U	3.4 U	3.6 U
4,4'-DDT	5.5 J	3.5 U	3.4 U	3.6 U
Methoxychlor	19 U	18 U	18 U	18 U
Endrin ketone	3.8 U	3.5 U	3.4 U	3.6 U
Endrin aldehyde	3.8 U	3.5 U	3.4 U	3.6 U
alpha-Chlordane	1.9 U	1.8 U	1.8 U	1.8 U
gamma-Chlordane	1.9 U	1.8 U	1.8 U	1.8 U
Toxaphene	190 U	180 U	180 U	180 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	SB109 Duplicate of SB109-04	SB109
TtFW Sample I.D.	LV-BIA-SB109-00	LV-BIA-SB109-04	LV-BIA-SB109-05	LV-BIA-SB109-08
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	4'-6'	8'-10'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	38 U	35 U	34 U	36 U
Aroclor-1221	77 U	71 U	69 U	73 U
Aroclor-1232	38 U	35 U	34 U	36 U
Aroclor-1242	38 U	35 U	34 U	36 U
Aroclor-1248	38 U	35 U	34 U	36 U
Aroclor-1254	38 U	35 U	34 U	36 U
Aroclor-1260	38 U	35 U	34 U	36 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	MW8	MW8
TtFW Sample I.D.	LV-BIA-SB109-14	LV-BIA-SB109-24	LV-BIA-SBMW8-00	LV-BIA-SBMW8-04
Sampling Date	12/5/00	12/5/00	12/5/00	12/5/00
Depth	14'-16'	24'-26'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	1.8 U	1.9 U	2.5 U	1.8 U
beta-BHC	1.8 U	1.9 U	2.5 U	1.8 U
delta-BHC	1.8 U	1.9 U	2.5 U	1.8 U
gamma-BHC (Lindane)	1.8 U	1.9 U	2.5 U	1.8 U
Heptachlor	1.8 U	1.9 U	2.5 U	1.8 U
Aldrin	1.8 U	1.9 U	2.5 U	1.8 U
Heptachlor epoxide	1.8 U	1.9 U	2.5 U	1.8 U
Endosulfan I	1.8 U	1.9 U	2.5 U	1.8 U
Dieldrin	3.6 U	3.8 U	4.8 U	3.6 U
4,4'-DDE	3.6 U	3.8 U	4.8 U	3.6 U
Endrin	3.6 U	3.8 U	4.8 U	3.6 U
Endosulfan II	3.6 U	3.8 U	4.8 U	3.6 U
4,4'-DDD	3.6 U	3.8 U	4.8 U	3.6 U
Endosulfan sulfate	3.6 U	3.8 U	4.8 U	3.6 U
4,4'-DDT	3.6 U	3.8 U	4.8 U	3.6 U
Methoxychlor	18 U	19 U	25 U	18 U
Endrin ketone	3.6 U	3.8 U	4.8 U	3.6 U
Endrin aldehyde	3.6 U	3.8 U	4.8 U	3.6 U
alpha-Chlordane	1.8 U	1.9 U	2.5 U	1.8 U
gamma-Chlordane	1.8 U	1.9 U	2.5 U	1.8 U
Toxaphene	180 U	190 U	250 U	180 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	MW8	MW8
TtFW Sample I.D.	LV-BIA-SB109-14	LV-BIA-SB109-24	LV-BIA-SBMW8-00	LV-BIA-SBMW8-04
Sampling Date	12/5/00	12/5/00	12/5/00	12/5/00
Depth	14'-16'	24'-26'	0'-2'	4'-6'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	36 U	38 U	48 U	36 U
Aroclor-1221	72 U	76 U	98 U	72 U
Aroclor-1232	36 U	38 U	48 U	36 U
Aroclor-1242	36 U	38 U	48 U	36 U
Aroclor-1248	36 U	38 U	48 U	36 U
Aroclor-1254	36 U	38 U	48 U	36 U
Aroclor-1260	36 U	38 U	48 U	36 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW8	MW8 Duplicate of MW8-08	MW8	MW8
TtFW Sample I.D.	LV-BIA-SBMW8-08	LV-BIA-SBMW8-09	LV-BIA-SBMW8-18	LV-BIA-SBMW8-34
Sampling Date	12/5/00	12/5/00	12/6/00	12/6/00
Depth	8'-10'	8'-10'	18'-20'	34'-36'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	1.8 U	1.9 UJ	1.8 U	1.8 U
beta-BHC	1.8 U	1.9 UJ	1.8 U	1.8 U
delta-BHC	1.8 U	1.9 UJ	1.8 U	1.8 U
gamma-BHC (Lindane)	1.8 U	1.9 UJ	1.8 U	1.8 U
Heptachlor	1.8 U	1.9 UJ	1.8 U	1.8 U
Aldrin	1.8 U	1.9 UJ	1.8 U	1.8 U
Heptachlor epoxide	1.8 U	1.9 UJ	1.8 U	1.8 U
Endosulfan I	1.8 U	1.9 UJ	1.8 U	1.8 U
Dieldrin	3.6 U	3.6 UJ	3.6 U	3.6 U
4,4'-DDE	3.6 U	3.6 UJ	3.6 U	3.6 U
Endrin	3.6 U	3.6 UJ	3.6 U	3.6 U
Endosulfan II	3.6 U	3.6 UJ	3.6 U	3.6 U
4,4'-DDD	3.6 U	3.6 UJ	3.6 U	3.6 U
Endosulfan sulfate	3.6 U	3.6 UJ	3.6 U	3.6 U
4,4'-DDT	3.6 U	3.6 UJ	3.6 U	3.6 U
Methoxychlor	18 U	19 UJ	18 U	18 U
Endrin ketone	3.6 U	3.6 UJ	3.6 U	3.6 U
Endrin aldehyde	3.6 U	3.6 UJ	3.6 U	3.6 U
alpha-Chlordane	1.8 U	1.9 UJ	1.8 U	1.8 U
gamma-Chlordane	1.8 U	1.9 UJ	1.8 U	1.8 U
Toxaphene	180 U	190 UJ	180 U	180 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-9
Pesticides/PCBs - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW8	MW8 Duplicate of MW8-08	MW8	MW8
TtFW Sample I.D.	LV-BIA-SBMW8-08	LV-BIA-SBMW8-09	LV-BIA-SBMW8-18	LV-BIA-SBMW8-34
Sampling Date	12/5/00	12/5/00	12/6/00	12/6/00
Depth	8'-10'	8'-10'	18'-20'	34'-36'
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	36 U	36 UJ	36 U	36 U
Aroclor-1221	72 U	73 UJ	73 U	72 U
Aroclor-1232	36 U	36 UJ	36 U	36 U
Aroclor-1242	36 U	36 UJ	36 U	36 U
Aroclor-1248	36 U	36 UJ	36 U	36 U
Aroclor-1254	36 U	36 UJ	36 U	36 U
Aroclor-1260	36 U	36 UJ	36 U	36 U

See Table D- for abbreviations and data qualifiers.

TABLE D-10
Metals - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA04	MWCCA04	MWCCA04	MWCCA04
TtFW Sample I.D.	LI-CCA-04-SS	LI-CCA-04-04-06	LI-CCA-04-10-12	LI-CCA-04-14-16
Sampling Date	09/15/1999	09/13/1999	09/14/1999	09/14/1999
Depth	0"-2"	4'-6'	10'-12'	14'-16'
Units	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	6520	8330	7360	8820
Antimony	1.8 B	1.1 U	1.2 U	1.1 U
Arsenic	4.6	11.5	12.2	9.3
Barium	92.8	225	339	233
Beryllium	0.89 BJ	0.42 B	0.43 B	0.44 B
Cadmium	0.44 B	0.23 U	0.23 U	0.22 U
Calcium	39800	1090 B	1530	2080
Chromium	22.9	10.2	11.7	10.4
Cobalt	4 B	7.3 B	8.5 B	9.1 B
Copper	201	30.2	37.1	36.5
Iron	16600	21100	20500	22300
Lead	83.8	23	15	21.3
Magnesium	4640	2630	2200	2980
Manganese	637	1200	4030	848
Mercury	0.12 U	0.11 U	0.12 U	0.11 U
Nickel	54.7	14.8	22	18.6
Potassium	578 B	704 B	577 B	778 B
Selenium	1.3 U	1.1 U	1.2 U	1.1 U
Silver	0.25 U	0.23 U	0.35 B	0.22 U
Sodium	247 B	114 B	117 B	122 B
Thallium	1.8 U	1.6 U	1.6 U	1.5 U
Vanadium	9.3 B	11 B	9.7 B	11.1
Zinc	215	81.9	78	93.5

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-10
Metals - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA04	MWCCA04	MWCCA04	MWCCA04
TtFW Sample I.D.	LI-CCA-04-20-22	LI-CCA-04-24-26	LI-CCA-04-30-32	LI-CCA-04-34-36
Sampling Date	09/14/1999	09/14/1999	09/14/1999	09/14/1999
Depth	20'-22'	24'-26'	30'-32'	34'-36'
Units	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	6030	7300	5860	9300
Antimony	1.1 U	1 U	1.1 U	1.2 U
Arsenic	13.4	8.9	7.7	10.8
Barium	249	149	89.8	311
Beryllium	0.32 B	0.35 B	0.31 B	0.48 B
Cadmium	0.22 U	0.2 U	0.22 U	0.23 U
Calcium	21500	30700	21600	3800
Chromium	6.5	10.1	7.2	11.1
Cobalt	9.5 B	6.5 B	5.3 B	9.2 B
Copper	86.3	36.2	22	34.5
Iron	17800	18500	16000	24200
Lead	21.4	13.7	12	15.8
Magnesium	9250	7720	4790	3200
Manganese	2000	577	335	1090
Mercury	0.11 U	0.11 U	0.1 U	0.12 U
Nickel	16.7	13.9	10.5	19.2
Potassium	620 B	960 B	570 B	869 B
Selenium	1.1 U	1 U	1.1 U	1.4
Silver	0.22 U	0.2 U	0.22 U	0.23 U
Sodium	131 B	186 B	137 B	141 B
Thallium	1.5 U	1.4 U	1.5 U	1.6 U
Vanadium	8.9 B	9.8 B	7.7 B	12.2
Zinc	92.6	73.6	62	96.8

TABLE D-10
Metals - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery		Cattaraugus Cutlery		Cattaraugus Cutlery		Cattaraugus Cutlery	
Location	MWCCA04		MWCCA04		MWCCA05		MWCCA05	
TtFW Sample I.D.	LI-CCA-04-40-42		LI-CCA-04-44-46		LI-CCA-05-SS		LI-CCA-05-1.5-2.0	
Sampling Date	09/14/1999		09/14/1999		09/15/1999		09/21/1999	
Depth	40'-42'		44'-46'		0"-2"		1.5'-2'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
Aluminum	6810		5460		8330		3760	
Antimony	1.1	U	1.1	U	50.2		4.9	B
Arsenic	8.4		7.5		39.5		25.9	
Barium	156		95.5		363		229	
Beryllium	0.32	B	0.29	B	1.6	J	0.99	B
Cadmium	0.21	U	0.21	U	4.5		0.31	B
Calcium	24400		45000		21000		4770	
Chromium	8.3		6.9		1510		86.3	
Cobalt	5.8	B	5	B	8.6	B	5.4	B
Copper	22.6		24.1		1680		1780	
Iron	17600		15200		56700		24100	
Lead	16.7		13.9		438		195	
Magnesium	3980		5280		4450		2170	
Manganese	561		563		694		226	
Mercury	0.1	U	0.1	U	0.61		0.98	
Nickel	12.4		10		191		220	
Potassium	729	B	524	B	579	B	358	B
Selenium	1.1	U	1.1	U	1.2	U	1.9	
Silver	0.21	U	0.21	U	0.25	B	0.74	B
Sodium	133	B	154	B	348	B	199	B
Thallium	1.5	U	1.5	U	1.7	U	1.7	U
Vanadium	8.6	B	7.5	B	32.7		18.6	
Zinc	67.7		65.6		1460		681	

TABLE D-10
Metals - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery		Cattaraugus Cutlery		Cattaraugus Cutlery		Cattaraugus Cutlery	
Location	MWCCA05		MWCCA05		MWCCA05		MWCCA05	
TtFW Sample I.D.	LI-CCA-05-5-7		LI-CCA-05-10-12		LI-CCA-05-8-10 Duplicate of CCA05-10-12		LI-CCA-05-15-17	
Sampling Date	09/15/1999		09/15/1999		09/15/1999		09/15/1999	
Depth	5'-7'		10'-12'		10'-12'		15'-17'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
Aluminum	10000		8020		8020		7470	
Antimony	1.1	U	1.1	U	1.2	U	1.1	U
Arsenic	10		11.6		10.2		8.8	
Barium	137		199		244		163	
Beryllium	0.53	BJ	0.34	BJ	0.33	BJ	0.33	BJ
Cadmium	0.21	U	0.23	U	0.23	U	0.23	U
Calcium	3630		1840		1790		1730	
Chromium	30.7		11.1		11.4		25.1	
Cobalt	8.7	B	7	B	6.8	B	7.2	B
Copper	42.3		31.2		26.2		44.1	
Iron	24100		21500		21000		18800	
Lead	19.4		19.3		17.8		16.4	
Magnesium	3350		2640		2660		2520	
Manganese	892		1260		1100		1090	
Mercury	0.11	U	0.11	U	0.11	U	0.11	U
Nickel	23.7		15.4		15.5		15.5	
Potassium	756	B	658	B	660	B	508	B
Selenium	1.1	U	1.1	U	1.2	U	1.1	U
Silver	0.21	U	0.23	U	0.23	U	0.23	U
Sodium	165	B	153	B	150	B	126	B
Thallium	1.5	U	1.6	U	1.6	U	1.6	U
Vanadium	14.7		12.3		12.3		10.6	B
Zinc	91.7		82.3		82.3		75	

TABLE D-10
Metals - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA05	MWCCA05	MWCCA05	MWCCA05
TtFW Sample I.D.	LI-CCA-05-20-22	LI-CCA-05-25-27	LI-CCA-05-30-32	LI-CCA-05-35-37
Sampling Date	09/16/1999	09/16/1999	09/16/1999	09/16/1999
Depth	20'-22'	25'-27'	30'-32'	35'-37'
Units	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	8310	7420	7030	6350
Antimony	1.1 U	1.1 U	1.1 U	1.1 U
Arsenic	9.2	13.2	10.6	7.9
Barium	184	187	130	117
Beryllium	0.41 B	0.43 B	0.37 B	0.34 B
Cadmium	0.22 U	0.23 U	0.21 U	0.21 U
Calcium	1790	2370	27400	25700
Chromium	13.2	11	8	8.9
Cobalt	7.6 B	7.1 B	7.1 B	5.8 B
Copper	34	34.7	27.8	24.1
Iron	21900	22600	19300	17100
Lead	17.1	18	16.7	13.3
Magnesium	2840	2740	9890	5170
Manganese	741	1190	561	571
Mercury	0.11 U	0.11 U	0.11 U	0.11 U
Nickel	15.2	15.6	13.5	12.4
Potassium	685 B	595 B	748 B	606 B
Selenium	1.1 U	1.1 U	1.1 U	1.1 U
Silver	0.22 U	0.23 U	0.21 U	0.21 U
Sodium	120 B	111 B	163 B	154 B
Thallium	1.5 U	1.6 U	1.5 U	1.5 U
Vanadium	10.6 B	10.4 B	9.4 B	8.5 B
Zinc	81.7	94.1	94.9	73.1

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-10
Metals - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery		Cattaraugus Cutlery		Cattaraugus Cutlery		Cattaraugus Cutlery	
Location	MWCCA05		MWCCA05		MWCCA06		MWCCA06	
TtFW Sample I.D.	LI-CCA-05-40-42		LI-CCA-05-45-47		LI-CCA-06-SS		LI-CCA-06-05-07	
Sampling Date	09/16/1999		09/16/1999		09/15/1999		09/20/1999	
Depth	40'-42'		45'-47'		0"-2"		5'-7'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
Aluminum	5980		6620		5740		10100	
Antimony	1.1	U	1.1	U	3.9	B	1.8	B
Arsenic	7.6		6.7		11.4		14.5	
Barium	179		102		60.1		293	
Beryllium	0.33	B	0.32	B	0.38	BJ	0.63	B
Cadmium	0.22	U	0.22	U	0.84	B	0.23	U
Calcium	33800		23500		35100		2180	
Chromium	7.2		8.2		35.6		87.8	
Cobalt	5.9	B	5.6	B	6.3	B	11.6	B
Copper	27.4		19.7		328		55.9	
Iron	16500		17600		23100		26900	
Lead	13.5		9.4		131		22.5	
Magnesium	6030		4260		7270		2700	
Manganese	808		374		587		2480	
Mercury	0.11	U	0.1	U	0.14	J	0.11	U
Nickel	11.8		11.8		53.6		25.1	
Potassium	536	B	562	B	569	B	786	B
Selenium	1.1	U	1.1	U	1.1	U	1.2	U
Silver	0.22	U	0.22	U	0.22	U	0.35	B
Sodium	151	B	136	B	194	B	129	B
Thallium	1.5	U	1.5	U	1.5	U	1.6	U
Vanadium	7.7	B	8.1	B	19.4		14.1	
Zinc	67.8		66		214		84.1	

TABLE D-10
Metals - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery		Cattaraugus Cutlery		Cattaraugus Cutlery		Cattaraugus Cutlery	
Location	MWCCA06		MWCCA06		MWCCA06		MWCCA06	
TtFW Sample I.D.	LI-CCA-06-10-12		LI-CCA-06-15-17		LI-CCA-06-20-22		LI-CCA-06-25-27	
Sampling Date	09/20/1999		09/20/1999		09/20/1999		09/20/1999	
Depth	10'-12'		15'-17'		20'-22'		25'-27'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
Aluminum	7940		7660		6970		7070	
Antimony	1.1	B	1.1	U	1.1	U	1.1	U
Arsenic	45.2		9.5		10.9		10	
Barium	219		169		141		155	
Beryllium	0.46	B	0.44	B	0.42	B	0.4	B
Cadmium	0.22	U	0.23	U	0.23	U	0.23	U
Calcium	1670		1750		1470		1640	
Chromium	55.3		50.4		39.7		22.2	
Cobalt	7.2	B	7.6	B	6.7	B	6.7	B
Copper	30.3		25.1		23.9		33	
Iron	22600		19700		18600		18800	
Lead	19.4		15.3		13.4		14.3	
Magnesium	2560		2640		2390		2480	
Manganese	747		786		769		802	
Mercury	0.11	U	0.12	U	0.11	U	0.11	U
Nickel	15.5		15.2		13.2		13.4	
Potassium	617	B	559	B	559	B	563	B
Selenium	1.1	U	1.1	U	1.1	U	1.1	U
Silver	0.28	B	0.23	U	0.36	B	0.23	B
Sodium	130	B	132	B	121	B	127	B
Thallium	1.5	U	1.6	U	1.6	U	1.6	U
Vanadium	11.4		10.1	B	9.7	B	9.6	B
Zinc	93.1		77.7		66.9		72.8	

e Table D-1 for abbreviations and data qualifiers.

TABLE D-10
Metals - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery		Cattaraugus Cutlery		Cattaraugus Cutlery		Cattaraugus Cutlery	
Location	MWCCA06		MWCCA06		MWCCA06		MWCCA06	
TtFW Sample I.D.	LI-CCA-06-30-32		LI-CCA-06-28-30 Duplicate of CCA06-30-32		LI-CCA-06-35-37		LI-CCA-06-40-42	
Sampling Date	09/20/1999		09/20/1999		09/20/1999		09/20/1999	
Depth	30'-32'		30'-32'		35'-37'		40'-42'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
Aluminum	6140		6880		7080		5700	
Antimony	1.1	U	1.1	U	1.1	U	1.1	U
Arsenic	8.7		10.3		8.8		8	
Barium	109		120		114		104	
Beryllium	0.35	B	0.4	B	0.41	B	0.38	B
Cadmium	0.22	U	0.22	U	0.22	U	0.22	U
Calcium	4390		5870		18500		44800	
Chromium	7.6		7.6		7.5		5.6	
Cobalt	5.4	B	6	B	6	B	5.1	B
Copper	46.9		25.4		27.3		23.3	
Iron	16600		18400		18100		14700	
Lead	11.5		12.7		12.5		9.7	
Magnesium	2740		2950		4310		4680	
Manganese	635		585		501		754	
Mercury	0.11	U	0.12	U	0.1	U	0.11	U
Nickel	12.8		12.3		13.2		10.6	
Potassium	501	B	605	B	606	B	528	B
Selenium	1.1	U	1.1	U	1.1	U	1.1	U
Silver	0.32	B	0.22	U	0.34	B	0.3	B
Sodium	130	B	133	B	204	B	175	B
Thallium	1.5	U	1.6	U	1.8	B	1.5	U
Vanadium	8.5	B	9.2	B	9.1	B	7.7	B
Zinc	72.4		77.4		68.2		71	

TABLE D-10
Metals - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery		Cattaraugus Cutlery		Cattaraugus Cutlery		Cattaraugus Cutlery	
Location	MWCCA06		MWCCA07		MWCCA07		MWCCA07	
TtFW Sample I.D.	LI-CCA-06-45-47		LI-CCA-07-SS		LI-CCA-07-05-07		LI-CCA-07-10-12	
Sampling Date	09/20/1999		09/15/1999		09/21/1999		09/21/1999	
Depth	45'-47'		0"-2"		5'-7'		10'-12'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
Aluminum	5360		6740		8950		8210	
Antimony	1.1	U	1.3	B	1.2	B	1.2	B
Arsenic	8.5		9.3		12.6		12.3	
Barium	91.4		77.8		153		181	
Beryllium	0.36	B	0.32	BJ	0.49	B	0.48	B
Cadmium	0.22	U	2.1		0.22	U	0.23	U
Calcium	35500		32700		1650		1730	
Chromium	6.9		26.9		80.1		14.6	
Cobalt	5	B	5.5	B	8.3	B	7	B
Copper	19.1		58.6		44.2		25.8	
Iron	16600		19700		22400		20800	
Lead	19.8		137		15.7		34.4	
Magnesium	4850		4840		2860		2620	
Manganese	656		483		528		845	
Mercury	0.11	U	0.1	U	0.11	U	0.11	U
Nickel	10		15.8		16.9		14.4	
Potassium	596	B	612	B	733	B	649	B
Selenium	1.1	U	1.1	U	1.1	U	1.1	U
Silver	0.34	B	0.22	U	0.27	B	0.35	B
Sodium	155	B	165	B	124	B	116	B
Thallium	1.5	U	1.5	U	1.5	U	1.6	U
Vanadium	7.3	B	12.2		12.5		10.7	B
Zinc	66.2		358		74.3		79.2	

e Table D-1 for abbreviations and data qualifiers.

TABLE D-10
Metals - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA07	MWCCA07	MWCCA07	MWCCA07
TtFW Sample I.D.	LI-CCA-07-15-17	LI-CCA-07-20-22	LI-CCA-07-25-27	LI-CCA-07-30-32
Sampling Date	09/21/1999	09/21/1999	09/21/1999	09/22/1999
Depth	15'-17'	20'-22'	25'-27'	30'-32'
Units	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	8210	7720	7130	6300
Antimony	1.1 U	1.1 U	1.1 U	1.1 U
Arsenic	11.5	12.1	8.7	11.4
Barium	154	160	136	112
Beryllium	0.49 B	0.47 B	0.43 B	0.44 B
Cadmium	0.22 U	0.23 U	0.23 U	0.21 U
Calcium	1820	1470	1530	7720
Chromium	22.2	58.4	46.1	9.4
Cobalt	7.7 B	7.3 B	5.7 B	6.1 B
Copper	50.5	53.3	65	34
Iron	20700	20400	17900	17800
Lead	20.6	15.2	11.1	13.4
Magnesium	2630	2450	2370	4250
Manganese	731	831	477	518
Mercury	0.11 U	0.12 U	0.11 U	0.11 U
Nickel	16.6	15.4	12.4	12.7
Potassium	652 B	640 B	500 B	548 B
Selenium	1.1 U	1.1 U	1.1 U	1.5
Silver	0.37 B	0.23 U	0.23 U	0.21 U
Sodium	116 B	116 B	104 B	117 B
Thallium	1.6 U	1.6 U	1.6 U	1.5 U
Vanadium	10.7 B	10.2 B	8.9 B	8.8 B
Zinc	80.1	70.1	67.9	78.3

Table D-1 for abbreviations and data qualifiers.

TABLE D-10
Metals - Soils (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA07	MWCCA07	MWCCA07	MWCCA07
TtFW Sample I.D.	LI-CCA-07-27-29 Duplicate of CCA07-30-32	LI-CCA-07-35-37	LI-CCA-07-40-42	LI-CCA-07-45-47
Sampling Date	09/21/1999	09/22/1999	09/22/1999	09/22/1999
Depth	30'-32'	35'-37'	40'-42'	45'-47'
Units	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	5390	6410	5590	4960
Antimony	1.1 U	1.1 U	1.1 U	1.1 U
Arsenic	8.4	14.2	8.6	7.1
Barium	85.8	89.4	93.5	92.4
Beryllium	0.36 B	0.53 B	0.51 B	0.46 B
Cadmium	0.22 U	0.21 U	0.22 U	0.21 U
Calcium	16000	23400	39700	64800
Chromium	8.8	7.1	6.7	8
Cobalt	4.9 B	6.7 B	5.3 B	4.8 B
Copper	30.7	28.2	23.1	22
Iron	14400	18200	15200	13400
Lead	10.9	16.5	11	11.8
Magnesium	3930	5340	4760	5150
Manganese	593	559	614	699
Mercury	0.11 U	0.11 U	0.11 U	0.11 U
Nickel	11.4	12.2 J	10.8 J	11.2 J
Potassium	518 B	570 B	555 B	519 B
Selenium	1.1 U	1.1 U	1.1 U	1 U
Silver	0.3 B	0.21 U	0.22 U	0.21 U
Sodium	133 B	131 B	136 B	163 B
Thallium	1.5 U	1.5 U	1.5 U	1.5 U
Vanadium	7.6 B	9.4 B	8.1 B	7.6 B
Zinc	61.7	74.3	74	56.2

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SB101		SB101		SB101		SB101	
TtFW Sample I.D.	LV-BIA-SB101-00		LV-BIA-SB101-04		LV-BIA-SB101-14		LV-BIA-SB101-24	
Sampling Date	11/27/00		11/27/00		11/27/00		11/27/00	
Depth	0'-2'		4'-6'		14'-16'		24'-26'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
ALUMINUM	19200		10800		8090		7840	
ANTIMONY	5.7	UJ	4.8	UJ	4.5	UJ	4.6	UJ
ARSENIC	11.4	J	12.1	J	12.8	J	9.4	J
BARIUM	63.6		125		126		184	
BERYLLIUM	0.050	U	0.20	B	0.040	B	0.040	U
CADMIUM	0.47	B	0.42	B	0.25	B	0.30	B
CALCIUM	847	B	649	B	38100		11500	
CHROMIUM	17.3		12.5		9.7		10.6	
COBALT	10.6	B	10.1	B	7.2	B	7.2	B
COPPER	12.3	J	24.9	J	20.1	J	19.7	J
IRON	25500		23400		19700		19300	
LEAD	18.0		17.7		29.0		9.0	
MAGNESIUM	3110		3020		4690		3520	
MANGANESE	520		1010		684		821	
MERCURY	0.070	U	0.050	U	0.050	U	0.060	U
NICKEL	21.8		18.7		16.1		16.1	
POTASSIUM	1030	B	1150		1060		884	B
SELENIUM	1.5	J	0.62	BJ	0.42	U	0.43	U
SILVER	0.58	B	0.35	B	0.29	B	0.30	U
SODIUM	971	B	212	U	200	U	206	U
THALLIUM	0.98	U	0.82	U	0.78	U	0.80	U
VANADIUM	28.4		13.6		10.6		10.2	B
ZINC	89.3		77.3		70.4		65.8	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB101	SB102	SB102	SB102
TtFW Sample I.D.	LV-BIA-SB101-34	LV-BIA-SB102-00	LV-BIA-SB102-04	LV-BIA-SB102-08
Sampling Date	11/27/00	11/28/00	11/28/00	11/28/00
Depth	34'-36'	0'-2'	4'-6'	8'-10'
Units	mg/kg	mg/kg	mg/kg	mg/kg
ALUMINUM	5330	7190	10600	8950
ANTIMONY	4.9 UJ	4.8 UJ	5.1 UJ	4.9 UJ
ARSENIC	7.9 J	9.7 J	6.0 J	11.3 J
BARIUM	131	130	119	214
BERYLLIUM	0.050 U	0.050 U	0.10 B	0.090 B
CADMIUM	0.18 B	0.40 B	0.45 B	0.41 B
CALCIUM	3050	12100	6140	6220
CHROMIUM	6.5	11.0	13.9	11.9
COBALT	10.9 B	6.9 B	10.4 B	7.5 B
COPPER	12.0 J	22.9 J	13.2 J	19.8 J
IRON	14800	20000	23300	21700
LEAD	9.6	16.4	10.6	21.4
MAGNESIUM	1840	2920	3070	3060
MANGANESE	929	577	279	946
MERCURY	0.060 U	0.050 U	0.060 U	0.050 U
NICKEL	12.7	16.0	23.8	16.9
POTASSIUM	599 B	825 B	1320	1260
SELENIUM	0.63 BJ	0.45 U	0.47 U	0.46 U
SILVER	0.32 U	0.45 B	0.43 B	0.39 B
SODIUM	217 U	214 U	227 U	218 U
THALLIUM	0.84 U	0.83 U	0.88 U	0.84 U
VANADIUM	6.7 B	9.3 B	12.9	11.5
ZINC	52.3	108	73.4	80.7

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SB102		SB102		SB103		SB103	
TtFW Sample I.D.	LV-BIA-SB102-14		LV-BIA-SB102-18		LV-BIA-SB103-00		LV-BIA-SB103-04	
Sampling Date	11/28/00		11/28/00		11/28/00		11/28/00	
Depth	14'-16'		18'-20'		0'-2'		4'-6'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
ALUMINUM	9710		12700		7480		9410	
ANTIMONY	4.8	UJ	4.9	UJ	5.2	UJ	5.0	UJ
ARSENIC	10.0	J	12.7	J	6.0	J	5.9	J
BARIUM	164		223		120		103	
BERYLLIUM	0.050	U	0.27	BJ	0.050	U	0.12	BJ
CADMIUM	0.45	B	0.54	B	0.37	B	0.35	B
CALCIUM	2930		4100		24800		4860	
CHROMIUM	11.7		16.6		11.9		11.1	
COBALT	8.9	B	12.6		6.1	B	8.6	B
COPPER	16.6	J	15.7	J	23.0	J	16.3	J
IRON	22500		28400		17600		20800	
LEAD	12.6		13.2		23.0		11.9	
MAGNESIUM	3320		4220		3460		2580	
MANGANESE	952		708		608		232	
MERCURY	0.050	U	0.050	U	0.060	U	0.060	U
NICKEL	18.9		26.3		15.0		19.7	
POTASSIUM	1260		1760		923	B	1020	B
SELENIUM	0.45	U	0.61	B	0.54	B	0.46	U
SILVER	0.38	B	0.43	B	0.63	B	0.33	U
SODIUM	215	U	216	U	233	U	222	U
THALLIUM	0.85	B	0.84	U	0.90	U	0.86	U
VANADIUM	13.1		16.2		10.2	B	11.4	B
ZINC	67.5		72.2		110		57.4	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SB103		SB103		SB103		SB104	
TtFW Sample I.D.	LV-BIA-SB103-14		LV-BIA-SB103-18		LV-BIASB103-24		LV-BIA-SB104-00	
Sampling Date	11/28/00		11/28/00		11/29/00		11/29/00	
Depth	14'-16'		18'-20'		24'-26'		0'-2'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
ALUMINUM	10200		9220		15000		12200	
ANTIMONY	5.0	UJ	4.8	UJ	4.7	UJ	5.9	UJ
ARSENIC	10.0	J	193	J	19.3	J	5.4	J
BARIUM	171		161		189		168	
BERYLLIUM	0.090	BJ	0.13	BJ	0.44	B	0.16	BJ
CADMIUM	0.33	B	0.49	B	0.57	B	0.60	B
CALCIUM	3100		35800		2540		2520	
CHROMIUM	14.1		12.2		19.1		17.2	
COBALT	11.2	B	9.0	B	17.6		11.0	B
COPPER	15.5	J	30.6	J	17.1	J	29.5	J
IRON	21700		27600		34200		22100	
LEAD	16.4		15.8		14.8		34.1	
MAGNESIUM	3570		4080		5320		3120	
MANGANESE	2050		849		474		336	
MERCURY	0.060	U	0.050	U	0.060	U	0.070	U
NICKEL	21.8		18.5		32.2		22.5	
POTASSIUM	1710		1320		2230		1330	B
SELENIUM	0.93	B	0.45	B	0.44	U	0.85	B
SILVER	0.56	B	0.53	B	0.61	B	0.38	U
SODIUM	223	U	213	U	209	U	262	U
THALLIUM	0.86	U	0.82	U	0.81	U	1.0	U
VANADIUM	13.1		13.7		20.2		17.6	
ZINC	59.1		65.8		81.1		95.0	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SB104		SB104		SB104 Duplicate of SB104-08		SB105	
TtFW Sample I.D.	LV-BIA-SB104-04		LV-BIA-SB104-08		LV-BIA-SB104-09		LV-BIA-SB105-00	
Sampling Date	11/29/00		11/29/00		11/29/00		11/29/00	
Depth	4'-6'		8'-10'		8'-10'		0'-2'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
ALUMINUM	9530		11200		11300		7430	
ANTIMONY	4.9	UJ	4.7	UJ	4.8	UJ	4.6	UJ
ARSENIC	7.7	J	11.9	J	12.5	J	5.8	J
BARIUM	117		261		246		148	
BERYLLIUM	0.23	BJ	0.24	BJ	0.090	B	0.040	U
CADMIUM	0.50	B	0.44	B	0.090	U	0.090	U
CALCIUM	1400		6820		6530		13200	
CHROMIUM	11.7		14.4		14.2		9.8	
COBALT	9.9	B	12.3		11.6		7.3	B
COPPER	12.6	J	22.0	J	24.0	J	19.4	J
IRON	25800		26500		26500		17400	
LEAD	10.6		11.4		15.8	R	13.9	R
MAGNESIUM	2730		4790		4920	J	3630	J
MANGANESE	279		818		627		652	
MERCURY	0.060	U	0.060	U	0.060	U	0.050	U
NICKEL	23.6		24.9		24.0		17.5	
POTASSIUM	957	B	1340		1540		896	B
SELENIUM	0.55	B	0.74	B	0.62	BJ	0.43	BJ
SILVER	0.55	B	0.53	B	0.56	B	0.30	U
SODIUM	219	U	209	U	213	U	206	U
THALLIUM	0.85	U	0.81	U	1.6	B	1.1	B
VANADIUM	12.0		15.2		15.0		10.5	B
ZINC	60.4		83.8		87.4		54.1	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SB105		SB105		SB105		SB106	
TtFW Sample I.D.	LV-BIA-SB105-04		LV-BIA-SB105-08		LV-BIA-SB105-14		LV-BIA-SB106-00	
Sampling Date	11/29/00		11/29/00		11/30/00		11/30/00	
Depth	4'-6'		8'-10'		14'-16'		0'-2'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
ALUMINUM	10400		11200		18100		8220	
ANTIMONY	5.0	UJ	4.9	UJ	4.8	UJ	4.8	UJ
ARSENIC	7.3	J	11.9	J	10.2	J	7.0	J
BARIUM	108		217		211		111	
BERYLLIUM	0.090	B	0.050	B	0.44	B	0.040	U
CADMIUM	0.090	U	0.090	U	0.090	U	0.090	B
CALCIUM	1680		6890		2660		18300	
CHROMIUM	11.6		13.2		20.3		9.0	
COBALT	9.6	B	10.5	B	18.1		7.4	B
COPPER	14.3	J	18.0	J	21.7	J	20.3	J
IRON	28100		26000		40000		17000	
LEAD	11.8	R	11.9	R	5.7	R	13.3	R
MAGNESIUM	2970	J	4580	J	6430	J	4080	J
MANGANESE	177		675		415		776	
MERCURY	0.060	U	0.060	U	0.060	U	0.060	U
NICKEL	20.4		22.7		36.5		15.5	
POTASSIUM	915	B	1440		2490		922	B
SELENIUM	1.0	BJ	0.82	BJ	1.3	J	1.3	J
SILVER	0.56	B	0.46	B	0.73	B	0.31	U
SODIUM	223	U	218	U	212	U	211	U
THALLIUM	2.3		1.8	B	2.1	B	1.4	B
VANADIUM	12.3		14.7		21.1		11.8	
ZINC	56.6		81.0		84.0		56.7	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SB106		SB106		SB106		SB106	
TtFW Sample I.D.	LV-BIA-SB106-04		LV-BIA-SB106-08		LV-BIA-SB106-14		LV-BIA-SB106-18	
Sampling Date	11/30/00		11/30/00		11/30/00		11/30/00	
Depth	4'-6'		8'-10'		14'-16'		18'-20'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
ALUMINUM	14000		10000		8800		7910	
ANTIMONY	5.7	UJ	4.9	UJ	5.0	UJ	4.9	UJ
ARSENIC	11.5	J	27.8	J	9.2	J	8.8	J
BARIUM	147		303		147		120	
BERYLLIUM	0.050	U	0.050	B	0.050	U	0.050	U
CADMIUM	0.56	B	0.11	B	0.14	B	0.090	B
CALCIUM	3050		2060		6420		1730	
CHROMIUM	64.8		12.6		10.6		9.8	
COBALT	8.9	B	11.8		7.1	B	7.8	B
COPPER	150	J	35.5	J	17.7	J	18.4	J
IRON	26800		27200		20300		18000	
LEAD	233	R	24.4	R	16.9	R	13.4	R
MAGNESIUM	2150	J	3360	J	2780	J	2580	J
MANGANESE	820		1080		929		995	
MERCURY	0.11	B	0.060	U	0.060	U	0.060	U
NICKEL	21.7		21.8		15.8		16.2	
POTASSIUM	830	B	1140		1100	B	911	B
SELENIUM	1.6	J	1.0	BJ	0.65	BJ	0.77	BJ
SILVER	0.67	B	0.46	B	0.32	U	0.32	B
SODIUM	256	U	218	U	221	U	216	U
THALLIUM	0.99	U	1.0	B	0.97	B	1.4	B
VANADIUM	29.8		13.7		10.9	B	10.3	B
ZINC	207		101		67.0		78.2	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SB107		SB107		SB107		SB107	
TtFW Sample I.D.	LV-BIA-SB107-00		LV-BIA-SB107-04		LV-BIA-SB107-08		LV-BIA-SB107-14	
Sampling Date	11/30/00		11/30/00		11/30/00		11/30/00	
Depth	0'-2'		4'-6'		8'-10'		14'-16'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
ALUMINUM	7520		12600		9990		10500	
ANTIMONY	4.7	UJ	5.9	UJ	4.9	UJ	5.0	UJ
ARSENIC	8.4	J	6.6	J	7.1	J	10.8	J
BARIUM	55.1		737		123		157	
BERYLLIUM	0.15	B	0.16	B	0.16	B	0.19	B
CADMIUM	0.090	U	0.22	B	0.20	B	0.14	B
CALCIUM	42000		2470		8650		5210	
CHROMIUM	7.7		23.5		18.4		15.2	
COBALT	5.7	B	11.1	B	10.7	B	10.0	B
COPPER	17.1	J	31.6	J	14.1	J	18.3	J
IRON	15100		26300		24000		25100	
LEAD	11.6	R	62.7	R	16.8	R	25.1	R
MAGNESIUM	6240	J	2650	J	2780	J	3860	J
MANGANESE	434		644		208		675	
MERCURY	0.050	U	0.070	U	0.060	U	0.060	U
NICKEL	12.4		24.9		22.8		21.8	
POTASSIUM	958	B	1150	B	874	B	1020	B
SELENIUM	0.48	BJ	1.2	BJ	0.70	BJ	1.2	J
SILVER	0.30	U	0.65	B	0.41	B	0.56	B
SODIUM	207	U	261	U	216	U	223	U
THALLIUM	0.80	U	1.4	B	1.5	B	1.2	B
VANADIUM	10.2	B	19.8		12.9		12.9	
ZINC	48.2		81.1		63.3		68.7	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SB108		SB108		SB108		SB108	
TtFW Sample I.D.	LV-BIA-SB108-00		LV-BIA-SB108-04		LV-BIA-SB108-10		LV-BIA-SB108-14	
Sampling Date	12/4/00		12/4/00		12/4/00		12/4/00	
Depth	0'-2'		4'-6'		10'-12'		14'-16'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
ALUMINUM	8320		11300		8890		7690	
ANTIMONY	0.48	UJ	0.50	UJ	0.48	UJ	0.45	UJ
ARSENIC	8.0		7.7		6.7		6.3	
BARIUM	125		157		173		135	
BERYLLIUM	0.29	B	0.51	B	0.36	B	0.30	B
CADMIUM	0.060	U	0.070	U	0.060	U	0.060	U
CALCIUM	17500		2560		2230		36600	
CHROMIUM	11.6		11.1		10.9		8.7	
COBALT	6.7	B	9.1	B	8.1	B	7.2	B
COPPER	27.6		15.6		23.9		19.1	
IRON	19400		25000		21500		17800	
LEAD	19.4	J	9.4	J	8.7	J	11.9	J
MAGNESIUM	3960		2930		2840		5380	
MANGANESE	665		418		594		717	
MERCURY	0.050	U	0.040	U	0.040	U	0.040	U
NICKEL	16.2		23.5		18.2		14.1	
POTASSIUM	738	B	746	B	813	B	866	B
SELENIUM	0.89	U	1.3	J	0.89	U	0.84	U
SILVER	0.080	U	0.090	U	0.080	U	0.080	U
SODIUM	200	B	180	B	162	B	202	B
THALLIUM	11.9		15.4		14.9		8.2	
VANADIUM	11.8		15.0		12.1		10.6	
ZINC	73.8	J	63.8	J	49.8	J	54.5	J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SB109	SB109	SB109 Duplicate of SB109-04	SB109
TtFW Sample I.D.	LV-BIA-SB109-00	LV-BIA-SB109-04	LV-BIA-SB109-05	LV-BIA-SB109-08
Sampling Date	12/4/00	12/4/00	12/4/00	12/4/00
Depth	0'-2'	4'-6'	4'-6'	8'-10'
Units	mg/kg	mg/kg	mg/kg	mg/kg
ALUMINUM	9030	10600	11700	7340
ANTIMONY	0.75 BJ	0.48 UJ	0.46 UJ	0.50 UJ
ARSENIC	9.2	11.5 J	6.2 J	6.5
BARIUM	88.5	100	51.8	185
BERYLLIUM	0.35 B	0.54 B	0.45 B	0.37 B
CADMIUM	0.26 B	0.060 U	0.060 U	0.070 U
CALCIUM	21800	443 B	410 B	2150
CHROMIUM	27.4	10.7	12.9	10.4
COBALT	6.5 B	10.5	10.1	6.0 B
COPPER	69.6	12.1	22.5	34.0
IRON	21200	20700	23600	17300
LEAD	157 J	11.8 J	11.6 J	11.1 J
MAGNESIUM	2800	3060	3260	2280
MANGANESE	558	367	825	761
MERCURY	0.050 U	0.050 U	0.040 U	0.050 U
NICKEL	20.5	17.4	20.4	13.7
POTASSIUM	616 B	762 B	704 B	587 B
SELENIUM	1.2 J	1.8 J	1.3 J	0.94 UJ
SILVER	0.090 U	0.080 U	0.080 U	0.090 U
SODIUM	875 B	271 B	292 B	314 B
THALLIUM	12.9	13.2	16.6	10.8
VANADIUM	17.0	12.9	14.5	10.7 B
ZINC	115 J	129 J	65.9 J	76.5 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site
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Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SB109		SB109		MW8		MW8	
TtFW Sample I.D.	LV-BIA-SB109-14		LV-BIA-SB109-24		LV-BIA-SBMW8-00		LV-BIA-SBMW8-04	
Sampling Date	12/5/00		12/5/00		12/5/00		12/5/00	
Depth	14'-16'		24'-26'		0'-2'		4'-6'	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
ALUMINUM	7410		8390		17200		11300	
ANTIMONY	0.51	UJ	0.72	BJ	0.57	UJ	0.49	BJ
ARSENIC	12.0	R	8.4	R	11.0	R	6.2	R
BARIUM	106		207		106		48.4	
BERYLLIUM	0.35	B	0.38	B	0.48	B	0.49	B
CADMIUM	0.070	U	0.070	U	0.72	B	0.060	U
CALCIUM	45900		2110		3580		870	B
CHROMIUM	8.3		10.7		17.4		10.4	
COBALT	6.6	B	9.2	B	10.2	B	7.5	B
COPPER	32.4		19.7		21.2		18.9	
IRON	18600		20200		24600		23800	
LEAD	17.4	R	8.9	R	27.5	R	22.0	R
MAGNESIUM	3230		3520		3440		3250	
MANGANESE	772		579		659		288	
MERCURY	0.050	U	0.040	U	0.090	B	0.050	B
NICKEL	13.9		17.8		22.1		18.1	
POTASSIUM	855	B	798	B	1110	B	770	B
SELENIUM	1.1	BJ	1.4	J	1.2	J	1.1	J
SILVER	0.090	U	0.090	U	0.10	U	0.080	U
SODIUM	277	B	288	B	452	B	236	B
THALLIUM	9.5		13.9		17.6		16.0	
VANADIUM	10.6	B	16.0		28.7		13.0	
ZINC	58.7		71.4		127		68.5	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site
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Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW8	MW8 Duplicate of MW8-08	MW8	MW8
TtFW Sample I.D.	LV-BIA-SBMW8-08	LV-BIA-SBMW8-09	LV-BIA-SBMW8-18	LV-BIA-SBMW8-34
Sampling Date	12/5/00	12/5/00	12/6/00	12/6/00
Depth	8'-10'	8'-10'	18'-20'	34'-36'
Units	mg/kg	mg/kg	mg/kg	mg/kg
ALUMINUM	9500	8180	7870	8420
ANTIMONY	0.48 UJ	0.62 BJ	0.50 UJ	0.53 BJ
ARSENIC	14.0 R	9.2 R	10.3 R	5.7 R
BARIUM	187	136	170	136
BERYLLIUM	0.40 B	0.36 B	0.32 B	0.31 B
CADMIUM	0.060 U	0.060 U	0.070 U	0.060 U
CALCIUM	11500 J	3630 J	21300	12200
CHROMIUM	10.0	9.2	9.3	8.6
COBALT	8.6 B	8.2 B	6.9 B	6.6 B
COPPER	28.2	35.9	23.1	28.6
IRON	23400	20000	19200	19600
LEAD	15.1 R	17.3 R	11.7 R	11.1 R
MAGNESIUM	3880	3100	5730	3490
MANGANESE	707	443	504	494
MERCURY	0.040 U	0.040 U	0.050 U	0.040 U
NICKEL	18.3	16.2	15.2	14.6
POTASSIUM	1130 J	1000 B	911 B	690 B
SELENIUM	0.95 BJ	0.96 BJ	0.93 U	0.97 BJ
SILVER	0.080 U	0.080 U	0.090 U	0.090 U
SODIUM	253 B	239 B	250 B	205 B
THALLIUM	15.6	14.6	10.7	11.6
VANADIUM	12.7	10.6	10.9	11.1
ZINC	86.4	65.8	61.9	72.8

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Background Soil Boring		Background Soil Boring		Background Soil Boring		Background Soil Boring	
Location	BSB1		BSB1		BSB1		BSB1	
TtFW Sample I.D.	LV-BSB1-00		LV-BSB1-04		LV-BSB1-10		LV-BSB1-24	
Sampling Date	12/19/00		12/19/00		12/19/00		12/19/00	
Depth	0'-2'		4'-6'		10'-12'		24'-26'	
Units	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
ALUMINUM	12000	J	10800	J	9600	J	7120	J
ANTIMONY	5.4	UJ	4.5	UJ	4.5	UJ	4.2	UJ
ARSENIC	10.7	J	8.0	J	11.0	J	7.0	J
BARIUM	89.1	J	149	J	135	J	113	J
BERYLLIUM	0.27	B	0.41	B	0.36	B	0.23	B
CADMIUM	0.64	B	0.45	B	0.45	B	0.40	B
CALCIUM	3800		898	B	7600		30300	
CHROMIUM	12.7	J	12.0	J	10.3	J	8.2	J
COBALT	5.6	B	7.5	B	7.4	B	6.1	B
COPPER	15.9	J	15.9	J	26.0	J	21.6	J
IRON	19100	J	21300	J	22600	J	16100	J
LEAD	76.0	J	9.6	J	24.0	J	13.8	J
MAGNESIUM	1830	J	3120	J	3410	J	4720	J
MANGANESE	1290	J	1110	J	605	J	907	J
MERCURY	0.10	B	0.060	U	0.060	U	0.050	U
NICKEL	10.6	BJ	18.5	J	17.5	J	14.0	J
POTASSIUM	763	B	1140	J	1150	J	821	B
SELENIUM	1.2	B	0.52	U	0.51	U	0.49	U
SILVER	0.83	B	0.77	B	0.76	B	0.45	B
SODIUM	175	B	121	B	146	B	150	B
THALLIUM	1.1	U	0.93	U	0.92	U	0.87	U
VANADIUM	20.5		12.9		11.4		8.4	B
ZINC	85.8	J	73.7	J	65.2	J	51.8	J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Background Soil Boring		Background Soil Boring		Background Soil Boring		Background Soil Boring	
Location	BSB2		BSB2		BSB2		BSB2	
TtFW Sample I.D.	LV-BSB2-00		LV-BSB2-08		LV-BSB2-14		LV-BSB2-24	
Sampling Date	12/18/00		12/18/00		12/19/00		12/19/00	
Depth	0'-2'		8'-10'		14'-16'		24'-26'	
Units	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
ALUMINUM	8180	J	10700	J	8490	J	7190	J
ANTIMONY	5.2	UJ	4.6	UJ	4.3	UJ	4.2	UJ
ARSENIC	7.6	J	13.4	J	9.9	J	9.9	J
BARIUM	85.5	J	246	J	132	J	268	J
BERYLLIUM	0.31	B	0.39	B	0.30	B	0.25	B
CADMIUM	0.47	B	0.44	B	0.43	B	0.36	B
CALCIUM	20700		2190		32500		22900	
CHROMIUM	10.7	J	12.0	J	9.6	J	8.6	J
COBALT	5.0	B	8.5	B	8.4	B	5.9	B
COPPER	17.6	J	25.0	J	24.8	J	17.5	J
IRON	16000	J	22800	J	19600	J	17000	J
LEAD	21.0	J	16.2	J	13.8	J	22.5	J
MAGNESIUM	3680	J	3200	J	3990	J	4060	J
MANGANESE	693	J	865	J	632	J	540	J
MERCURY	0.070	U	0.060	U	0.050	U	0.050	U
NICKEL	13.6	J	18.3	J	17.4	J	13.5	J
POTASSIUM	922	B	1130	B	971	B	826	B
SELENIUM	0.65	B	0.53	U	0.50	U	0.49	U
SILVER	0.60	B	0.74	B	0.61	B	0.55	B
SODIUM	1290	B	413	B	229	B	180	B
THALLIUM	1.1	U	0.95	U	0.89	U	0.87	U
VANADIUM	13.4		13.1		10.6	B	8.3	B
ZINC	68.8	J	103	J	62.9	J	188	J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Background Soil Boring	Background Soil Boring	Background Soil Boring	Background Soil Boring
Location	BSB3	BSB3	BSB3 Duplicate of BSB3-04	BSB3
TtFW Sample I.D.	LV-BSB3-00	LV-BSB3-04	LV-BSB3-05	LV-BSB3-10
Sampling Date	12/18/00	12/18/00	12/18/00	12/18/00
Depth	0'-2'	4'-6'	4'-6'	10'-12'
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg
ALUMINUM	11300 J	14300 J	14300 J	9510 J
ANTIMONY	5.0 UJ	4.8 UJ	4.8 UJ	4.5 UJ
ARSENIC	8.5 J	15.0 J	12.6 J	22.3 J
BARIUM	88.9 J	104 J	146 J	210 J
BERYLLIUM	0.33 B	0.65 B	0.63 B	0.43 B
CADMIUM	0.60 B	0.68 B	0.58 B	0.76 B
CALCIUM	9510	463 B	435 B	1410
CHROMIUM	12.7 J	16.3 J	16.3 J	11.7 J
COBALT	6.6 B	7.7 B	12.1 J	8.3 B
COPPER	22.5 J	25.4 J	23.0 J	33.2 J
IRON	18700 J	27400 J	25400 J	24700 J
LEAD	51.7 J	16.5 J	18.0 J	25.6 J
MAGNESIUM	2570 J	3280 J	3400 J	2810 J
MANGANESE	823 J	538 J	899 J	727 J
MERCURY	0.12 B	0.060 U	0.060 U	0.060 U
NICKEL	14.5 J	20.3 J	19.5 J	22.3 J
POTASSIUM	949 B	1280 J	1380 J	929 B
SELENIUM	0.97 B	0.69 B	0.56 U	0.70 B
SILVER	0.80 B	1.0 B	0.97 B	0.81 B
SODIUM	186 B	214 B	203 B	163 B
THALLIUM	1.0 U	0.99 U	0.99 U	0.92 U
VANADIUM	16.9	25.9	25.8	11.9
ZINC	126 J	82.0 J	76.4 J	96.0 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Background Soil Boring		Background Soil Boring		Background Soil Boring		Background Soil Boring	
Location	BSB3		BSB4		BSB4		BSB4	
TtFW Sample I.D.	LV-BSB3-18		LV-BSB4-00		LV-BSB4-04		LV-BSB4-10	
Sampling Date	12/18/00		12/20/00		12/20/00		12/20/00	
Depth	18'-20'		0'-2'		4'-6'		10'-12'	
Units	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
ALUMINUM	8810	J	6250		12500		13300	
ANTIMONY	4.4	UJ	5.0	UJ	4.9	UJ	5.0	UJ
ARSENIC	9.2	J	7.5	J	12.8	J	23.5	J
BARIUM	158	J	598		255		250	
BERYLLIUM	0.30	B	0.090	B	0.27	B	0.28	B
CADMIUM	0.44	B	1.0	B	0.98	B	1.2	J
CALCIUM	13700		12400		1880		6200	
CHROMIUM	10.5	J	9.4		16.7		17.2	
COBALT	8.7	B	7.7	B	15.1		15.1	
COPPER	24.8	J	24.4	J	17.2	J	19.2	J
IRON	20700	J	20500		28300		29900	
LEAD	17.9	J	55.8	J	13.4	J	13.1	J
MAGNESIUM	6020	J	4760	J	3740	J	5030	J
MANGANESE	537	J	472		1350		645	
MERCURY	0.050	U	0.060	U	0.060	U	0.060	U
NICKEL	18.5	J	23.2		29.0		28.7	
POTASSIUM	927	B	850	B	1620		2130	
SELENIUM	0.50	U	0.89	B	0.96	B	0.76	B
SILVER	0.74	B	0.49	B	0.75	B	0.65	B
SODIUM	158	B	224	U	272	B	221	U
THALLIUM	0.89	U	0.87	U	1.9	B	1.9	B
VANADIUM	11.3		12.3		16.5		17.8	
ZINC	82.6	J	80.0		64.9		67.3	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Background Soil Boring		Background Soil Boring		Background Soil Boring		Background Soil Boring	
Location	BSB4 Duplicate of BSB4-10		BSB4		BSB5		BSB5	
TtFW Sample I.D.	LV-BSB4-11		LV-BSB4-24		LV-BSB5-00		LV-BSB5-04	
Sampling Date	12/20/00		12/20/00		12/20/00		12/20/00	
Depth	10'-12'		24'-26		0'-2'		4'-6'	
Units	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
ALUMINUM	12500		14800		9660		9240	
ANTIMONY	4.9	UJ	5.1	UJ	5.9	UJ	4.9	UJ
ARSENIC	13.0	J	11.6	J	6.9	J	7.2	J
BARIUM	253		275		80.6		173	
BERYLLIUM	0.27	B	0.26	B	0.060	U	0.050	U
CADMIUM	0.93	B	1.0	B	0.68	B	0.68	B
CALCIUM	10700		7010		8870		754	B
CHROMIUM	16.0		23.1		10.4		9.8	
COBALT	13.4		13.7		5.6	B	7.5	B
COPPER	16.3	J	20.9	J	13.9	J	19.5	J
IRON	28200		32000		16600		19800	
LEAD	10.7	J	13.3	J	38.0	J	9.9	J
MAGNESIUM	5250	J	5510	J	2330	J	2890	J
MANGANESE	614		488		757		633	
MERCURY	0.060	U	0.060	U	0.070	B	0.060	U
NICKEL	26.4		29.9		11.5		15.6	
POTASSIUM	1900		2490		760	B	1140	B
SELENIUM	0.50	B	0.71	B	1.3	B	0.84	B
SILVER	0.59	B	0.71	B	0.38	B	0.32	U
SODIUM	218	U	225	U	262	U	218	U
THALLIUM	0.84	U	1.4	B	1.0	U	1.4	B
VANADIUM	16.2		18.6		16.3		12.2	
ZINC	64.5		70.4		68.7		66.9	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-11
Metals - Soils (2000/2001)
Little Valley Superfund Site

Area	Background Soil Boring		Background Soil Boring		Background Soil Boring		Background Soil Boring	
Location	BSB5		BSB6		BSB6		BSB6	
TtFW Sample I.D.	LV-BSB5-14		LV-BSB6-00		LV-BSB6-04		LV-BSB6-10	
Sampling Date	12/20/00		12/20/00		12/20/00		12/20/00	
Depth	14'-16'		0'-2'		4'-6'		10'-12'	
Units	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
ALUMINUM	8270		8410		12100		11400	
ANTIMONY	4.9	UJ	4.8	UJ	5.6	UJ	5.2	UJ
ARSENIC	8.5	J	6.8	J	8.7	J	21.2	J
BARIUM	104		93.4		146		173	
BERYLLIUM	0.050	U	0.040	U	0.21	B	0.19	B
CADMIUM	0.78	B	0.71	B	0.83	B	1.0	B
CALCIUM	1540		6060		1650		1620	
CHROMIUM	9.5		10.9		13.1		13.1	
COBALT	7.3	B	6.1	B	10.4	B	10.5	B
COPPER	21.9	J	17.2	J	10.5	J	16.2	J
IRON	19200		19100		22900		27800	
LEAD	10.3	J	12.1	J	13.2	J	22.4	J
MAGNESIUM	2800	J	3270	J	2330	J	2750	J
MANGANESE	601		515		920		1290	
MERCURY	0.060	U	0.060	U	0.070	U	0.060	U
NICKEL	15.7		15.2		16.5		20.8	
POTASSIUM	967	B	993	B	1100	B	1510	
SELENIUM	0.96	B	0.58	B	1.0	B	0.90	B
SILVER	0.36	B	0.47	B	0.44	B	0.78	B
SODIUM	218	U	213	U	248	U	232	U
THALLIUM	1.0	B	0.82	U	0.96	U	0.90	U
VANADIUM	11.2	B	11.6		16.1		16.3	
ZINC	61.6		59.8		60.1		67.1	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-12
Metals - Soils (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-1	CCAGEO-2	CCAGEO-3	CCAGEO-4
TtFW Sample I.D.	LV-SS-CCA-GEO1-0-1	LV-SS-CCA-GEO2-0-1	LV-SS-CCA-GEO3-0-1	LV-SS-CCA-GEO4-0-1
Sampling Date	09/10/03	09/10/03	09/10/03	09/10/03
Depth	0'-1'	0'-1'	0'-1'	0'-1'
Units	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	8700 L	12000	14000	6500
Antimony	6.8 U	6.8 U	21 K	8.1 U
Arsenic	8.2	15	32	15
Barium	130	160	270	460
Beryllium	0.82 U	1.3	2.3	0.67 U
Cadmium	3.4	3.8	4.1	41
Calcium	13000 L	38000 L	46000 L	13000
Chromium	41	140	95	170
Cobalt	7.8	10	7.2	15
Copper	270 L	780	1600	1500
Iron	31000	69000	49000	29000
Lead	130 L	2100	620	480
Magnesium	4200 L	8900	9600	2700
Manganese	900	1600	1800	630
Mercury	0.1	0.06 U	0.05 U	2.9
Nickel	44	150	220	1300
Potassium	620	750	1200	670 U
Selenium	4 U	7.3	5.9 J	4.7 U
Silver	2.8	1.1 U	1.1 U	13
Sodium	570 U	570 U	540 U	670 U
Thallium	2.8 U	3.5	3.6	3.4 U
Vanadium	14	72	32	19
Zinc	720	460	790	2000

See Table D-1 for abbreviations and data qualifiers.

TABLE D-12
Metals - Soils (2003)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Railroad Avenue
Location	CCAGEO-5	CCAGEO-5 Duplicate	CCAGEO-6	RRAAGEO-1
TtFW Sample I.D.	LV-SS-CCA-GEO5-0-1	LV-SS-CCA-GEO7-0-1	LV-SS-CCA-GEO6-0-1	LV-SS-RRAA-GEO1-0-1
Sampling Date	09/10/03	09/10/03	09/10/03	09/11/03
Depth	0'-1'	0'-1'	0'-1'	0'-1'
Units	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	10000	8400	6400	10000
Antimony	7 U	7.1 U	7.2 U	7.4 U
Arsenic	23	20	9	11
Barium	320	340	88	130
Beryllium	1.2	1	0.62	0.61 U
Cadmium	6	6.9	2	1
Calcium	8900	5400	4600	1200
Chromium	53	51	16	12
Cobalt	10	10	7.2	9.4
Copper	530	590	650	20
Iron	45000	44000	26000	24000
Lead	130	150	120	34
Magnesium	3200	2700	1200	2000
Manganese	580	520	400	890
Mercury	0.14	0.06 U	0.08	0.07
Nickel	83	99	110	16
Potassium	620	590 U	600 U	990
Selenium	4.8	4.1 U	4.2 U	4.3 U
Silver	3.8	3.2	3.6	1.2 U
Sodium	580 U	590 U	600 U	610 U
Thallium	2.9 U	3 U	3 U	3.1 U
Vanadium	23	20	19	18
Zinc	320	360	240	69

See Table [illegible] or abbreviations and data qualifiers.

TABLE D-12
Metals - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-2	RRAAGEO-3	RRAAGEO-4	RRAAGEO-5
TtFW Sample I.D.	LV-SS-RRAA-GE02-0-1	LV-SS-RRAA-GE03-0-1	LV-SS-RRAA-GE04-0-1	LV-SS-RRAA-GE05-0-1
Sampling Date	09/16/03	09/16/03	09/16/03	09/16/03
Depth	0'-1'	0'-1'	0'-1'	0'-1'
Units	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	8520	13400	13800	12800
Antimony	12.3 R	0.39 R	0.29 R	13.6 UR
Arsenic	14 J	13.8 J	8.5 J	10.7 J
Barium	128	107	84.8	155
Beryllium	0.29 J	0.43 J	0.41 J	0.6 J
Cadmium	0.23 J	0.38 J	0.38 J	0.47 J
Calcium	5590	1390	1220	1720
Chromium	11.5	14.5	13.7	15.5
Cobalt	6.7 J	9.4 J	9.2 J	10.5 J
Copper	47 J	34.2 J	13.1 J	41.9 J
Iron	19700 J	23900 J	21900 J	24000 J
Lead	41.2	26.8	21	47.4
Magnesium	3550	2500	2140	2630
Manganese	462	856	1090	891
Mercury	0.11 U	0.1 J	0.11 J	0.13
Nickel	16.4	17.2	14.1	21.9
Potassium	581 J	966	743 J	820 J
Selenium	7.1 U	6.7 U	7.3 U	8 U
Silver	2 U	1.9 U	2.1 U	2.3 U
Sodium	107 J	24.6 J	31.7 J	37.9 J
Thallium	5.1 U	0.6 J	1 J	5.7 U
Vanadium	10.8	17.9	20.4	17.6
Zinc	93.1 R	80.4 R	73.9 R	101 R

See Table D-1 for abbreviations and data qualifiers.

TABLE D-12
Metals - Soils (2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-6	RRAAGEO-7	RRAAGEO-8	RRAAGEO-9
TtFW Sample I.D.	LV-SS-RRAA-GE06-0-1	LV-SS-RRAA-GE07-0-1	LV-SS-RRAA-GE08-0-1	LV-SS-RRAA-GE09-0-1
Sampling Date	09/16/03	09/16/03	09/17/03	09/17/03
Depth	0'-1'	0'-1'	0'-1'	0'-1'
Units	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	12100	13100	14500	7810
Antimony	10.6 UR	0.31 R	12.4 UR	10.9 R
Arsenic	11.2 J	11.8 J	11.5 J	10.5 J
Barium	158	119	215	130
Beryllium	0.56 J	0.46 J	0.57 J	0.49 J
Cadmium	0.43 J	0.43 J	0.82 J	0.47 J
Calcium	2130	611 J	1560	2930
Chromium	14.9	13.9	19.8	10.5
Cobalt	9	9.3 J	10.7	7.1 J
Copper	25.4 J	15.9 J	103 J	58.2 J
Iron	23600 J	22700 J	26300 J	18200 J
Lead	43.7	30.8	211	121
Magnesium	2200	2170	2750	1830
Manganese	659	1180	855	732
Mercury	0.1 J	0.097 J	0.2	0.18
Nickel	17.6	16.2	22.5	31.5
Potassium	1020	712 J	1400	682 J
Selenium	6.2 U	7.8 U	7.2 U	6.4 U
Silver	1.8 U	2.2 U	2.1 U	1.8 U
Sodium	25.4 J	31.2 J	43.5 J	34.3 J
Thallium	4.4 U	0.99 J	0.53 J	0.34 J
Vanadium	16.9	19.2	20.9	12.2
Zinc	132	78.8 R	250	115

See Table D- for abbreviations and data qualifiers.

TABLE D-12
Metals - Soils (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-10	RRAAGEO-11	RRAAGEO-12
TtFW Sample I.D.	LV-SS-RRAA-GE010-0-1	LV-SS-RRAA-GE011-0-1	LV-SS-RRAA-GE012-0-1
Sampling Date	09/17/03	09/17/03	09/17/03
Depth	0'-1'	0'-1'	0'-1'
Units	mg/kg	mg/kg	mg/kg
Aluminum	12500	7190	11000
Antimony	11.5 UR	0.53 R	12.1 UR
Arsenic	11.5 J	8.3 J	8.7 J
Barium	126	117	136
Beryllium	0.43 J	0.27 J	0.68 J
Cadmium	0.68 J	0.2 J	0.69 J
Calcium	1700	28500	9910
Chromium	14.3	8.9	14
Cobalt	8.9 J	5.6 J	8.2 J
Copper	22 J	19.9 J	22.5 J
Iron	23300 J	16300 J	20600 J
Lead	98.8	20.4	148
Magnesium	2360	3350	3700
Manganese	872	900	1030
Mercury	0.53	0.1 U	0.17
Nickel	21.2	13.3	18.4
Potassium	911 J	931	740 J
Selenium	6.7 U	1.5 J	7.1 U
Silver	1.9 U	1.7 U	2 U
Sodium	28.2 J	50.7 J	74.6 J
Thallium	0.8 J	0.55 J	0.77 J
Vanadium	18.3	10.6	14.5
Zinc	175	61.8	165

See Table D-1 for abbreviations and data qualifiers.

TABLE D-13
Volatile Organic Compounds - Sediments (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SDCCA1	SDCCA1N	SDCCA1S
TtFW Sample I.D.	LV-SDCCA1-01 (approximately SDCCA1S)	LV-SDCCA1N-01	LV-SDCCA1S-01
Sampling Date	06/17/1998	07/15/1998	07/15/98
Units	ug/kg	ug/kg	ug/kg
Chloromethane	19 UJ	22 UJ	15 UJ
Bromomethane	19 UJ	22 UJ	15 U
Vinyl chloride	19 UJ	22 UJ	15 U
Chloroethane	19 UJ	22 UJ	15 U
Methylene chloride	19 UJ	22 UJ	15 U
Acetone	79 UJ	140 UJ	71 UJ
Carbon disulfide	19 UJ	3 J	15 U
1,1-Dichloroethene	19 UJ	22 UJ	15 U
1,1-Dichloroethane	19 UJ	22 UJ	15 U
1,2-Dichloroethene (total)	19 UJ	22 UJ	15 U
Chloroform	19 UJ	22 UJ	15 U
1,2-Dichloroethane	19 UJ	22 UJ	15 UJ
2-Butanone	27 J	25 UJ	19 UJ
1,1,1-Trichloroethane	19 UJ	22 UJ	15 U
Carbon Tetrachloride	19 UJ	22 UJ	15 U
Bromodichloromethane	19 UJ	22 UJ	15 U
1,2-Dichloropropane	19 UJ	22 UJ	15 U
cis-1,3-Dichloropropene	19 UJ	22 UJ	15 U
Trichloroethene	19 UJ	22 UJ	15 U
Dibromochloromethane	19 UJ	22 UJ	15 U
1,1,2-Trichloroethane	19 UJ	22 UJ	15 U
Benzene	19 UJ	22 UJ	15 U
trans-1,3-Dichloropropene	19 UJ	22 UJ	15 UJ
Bromoform	19 UJ	22 UJ	15 U
4-Methyl-2-pentanone	19 UJ	22 UJ	15 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-13
Volatile Organic Compounds - Sediments (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SDCCA1	SDCCA1N	SDCCA1S
TtFW Sample I.D.	LV-SDCCA1-01 (approximately SDCCA1S)	LV-SDCCA1N-01	LV-SDCCA1S-01
Sampling Date	06/17/1998	07/15/1998	07/15/98
Units	ug/kg	ug/kg	ug/kg
2-Hexanone	19 UJ	22 UJ	15 UJ
Tetrachloroethene	19 UJ	22 UJ	15 U
1,1,2,2-Tetrachloroethane	19 UJ	22 UJ	15 U
Toluene	19 UJ	4 J	15 U
Chlorobenzene	19 UJ	22 UJ	15 U
Ethylbenzene	19 UJ	22 UJ	15 U
Styrene	19 UJ	22 UJ	15 U
Xylenes (total)	19 UJ	22 UJ	15 U
Total Volatile TICs	R	15 J	18 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-13
Volatile Organic Compounds - Sediments (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SDCCA2	SDCCA2	SDCCA3
TtFW Sample I.D.	LV-SDCCA2-01	LV-SDCCA4-01 Duplicate of SDCCA2-01	LV-SDCCA3-01
Sampling Date	07/15/1998	07/15/1998	07/15/1998
Units	ug/kg	ug/kg	ug/kg
Chloromethane	16 UJ	23 UJ	26 UJ
Bromomethane	16 U	23 UJ	26 UJ
Vinyl chloride	16 U	23 UJ	26 UJ
Chloroethane	16 U	23 UJ	26 UJ
Methylene chloride	16 U	23 UJ	26 UJ
Acetone	21 UJ	110 UJ	130 UJ
Carbon disulfide	16 U	23 UJ	26 UJ
1,1-Dichloroethene	16 U	23 UJ	26 UJ
1,1-Dichloroethane	16 U	23 UJ	26 UJ
1,2-Dichloroethene (total)	16 U	23 UJ	26 UJ
Chloroform	16 U	23 UJ	26 UJ
1,2-Dichloroethane	16 UJ	23 UJ	26 UJ
2-Butanone	16 UJ	23 UJ	26 UJ
1,1,1-Trichloroethane	16 U	23 UJ	26 UJ
Carbon Tetrachloride	16 U	23 UJ	26 UJ
Bromodichloromethane	16 U	23 UJ	26 UJ
1,2-Dichloropropane	16 U	23 UJ	26 UJ
cis-1,3-Dichloropropene	16 U	23 UJ	26 UJ
Trichloroethene	16 U	23 UJ	26 UJ
Dibromochloromethane	16 U	23 UJ	26 UJ
1,1,2-Trichloroethane	16 U	23 UJ	26 UJ
Benzene	16 U	23 UJ	26 UJ
trans-1,3-Dichloropropene	16 UJ	23 UJ	26 UJ
Bromoform	16 U	23 UJ	26 UJ
4-Methyl-2-pentanone	16 UJ	23 UJ	26 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-13
Volatile Organic Compounds - Sediments (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SDCCA2	SDCCA2	SDCCA3
TtFW Sample I.D.	LV-SDCCA2-01	LV-SDCCA4-01 Duplicate of SDCCA2-01	LV-SDCCA3-01
Sampling Date	07/15/1998	07/15/1998	07/15/1998
Units	ug/kg	ug/kg	ug/kg
2-Hexanone	16 UJ	23 UJ	26 UJ
Tetrachloroethene	16 U	23 UJ	26 UJ
1,1,2,2-Tetrachloroethane	16 U	23 UJ	26 UJ
Toluene	16 U	23 UJ	17 J
Chlorobenzene	16 U	23 UJ	26 UJ
Ethylbenzene	16 U	23 UJ	26 UJ
Styrene	16 U	23 UJ	26 UJ
Xylenes (total)	16 U	23 UJ	26 UJ
Total Volatile TICs	--	--	--

See Table D-1 for abbreviations and data qualifiers.

TABLE D-13
Volatile Organic Compounds - Sediments (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SDCCA1N	SDCCA1N	SDCCA1S
TtFW Sample I.D.	LV-SDCCA1N-02	LV-SDCCA5N-02 Duplicate of SDCCA1N-02	LV-SDCCA1S-02
Sampling Date	07/28/1998	07/28/1998	07/28/1998
Units	ug/kg	ug/kg	ug/kg
Chloromethane	19 U	20 U	19 U
Bromomethane	19 U	20 U	19 U
Vinyl chloride	19 U	20 U	19 U
Chloroethane	19 U	20 U	19 U
Methylene chloride	19 U	20 U	19 U
Acetone	46 U	35 U	65 U
Carbon disulfide	19 UJ	20 U	19 UJ
1,1-Dichloroethene	19 U	20 U	19 U
1,1-Dichloroethane	19 U	20 U	19 U
1,2-Dichloroethene (total)	19 U	20 U	19 U
Chloroform	19 U	20 U	19 U
1,2-Dichloroethane	19 U	20 U	19 U
2-Butanone	19 U	20 U	19 U
1,1,1-Trichloroethane	19 U	20 UJ	19 U
Carbon Tetrachloride	19 U	20 U	19 U
Bromodichloromethane	19 U	20 U	19 U
1,2-Dichloropropane	19 U	20 U	19 U
cis-1,3-Dichloropropene	19 U	20 U	19 U
Trichloroethene	19 U	20 U	19 U
Dibromochloromethane	19 U	20 U	19 U
1,1,2-Trichloroethane	19 U	20 U	19 U
Benzene	19 U	20 U	19 U
trans-1,3-Dichloropropene	19 U	20 U	19 U
Bromoform	19 U	20 U	19 U
4-Methyl-2-pentanone	19 U	20 U	19 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-13
Volatile Organic Compounds - Sediments (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SDCCA1N	SDCCA1N	SDCCA1S
TtFW Sample I.D.	LV-SDCCA1N-02	LV-SDCCA5N-02 Duplicate of SDCCA1N-02	LV-SDCCA1S-02
Sampling Date	07/28/1998	07/28/1998	07/28/1998
Units	ug/kg	ug/kg	ug/kg
2-Hexanone	19 U	20 U	19 UJ
Tetrachloroethene	19 U	20 U	19 UJ
1,1,2,2-Tetrachloroethane	19 U	20 U	19 UJ
Toluene	19 U	20 U	19 UJ
Chlorobenzene	19 U	20 U	19 UJ
Ethylbenzene	19 U	20 U	19 UJ
Styrene	19 U	20 U	19 UJ
Xylenes (total)	19 U	20 U	19 UJ
Total Volatile TICs	--	--	--

See Table D-1 for abbreviations and data qualifiers.

TABLE D-13
Volatile Organic Compounds - Sediments (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SDCCA2	SDCCA3
TtFW Sample I.D.	LV-SDCCA2-02	LV-SDCCA3-02
Sampling Date	07/28/1998	07/28/1998
Units	ug/kg	ug/kg
Chloromethane	25 UJ	23 UJ
Bromomethane	25 UJ	23 UJ
Vinyl chloride	25 UJ	23 UJ
Chloroethane	25 UJ	23 UJ
Methylene chloride	25 UJ	23 UJ
Acetone	39 UJ	34 UJ
Carbon disulfide	25 UJ	23 UJ
1,1-Dichloroethene	25 UJ	23 UJ
1,1-Dichloroethane	25 UJ	23 UJ
1,2-Dichloroethene (total)	25 UJ	23 UJ
Chloroform	25 UJ	23 UJ
1,2-Dichloroethane	25 UJ	23 UJ
2-Butanone	25 UJ	23 UJ
1,1,1-Trichloroethane	25 UJ	23 UJ
Carbon Tetrachloride	25 UJ	23 UJ
Bromodichloromethane	25 UJ	23 UJ
1,2-Dichloropropane	25 UJ	23 UJ
cis-1,3-Dichloropropene	25 UJ	23 UJ
Trichloroethene	25 UJ	23 UJ
Dibromochloromethane	25 UJ	23 UJ
1,1,2-Trichloroethane	25 UJ	23 UJ
Benzene	25 UJ	23 UJ
trans-1,3-Dichloropropene	25 UJ	23 UJ
Bromoform	25 UJ	23 UJ
4-Methyl-2-pentanone	25 UJ	23 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-13
Volatile Organic Compounds - Sediments (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SDCCA2	SDCCA3
TtFW Sample I.D.	LV-SDCCA2-02	LV-SDCCA3-02
Sampling Date	07/28/1998	07/28/1998
Units	ug/kg	ug/kg
2-Hexanone	25 UJ	23 UJ
Tetrachloroethene	25 UJ	23 UJ
1,1,2,2-Tetrachloroethane	25 UJ	23 UJ
Toluene	25 UJ	35 J
Chlorobenzene	25 UJ	23 UJ
Ethylbenzene	25 UJ	23 UJ
Styrene	25 UJ	23 UJ
Xylenes (total)	25 UJ	23 UJ
Total Volatile TICs	15 J	--

TABLE D-14
Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD01A	SD02A	SD02B	SD03A	SD03A Duplicate Sediment
TtFW Sample I.D.	LVBIA-SD01A-01	LVBIA-SD02A-01	LVBIA-SD02B-01	LVBIA-SD03A-01	LVBIA-SD03D-01
Depth	0"-6"	0"-6"	6"-12"	0"-6"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	12 UJ	13 UJ	13 UJ	29 UJ	30 UJ
Chloromethane	12 UJ	13 UJ	13 UJ	29 UJ	30 UJ
Vinyl Chloride	12 UJ	13 UJ	13 UJ	29 UJ	30 UJ
Bromomethane	12 U	13 U	13 U	29 UJ	30 U
Chloroethane	12 U	13 UJ	13 U	29 UJ	30 U
Trichlorofluoromethane	12 UJ	13 UJ	13 UJ	29 UJ	30 UJ
1,1-Dichloroethene	12 U	13 UJ	13 U	29 UJ	30 U
1,1,2-Trichloro-1,2,2-trifluoroethane	12 U	13 UJ	13 U	29 UJ	30 U
Acetone	12 UJ	28 UJ	13 UJ	29 UJ	30 UJ
Carbon Disulfide	12 U	4 J	2 J	17 J	30 U
Methyl Acetate	12 U	13 U	13 U	29 UJ	30 U
Methylene Chloride	15 U	25 U	16 U	29 UJ	30 U
trans-1,2-Dichloroethene	12 U	13 U	13 U	29 UJ	30 U
Methyl tert-Butyl Ether	12 U	13 U	13 U	29 UJ	30 U
1,1-Dichloroethane	12 U	13 U	13 U	29 UJ	30 U
cis-1,2-Dichloroethene	12 U	13 U	13 U	19 J	12 J
2-Butanone	12 UJ	13 UJ	13 UJ	29 UJ	30 UJ
Chloroform	12 U	13 U	13 U	29 UJ	30 U
1,1,1-Trichloroethane	12 U	13 U	13 U	29 UJ	30 U
Cyclohexane	12 U	13 U	13 U	29 UJ	30 U
Carbon Tetrachloride	12 U	13 U	13 U	29 UJ	30 U
Benzene	12 U	13 U	13 U	29 UJ	30 U
1,2-Dichloroethane	12 U	13 U	13 U	29 UJ	30 U
Trichloroethene	12 U	13 U	13 U	29 UJ	30 U
Methylcyclohexane	12 U	13 U	13 U	29 UJ	30 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-14
Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD01A	SD02A	SD02B	SD03A	SD03A Duplicate Sediment
TtFW Sample I.D.	LVBIA-SD01A-01	LVBIA-SD02A-01	LVBIA-SD02B-01	LVBIA-SD03A-01	LVBIA-SD03D-01
Depth	0"-6"	0"-6"	6"-12"	0"-6"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2-Dichloropropane	12 U	13 U	13 U	29 UJ	30 U
romodichloromethane	12 U	13 U	13 U	29 UJ	30 U
s-1,3-Dichloropropene	12 U	13 U	13 U	29 UJ	30 U
Methyl-2-pentanone	12 U	13 U	5 J	29 UJ	30 U
oluene	12 U	13 U	13 U	29 UJ	30 U
ans-1,3-Dichloropropene	12 U	13 U	13 U	29 UJ	30 U
,1,2-Trichloroethane	12 U	13 U	13 U	29 UJ	30 U
etrachloroethene	12 U	13 U	13 U	29 UJ	30 U
Hexanone	12 UJ	13 U	13 UJ	29 UJ	30 UJ
ibromochloromethane	12 U	13 U	13 U	29 UJ	30 U
,2-Dibromoethane	12 U	13 U	13 U	29 UJ	30 U
hlorobenzene	12 U	13 U	13 U	29 UJ	30 U
thylbenzene	12 U	13 U	13 U	29 UJ	30 U
ylenes (total)	12 U	13 U	13 U	29 UJ	30 U
tyrene	12 U	13 U	13 U	29 UJ	30 U
romoform	12 U	13 U	13 U	29 UJ	30 U
opropylbenzene	12 U	13 U	13 U	29 UJ	30 U
,1,2,2-Tetrachloroethane	12 U	13 U	13 U	29 UJ	30 U
,3-Dichlorobenzene	12 U	13 U	13 U	29 UJ	30 U
,4-Dichlorobenzene	12 U	13 U	13 U	29 UJ	30 U
,2-Dichlorobenzene	12 U	13 U	13 U	29 UJ	30 U
,2-Dibromo-3-chloropropane	12 U	13 U	13 U	29 UJ	30 U
,2,4-Trichlorobenzene	12 U	13 U	13 U	29 UJ	30 U

e Table D-1 f[illegible]bbreviations and data qualifiers.

TABLE D-14
Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD03B	SD03C	SD04A	SD04B	SD05A
TtFW Sample I.D.	LVBIA-SD03B-01	LVBIA-SD03C-01	LVBIA-SD04A-01	LVBIA-SD04B-01	LVBIA-SD05A-01
Depth	6"-12"	12"-18"	0"-6"	6"-10"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dichlorodifluoromethane	21 UJ	24 UJ	19 UJ	16 UJ	17 UJ
Chloromethane	21 UJ	24 UJ	19 UJ	16 UJ	17 UJ
Vinyl Chloride	21 UJ	24 UJ	19 UJ	16 UJ	17 UJ
Bromomethane	21 U	24 U	19 U	16 U	17 U
Chloroethane	21 U	24 UJ	19 U	16 U	17 U
Trichlorofluoromethane	21 UJ	24 UJ	19 UJ	16 UJ	17 UJ
1,1-Dichloroethene	21 U	24 UJ	19 U	16 U	17 U
1,1,2-Trichloro-1,2,2-trifluoroethane	21 U	24 UJ	19 U	16 U	17 U
Acetone	25 UJ	24 UJ	59 UJ	25 UJ	19 UJ
Carbon Disulfide	28	24 UJ	2 J	5 J	7 J
Methyl Acetate	21 U	24 U	19 U	16 U	17 U
Methylene Chloride	22 U	24 U	26 U	19 U	19 U
trans-1,2-Dichloroethene	21 U	24 U	19 U	16 U	17 U
Methyl tert-Butyl Ether	21 U	24 U	19 U	16 U	17 U
1,1-Dichloroethane	21 U	24 U	19 U	16 U	17 U
cis-1,2-Dichloroethene	12 J	6 J	19 U	16 U	17 U
2-Butanone	21 UJ	24 UJ	14 J	16 UJ	17 UJ
Chloroform	21 U	24 U	19 U	16 U	17 U
1,1,1-Trichloroethane	21 U	24 U	19 U	16 U	17 U
Cyclohexane	21 U	24 U	19 U	16 U	17 U
Carbon Tetrachloride	21 U	24 U	19 U	16 U	17 U
Benzene	21 U	24 U	19 U	16 U	17 U
1,2-Dichloroethane	21 U	24 U	19 U	16 U	17 U
Trichloroethene	21 U	24 U	19 U	16 U	17 U
Methylcyclohexane	21 U	24 U	19 U	16 U	17 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-14
Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD03B	SD03C	SD04A	SD04B	SD05A
TtFW Sample I.D.	LVBIA-SD03B-01	LVBIA-SD03C-01	LVBIA-SD04A-01	LVBIA-SD04B-01	LVBIA-SD05A-01
Depth	6"-12"	12"-18"	0"-6"	6"-10"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
,2-Dichloropropane	21 U	24 U	19 U	16 U	17 U
romodichloromethane	21 U	24 U	19 U	16 U	17 U
is-1,3-Dichloropropene	21 U	24 U	19 U	16 U	17 U
-Methyl-2-pentanone	21 U	24 U	19 U	16 U	17 U
oluene	21 U	24 U	19 U	16 U	17 U
rans-1,3-Dichloropropene	21 U	24 U	19 U	16 U	17 U
,1,2-Trichloroethane	21 U	24 U	19 U	16 U	17 U
etrachloroethene	21 U	24 U	19 U	16 U	17 U
-Hexanone	21 UJ	24 U	19 UJ	16 UJ	17 UJ
Dibromochloromethane	21 U	24 U	19 U	16 U	17 U
1,2-Dibromoethane	21 U	24 U	19 U	16 U	17 U
Chlorobenzene	21 U	24 U	19 U	16 U	17 U
Ethylbenzene	21 U	24 U	19 U	16 U	17 U
Xylenes (total)	21 U	24 U	19 U	16 U	17 U
Styrene	21 U	24 U	19 U	16 U	17 U
Bromoform	21 U	24 U	19 U	16 U	17 U
sopropylbenzene	21 U	24 U	19 U	16 U	17 U
1,1,2,2-Tetrachloroethane	21 U	24 U	19 U	16 U	17 U
1,3-Dichlorobenzene	21 U	24 U	19 U	16 U	17 U
1,4-Dichlorobenzene	21 U	24 U	19 U	16 U	17 U
1,2-Dichlorobenzene	21 U	24 U	19 U	16 U	17 U
1,2-Dibromo-3-chloropropane	21 U	24 U	19 U	16 U	17 U
1,2,4-Trichlorobenzene	21 U	24 U	19 U	16 U	17 U

e Table D-1 f[illegible]bbreviations and data qualifiers.

TABLE D-14
Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	
Location	SD05B	
TtFW Sample I.D.	LVBIA-SD05B-01	
Depth	6"-12"	
Sampling Date	12/13/00	
Units	ug/Kg	
Dichlorodifluoromethane	18	UJ
Chloromethane	18	UJ
Vinyl Chloride	18	UJ
Bromomethane	18	U
Chloroethane	18	U
Trichlorofluoromethane	18	UJ
1,1-Dichloroethene	18	U
1,1,2-Trichloro-1,2,2-trifluoroethane	18	U
Acetone	18	UJ
Carbon Disulfide	18	U
Methyl Acetate	18	U
Methylene Chloride	18	U
trans-1,2-Dichloroethene	18	U
Methyl tert-Butyl Ether	18	U
1,1-Dichloroethane	18	U
cis-1,2-Dichloroethene	18	U
2-Butanone	18	UJ
Chloroform	18	U
1,1,1-Trichloroethane	18	U
Cyclohexane	18	U
Carbon Tetrachloride	18	U
Benzene	18	U
1,2-Dichloroethane	18	U
Trichloroethene	18	U
Methylcyclohexane	18	U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-14
Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	
Location	SD05B	
TtFW Sample I.D.	LVBIA-SD05B-01	
Depth	6"-12"	
Sampling Date	12/13/00	
Units	ug/Kg	
1,2-Dichloropropane	18	U
Bromodichloromethane	18	U
cis-1,3-Dichloropropene	18	U
4-Methyl-2-pentanone	18	U
Toluene	18	U
trans-1,3-Dichloropropene	18	U
1,1,2-Trichloroethane	18	U
Tetrachloroethene	18	U
2-Hexanone	18	UJ
Dibromochloromethane	18	U
1,2-Dibromoethane	18	U
Chlorobenzene	18	U
Ethylbenzene	18	U
Xylenes (total)	18	U
Styrene	18	U
Bromoform	18	U
Isopropylbenzene	18	U
1,1,2,2-Tetrachloroethane	18	U
1,3-Dichlorobenzene	18	U
1,4-Dichlorobenzene	18	U
1,2-Dichlorobenzene	18	U
1,2-Dibromo-3-chloropropane	18	U
1,2,4-Trichlorobenzene	18	U

TABLE D-15
Semi-Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD01A	SD02A	SD02B	SD03A
TtFW Sample I.D.	LVBIA-SD01A-01	LVBIA-SD02A-01	LVBIA-SD02B-01	LVBIA-SD03A-01
Depth	0"-6"	0"-6"	6"-12"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	450 U	450 UJ	450 UJ	7600 UJ
Phenol	450 U	450 U	450 U	7600 UJ
bis-(2-Chloroethyl) ether	450 U	450 U	450 U	7600 UJ
2-Chlorophenol	450 U	450 U	450 U	7600 UJ
2-Methylphenol	450 UJ	450 U	450 U	7600 UJ
2,2'-oxybis(1-Chloropropane)	450 U	450 U	450 U	7600 UJ
Acetophenone	450 U	450 U	450 U	7600 UJ
4-Methylphenol	450 U	450 U	450 U	7600 UJ
N-Nitroso-di-n-propylamine	450 U	450 U	450 U	7600 UJ
Hexachloroethane	450 U	450 U	450 U	7600 UJ
Nitrobenzene	450 U	450 U	450 U	7600 UJ
Isophorone	450 U	450 U	450 U	7600 UJ
2-Nitrophenol	450 U	450 U	450 U	7600 UJ
2,4-Dimethylphenol	450 U	450 U	450 U	7600 UJ
bis(2-Chloroethoxy)methane	450 U	450 U	450 U	7600 UJ
2,4-Dichlorophenol	450 U	450 U	450 U	7600 UJ
Naphthalene	450 U	450 U	450 U	7600 UJ
4-Chloroaniline	450 U	450 U	450 U	7600 UJ
Hexachlorobutadiene	450 U	450 U	450 U	7600 UJ
Caprolactam	450 U	450 U	450 U	7600 UJ
4-Chloro-3-methylphenol	450 U	450 U	450 U	7600 UJ
2-Methylnaphthalene	450 U	450 U	450 U	7600 UJ
Hexachlorocyclopentadiene	450 U	450 U	450 U	7600 UJ
2,4,6-Trichlorophenol	450 U	450 U	450 U	7600 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-15
Semi-Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD01A	SD02A	SD02B	SD03A
TtFW Sample I.D.	LVBIA-SD01A-01	LVBIA-SD02A-01	LVBIA-SD02B-01	LVBIA-SD03A-01
Depth	0"-6"	0"-6"	6"-12"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,5-Trichlorophenol	1100 U	1100 U	1100 U	19000 UJ
1,1'-Biphenyl	450 U	450 U	450 U	7600 UJ
2-Chloronaphthalene	450 U	450 U	450 U	7600 UJ
2-Nitroaniline	1100 U	1100 U	1100 U	19000 UJ
Dimethylphthalate	450 U	450 U	450 U	7600 UJ
2,6-Dinitrotoluene	450 U	450 U	450 U	7600 UJ
Acenaphthylene	450 U	450 U	450 U	7600 UJ
3-Nitroaniline	1100 U	1100 U	1100 U	19000 UJ
Acenaphthene	450 U	450 U	450 U	7600 UJ
2,4-Dinitrophenol	1100 UJ	1100 U	1100 U	19000 UJ
4-Nitrophenol	1100 UJ	1100 U	1100 U	19000 UJ
Dibenzofuran	450 U	450 U	450 U	7600 UJ
2,4-Dinitrotoluene	450 U	450 U	450 U	7600 UJ
Diethylphthalate	450 U	450 U	450 U	7600 UJ
Fluorene	450 U	450 U	450 U	7600 UJ
4-Chlorophenyl-phenyl ether	450 U	450 U	450 U	7600 UJ
4-Nitroaniline	1100 U	1100 U	1100 U	19000 UJ
4,6-Dinitro-2-methylphenol	1100 U	1100 U	1100 U	19000 UJ
N-Nitrosodiphenylamine	450 U	450 U	450 U	7600 UJ
4-Bromophenyl-phenylether	450 U	450 U	450 U	7600 UJ
Hexachlorobenzene	450 U	450 U	450 U	7600 UJ
Atrazine	450 U	450 U	450 U	7600 UJ
Pentachlorophenol	1100 U	1100 U	1100 U	19000 UJ
Phenanthrene	450 U	54 J	450 U	1300 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-15
Semi-Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SD01A		SD02A		SD02B		SD03A	
TtFW Sample I.D.	LVBIA-SD01A-01		LVBIA-SD02A-01		LVBIA-SD02B-01		LVBIA-SD03A-01	
Depth	0"-6"		0"-6"		6"-12"		0"-6"	
Sampling Date	12/13/00		12/13/00		12/13/00		12/13/00	
Units	ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Anthracene	450	U	450	U	450	U	7600	UJ
Carbazole	450	U	450	U	450	U	7600	UJ
Di-n-butylphthalate	450	UJ	450	U	450	U	7600	UJ
Fluoranthene	450	U	120	J	450	U	3700	J
Pyrene	450	U	99	J	450	U	2800	J
Butylbenzylphthalate	450	U	450	U	450	U	7600	UJ
3,3'-Dichlorobenzidine	450	U	450	U	450	U	7600	UJ
Benzo(a)anthracene	450	U	60	J	450	U	1300	J
Chrysene	450	U	69	J	450	U	1800	J
bis(2-Ethylhexyl)phthalate	74	J	310	J	140	J	21000	J
Di-n-octylphthalate	450	U	450	U	450	U	2100	J
Benzo(b)fluoranthene	450	U	51	J	450	U	1600	J
Benzo(k)fluoranthene	450	U	48	J	450	U	1400	J
Benzo(a)pyrene	450	U	49	J	450	U	1400	J
Indeno(1,2,3-cd)pyrene	450	U	450	U	450	U	860	J
Dibenzo(a,h)anthracene	450	U	450	U	450	U	7600	UJ
Benzo(g,h,i)perylene	450	U	450	U	450	U	770	J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-15
Semi-Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD03A	SD03B	SD03C	SD04A
	Duplicate Sediment			
TtFW Sample I.D.	LVBIA-SD03D-01	LVBIA-SD03B-01	LVBIA-SD03C-01	LVBIA-SD04A-01
Depth	0"-6"	6"-12"	12"-18"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	6200 UJ	6100 UJ	6100 UJ	540 UJ
Phenol	6200 U	6100 U	6100 U	540 U
bis-(2-Chloroethyl) ether	6200 U	6100 U	6100 U	540 U
2-Chlorophenol	6200 U	6100 U	6100 U	540 U
2-Methylphenol	6200 U	6100 U	6100 U	540 U
2,2'-oxybis(1-Chloropropane)	6200 U	6100 U	6100 U	540 U
Acetophenone	6200 U	6100 U	6100 U	540 U
4-Methylphenol	6200 U	6100 U	6100 U	540 U
N-Nitroso-di-n-propylamine	6200 U	6100 U	6100 U	540 U
Hexachloroethane	6200 U	6100 U	6100 U	540 U
Nitrobenzene	6200 U	6100 U	6100 U	540 U
Isophorone	6200 U	6100 U	6100 U	540 U
2-Nitrophenol	6200 U	6100 U	6100 U	540 U
2,4-Dimethylphenol	6200 U	6100 U	6100 U	540 U
bis(2-Chloroethoxy)methane	6200 U	6100 U	6100 U	540 U
2,4-Dichlorophenol	6200 U	6100 U	6100 U	540 U
Naphthalene	6200 U	6100 U	6100 U	540 U
4-Chloroaniline	6200 U	6100 U	6100 U	540 U
Hexachlorobutadiene	6200 U	6100 U	6100 U	540 U
Caprolactam	6200 U	6100 U	6100 U	540 U
4-Chloro-3-methylphenol	6200 U	6100 U	6100 U	540 U
2-Methylnaphthalene	6200 U	6100 U	6100 U	540 U
Hexachlorocyclopentadiene	6200 U	6100 U	6100 U	540 U
2,4,6-Trichlorophenol	6200 U	6100 U	6100 U	540 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-15
Semi-Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD03A	SD03B	SD03C	SD04A
	Duplicate Sediment			
TtFW Sample I.D.	LVBIA-SD03D-01	LVBIA-SD03B-01	LVBIA-SD03C-01	LVBIA-SD04A-01
Depth	0"-6"	6"-12"	12"-18"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
2,4,5-Trichlorophenol	16000 U	15000 U	15000 U	1400 U
1,1'-Biphenyl	6200 U	6100 U	6100 U	540 U
2-Chloronaphthalene	6200 U	6100 U	6100 U	540 U
2-Nitroaniline	16000 U	15000 U	15000 U	1400 U
Dimethylphthalate	6200 U	6100 U	6100 U	540 U
2,6-Dinitrotoluene	6200 U	6100 U	6100 U	540 U
Acenaphthylene	6200 U	6100 U	6100 U	540 U
3-Nitroaniline	16000 U	15000 U	15000 U	1400 U
Acenaphthene	6200 U	6100 U	6100 U	540 U
2,4-Dinitrophenol	16000 U	15000 U	15000 U	1400 U
4-Nitrophenol	16000 U	15000 U	15000 U	1400 U
Dibenzofuran	6200 U	6100 U	6100 U	540 U
2,4-Dinitrotoluene	6200 U	6100 U	6100 U	540 U
Diethylphthalate	6200 U	6100 U	6100 U	540 U
Fluorene	6200 U	6100 U	6100 U	540 U
4-Chlorophenyl-phenyl ether	6200 U	6100 U	6100 U	540 U
4-Nitroaniline	16000 U	15000 U	15000 U	1400 U
4,6-Dinitro-2-methylphenol	16000 U	15000 U	15000 U	1400 U
N-Nitrosodiphenylamine	6200 U	6100 U	6100 U	540 U
4-Bromophenyl-phenylether	6200 U	6100 U	6100 U	540 U
Hexachlorobenzene	6200 U	6100 U	6100 U	540 U
Atrazine	6200 U	6100 U	6100 U	540 U
Pentachlorophenol	16000 U	15000 U	15000 U	1400 U
Phenanthrene	1300 J	1800 J	810 J	320 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-15
Semi-Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD03A Duplicate Sediment	SD03B	SD03C	SD04A
TtFW Sample I.D.	LVBIA-SD03D-01	LVBIA-SD03B-01	LVBIA-SD03C-01	LVBIA-SD04A-01
Depth	0"-6"	6"-12"	12"-18"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Anthracene	6200 U	6100 U	6100 U	540 U
Carbazole	6200 U	6100 U	6100 U	540 U
Di-n-butylphthalate	6200 U	6100 U	6100 U	540 U
Fluoranthene	3500 J	5300 J	2200 J	480 J
Pyrene	2600 J	3900 J	1700 J	360 J
Butylbenzylphthalate	6200 U	6100 U	6100 U	540 U
3,3'-Dichlorobenzidine	6200 U	6100 U	6100 U	540 U
Benzo(a)anthracene	1300 J	1800 J	830 J	200 J
Chrysene	1800 J	2500 J	1000 J	230 J
bis(2-Ethylhexyl)phthalate	22000	40000	27000	1200
Di-n-octylphthalate	3100 J	4400 J	1200 J	540 U
Benzo(b)fluoranthene	1600 J	1700 J	950 J	200 J
Benzo(k)fluoranthene	1500 J	2500 J	890 J	190 J
Benzo(a)pyrene	1400 J	2000 J	850 J	190 J
Indeno(1,2,3-cd)pyrene	690 J	1200 J	6100 U	89 J
Dibenzo(a,h)anthracene	6200 U	6100 U	6100 U	540 U
Benzo(g,h,i)perylene	6200 U	900 J	6100 U	55 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-15
Semi-Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries
Location	SD04B	SD05A	SD05B
TtFW Sample I.D.	LVBIA-SD04B-01	LVBIA-SD05A-01	LVBIA-SD05B-01
Depth	6"-10"	0"-6"	6"-12"
Sampling Date	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg
Benzaldehyde	510 UJ	540 UJ	510 UJ
Phenol	510 U	540 U	510 U
bis-(2-Chloroethyl) ether	510 U	540 U	510 U
2-Chlorophenol	510 U	540 U	510 U
2-Methylphenol	510 U	540 U	510 U
2,2'-oxybis(1-Chloropropane)	510 U	540 U	510 U
Acetophenone	510 U	540 U	510 U
4-Methylphenol	510 U	540 U	510 U
N-Nitroso-di-n-propylamine	510 U	540 U	510 U
Hexachloroethane	510 U	540 U	510 U
Nitrobenzene	510 U	540 U	510 U
Isophorone	510 U	540 U	510 U
2-Nitrophenol	510 U	540 U	510 U
2,4-Dimethylphenol	510 U	540 U	510 U
bis(2-Chloroethoxy)methane	510 U	540 U	510 U
2,4-Dichlorophenol	510 U	540 U	510 U
Naphthalene	510 U	540 U	510 U
4-Chloroaniline	510 U	540 U	510 U
Hexachlorobutadiene	510 U	540 U	510 U
Caprolactam	510 U	540 U	510 U
4-Chloro-3-methylphenol	510 U	540 U	510 U
2-Methylnaphthalene	510 U	540 U	510 U
Hexachlorocyclopentadiene	510 U	540 U	510 U
2,4,6-Trichlorophenol	510 U	540 U	510 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-15
Semi-Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries	
Location	SD04B		SD05A		SD05B	
TtFW Sample I.D.	LVBIA-SD04B-01		LVBIA-SD05A-01		LVBIA-SD05B-01	
Depth	6"-10"		0"-6"		6"-12".	
Sampling Date	12/13/00		12/13/00		12/13/00	
Units	ug/Kg		ug/Kg		ug/Kg	
2,4,5-Trichlorophenol	1300	U	1400	U	1300	U
1,1'-Biphenyl	510	U	540	U	510	U
2-Chloronaphthalene	510	U	540	U	510	U
2-Nitroaniline	1300	U	1400	U	1300	U
Dimethylphthalate	510	U	540	U	510	U
2,6-Dinitrotoluene	510	U	540	U	510	U
Acenaphthylene	510	U	540	U	510	U
3-Nitroaniline	1300	U	1400	U	1300	U
Acenaphthene	510	U	540	U	510	U
2,4-Dinitrophenol	1300	U	1400	U	1300	U
4-Nitrophenol	1300	U	1400	U	1300	U
Dibenzofuran	510	U	540	U	510	U
2,4-Dinitrotoluene	510	U	540	U	510	U
Diethylphthalate	510	U	540	U	510	U
Fluorene	510	U	540	U	510	U
4-Chlorophenyl-phenyl ether	510	U	540	U	510	U
4-Nitroaniline	1300	U	1400	U	1300	U
4,6-Dinitro-2-methylphenol	1300	U	1400	U	1300	U
N-Nitrosodiphenylamine	510	U	540	U	510	U
4-Bromophenyl-phenylether	510	U	540	U	510	U
Hexachlorobenzene	510	U	540	U	510	U
Atrazine	510	U	540	U	510	U
Pentachlorophenol	1300	U	1400	U	1300	U
Phenanthrene	280	J	67	J	54	J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-15
Semi-Volatile Organic Compounds - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries	
Location	SD04B		SD05A		SD05B	
TtFW Sample I.D.	LVBIA-SD04B-01		LVBIA-SD05A-01		LVBIA-SD05B-01	
Depth	6"-10"		0"-6"		6"-12"	
Sampling Date	12/13/00		12/13/00		12/13/00	
Units	ug/Kg		ug/Kg		ug/Kg	
Anthracene	57	J	540	U	510	U
Carbazole	510	U	540	U	510	U
Di-n-butylphthalate	510	U	540	U	510	U
Fluoranthene	550		170	J	200	J
Pyrene	430	J	140	J	170	J
Butylbenzylphthalate	510	U	66	J	77	J
3,3'-Dichlorobenzidine	510	U	540	U	510	U
Benzo(a)anthracene	280	J	90	J	110	J
Chrysene	330	J	110	J	130	J
bis(2-Ethylhexyl)phthalate	310	J	13000	D	10000	D
Di-n-octylphthalate	510	U	820		840	
Benzo(b)fluoranthene	280	J	94	J	100	J
Benzo(k)fluoranthene	290	J	82	J	120	J
Benzo(a)pyrene	240	J	83	J	95	J
Indeno(1,2,3-cd)pyrene	94	J	540	U	510	U
Dibenzo(a,h)anthracene	510	U	540	U	510	U
Benzo(g,h,i)perylene	510	U	540	U	510	U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-16
Pesticides/PCBs - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD01A	SD02A	SD02B	SD03A
TtFW Sample I.D.	LVBIA-SD01A-01	LVBIA-SD02A-01	LVBIA-SD02B-01	LVBIA-SD03A-01
Depth	0"-6"	0"-6"	6"-12"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	2.3 U	2.3 U	2.3 U	3.9 UJ
beta-BHC	2.3 U	2.3 U	2.3 U	3.9 UJ
delta-BHC	2.3 U	2.3 U	2.3 U	3.9 UJ
gamma-BHC (Lindane)	2.3 U	2.3 U	2.3 U	3.9 UJ
Heptachlor	2.3 U	2.3 U	2.3 U	3.9 UJ
Aldrin	2.3 U	2.3 U	2.3 U	3.9 UJ
Heptachlor epoxide	2.3 U	2.3 U	2.3 U	3.9 UJ
Endosulfan I	2.3 U	2.3 U	2.3 U	3.9 UJ
Dieldrin	4.4 U	4.5 U	4.5 U	7.6 UJ
4,4'-DDE	4.4 U	4.5 U	4.5 U	7.6 UJ
Endrin	4.4 U	4.5 U	4.5 U	7.6 UJ
Endosulfan II	4.4 U	4.5 U	4.5 U	7.6 UJ
4,4'-DDD	4.4 U	4.5 U	4.5 U	7.6 UJ
Endosulfan sulfate	4.4 U	4.5 U	4.5 U	7.6 UJ
4,4'-DDT	4.4 U	4.5 U	4.5 U	7.6 UJ
Methoxychlor	23 U	23 U	23 U	39 UJ
Endrin ketone	4.4 U	4.5 U	4.5 U	7.6 UJ
Endrin aldehyde	4.4 U	4.5 U	4.5 U	7.6 UJ
alpha-Chlordane	2.3 U	2.3 U	2.3 U	3.9 UJ
gamma-Chlordane	2.3 U	2.3 U	2.3 U	3.9 UJ
Toxaphene	230 U	230 U	230 U	390 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-16
Pesticides/PCBs - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD01A	SD02A	SD02B	SD03A
TtFW Sample I.D.	LVBIA-SD01A-01	LVBIA-SD02A-01	LVBIA-SD02B-01	LVBIA-SD03A-01
Depth	0"-6"	0"-6"	6"-12"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	44 U	45 U	45 U	76 UJ
Aroclor-1221	90 U	91 U	92 U	150 UJ
Aroclor-1232	44 U	45 U	45 U	76 UJ
Aroclor-1242	44 U	45 U	45 U	76 UJ
Aroclor-1248	44 U	45 U	45 U	76 UJ
Aroclor-1254	44 U	45 U	45 U	76 UJ
Aroclor-1260	44 U	45 U	45 U	76 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-16
Pesticides/PCBs - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD03A Duplicate Sediment	SD03B	SD03C	SD04A
TtFW Sample I.D.	LVBIA-SD03D-01	LVBIA-SD03B-01	LVBIA-SD03C-01	LVBIA-SD04A-01
Depth	0"-6"	6"-12"	12"-18"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	3.2 U	3.1 U	3.1 U	2.8 U
beta-BHC	3.2 U	3.1 U	3.1 U	2.8 U
delta-BHC	3.2 U	3.1 U	3.1 U	2.8 U
gamma-BHC (Lindane)	3.2 U	3.1 U	3.1 U	2.8 U
Heptachlor	3.2 U	3.1 U	3.1 U	2.8 U
Aldrin	3.2 U	3.1 U	3.1 U	2.8 U
Heptachlor epoxide	3.2 U	3.1 U	3.1 U	2.8 U
Endosulfan I	3.2 U	3.1 U	3.1 U	2.8 U
Dieldrin	6.1 U	6.1 U	6.0 U	5.4 U
4,4'-DDE	6.1 U	6.1 U	6.0 U	5.4 U
Endrin	6.1 U	6.1 U	6.0 U	5.4 U
Endosulfan II	6.1 U	6.1 U	6.0 U	5.4 U
4,4'-DDD	6.1 U	6.1 U	6.0 U	5.4 U
Endosulfan sulfate	6.1 U	6.1 U	6.0 U	5.4 U
4,4'-DDT	6.1 U	6.1 U	6.0 U	5.4 U
Methoxychlor	32 U	31 U	31 U	28 U
Endrin ketone	6.1 U	6.1 U	6.0 U	5.4 U
Endrin aldehyde	6.1 U	6.1 U	6.0 U	5.4 U
alpha-Chlordane	3.2 U	3.1 U	3.1 U	2.8 U
gamma-Chlordane	3.2 U	3.1 U	3.1 U	2.8 U
Toxaphene	320 U	310 U	310 U	280 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-16
Pesticides/PCBs - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SD03A	SD03B	SD03C	SD04A
	Duplicate Sediment			
TtFW Sample I.D.	LVBIA-SD03D-01	LVBIA-SD03B-01	LVBIA-SD03C-01	LVBIA-SD04A-01
Depth	0"-6"	6"-12"	12"-18"	0"-6"
Sampling Date	12/13/00	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	61 U	61 U	60 U	54 U
Aroclor-1221	120 U	120 U	120 U	110 U
Aroclor-1232	61 U	61 U	60 U	54 U
Aroclor-1242	61 U	61 U	60 U	54 U
Aroclor-1248	61 U	61 U	60 U	54 U
Aroclor-1254	61 U	61 U	60 U	54 U
Aroclor-1260	61 U	61 U	60 U	54 U

TABLE D-16
Pesticides/PCBs - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries
Location	SD04B	SD05A	SD05B
TtFW Sample I.D.	LVBIA-SD04B-01	LVBIA-SD05A-01	LVBIA-SD05B-01
Depth	6"-10"	0"-6"	6"-12"
Sampling Date	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	2.6 U	2.8 U	2.6 U
beta-BHC	2.6 U	2.8 U	2.6 U
delta-BHC	2.6 U	2.8 U	2.6 U
gamma-BHC (Lindane)	2.6 U	2.8 U	2.6 U
Heptachlor	2.6 U	2.8 U	2.6 U
Aldrin	2.6 U	2.8 U	2.6 U
Heptachlor epoxide	2.6 U	2.8 U	2.6 U
Endosulfan I	2.6 U	2.8 U	2.6 U
Dieldrin	5.1 U	5.4 U	5.1 U
4,4'-DDE	5.1 U	5.4 U	5.1 U
Endrin	5.1 U	5.4 U	5.1 U
Endosulfan II	5.1 U	5.4 U	5.1 U
4,4'-DDD	5.1 U	5.4 U	5.1 U
Endosulfan sulfate	5.1 U	5.4 U	5.1 U
4,4'-DDT	5.1 U	5.4 U	5.1 U
Methoxychlor	26 U	28 U	26 U
Endrin ketone	5.1 U	5.4 U	5.1 U
Endrin aldehyde	5.1 U	5.4 U	5.1 U
alpha-Chlordane	2.6 U	2.8 U	2.6 U
gamma-Chlordane	2.6 U	2.8 U	2.6 U
Toxaphene	260 U	280 U	260 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-16
Pesticides/PCBs - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries
Location	SD04B	SD05A	SD05B
TtFW Sample I.D.	LVBIA-SD04B-01	LVBIA-SD05A-01	LVBIA-SD05B-01
Depth	6"-10"	0"-6"	6"-12"
Sampling Date	12/13/00	12/13/00	12/13/00
Units	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	51 U	54 U	51 U
Aroclor-1221	100 U	110 U	100 U
Aroclor-1232	51 U	54 U	51 U
Aroclor-1242	51 U	54 U	51 U
Aroclor-1248	51 U	54 U	51 U
Aroclor-1254	51 U	54 U	51 U
Aroclor-1260	51 U	54 U	51 U

TABLE D-17
Metals - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SD01A		SD02A		SD02B		SD03A	
TtFW Sample I.D.	LVBIA-SD01A-01		LVBIA-SD02A-01		LVBIA-SD02B-01		LVBIA-SD03A-01	
Depth	0"-6"		0"-6"		6"-12"		0"-6"	
Sampling Date	12/13/00		12/13/00		12/13/00		12/13/00	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
ALUMINUM	7690		9290		7700		11200	J
ANTIMONY	5.3	UJ	7.0	UJ	6.0	UJ	9.7	UJ
ARSENIC	9.0		7.7		9.1		6.9	J
BARIUM	100		125		102		147	J
BERYLLIUM	0.20	B	0.20	B	0.14	B	0.090	UJ
CADMIUM	0.25	B	0.16	B	0.28	B	0.81	BJ
CALCIUM	1180	B	1480	B	1140	B	3860	J
CHROMIUM	9.6		11.8		9.6		24.1	J
COBALT	8.6	B	10.1	B	8.6	B	10.7	BJ
COPPER	11.8	J	15.1	J	11.3	J	38.3	J
IRON	22100		21600		20700		19900	J
LEAD	12.3		18.3		14.8		92.4	J
MAGNESIUM	2410		2600		2270		3620	J
MANGANESE	504		310		244		197	J
MERCURY	0.060	U	0.080	U	0.070	U	0.11	UJ
NICKEL	17.5		19.1		16.7		24.1	J
POTASSIUM	648	B	1200	B	913	B	1460	BJ
SELENIUM	1.1	BJ	1.7	J	0.81	BJ	2.1	BJ
SILVER	0.74	B	0.85	B	0.73	B	0.77	BJ
SODIUM	237	U	313	U	268	U	432	UJ
THALLIUM	0.92	U	1.2	U	1.0	U	1.7	UJ
VANADIUM	10.2	B	12.9	B	10.7	B	17.4	BJ
ZINC	58.8		67.4		54.7		277	J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-17
Metals - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries		Bush Industries	
Location	SD03A		SD03B		SD03C		SD04A	
	Duplicate Sediment							
TtFW Sample I.D.	LVBIA-SD03D-01		LVBIA-SD03B-01		LVBIA-SD03C-01		LVBIA-SD04A-01	
Depth	0"-6"		6"-12"		12"-18"		0"-6"	
Sampling Date	12/13/00		12/13/00		12/13/00		12/13/00	
Units	mg/kg		mg/kg		mg/kg		mg/kg	
ALUMINUM	9240	J	10800	J	6770		10400	
ANTIMONY	9.4	UJ	8.8	UJ	7.4	UJ	6.7	UJ
ARSENIC	6.1	J	6.1	J	4.6		8.7	
BARIUM	128	J	130	J	84.7		161	
BERYLLIUM	0.090	UJ	0.080	BJ	0.070	B	0.19	B
CADMIUM	0.70	BJ	0.57	BJ	0.24	B	0.13	B
CALCIUM	4420	J	2500	J	1560	B	1590	
CHROMIUM	23.7	J	18.8	J	10.7		13.2	
COBALT	8.9	BJ	10.5	BJ	6.9	B	10.8	B
COPPER	39.7	J	28.2	J	17.7	J	13.7	J
IRON	17500	J	19800	J	13100		21900	
LEAD	89.0	J	71.8	J	38.8		27.6	
MAGNESIUM	3570	J	3220	J	1940		2590	
MANGANESE	169	J	167	J	104		417	
MERCURY	0.11	UJ	0.10	UJ	0.090	U	0.080	U
NICKEL	20.8	J	22.5	J	14.3		20.0	
POTASSIUM	1140	BJ	1340	BJ	902	B	1070	B
SELENIUM	2.2	J	1.4	BJ	1.2	BJ	1.5	BJ
SILVER	0.61	UJ	0.82	BJ	0.48	B	0.75	B
SODIUM	419	UJ	391	UJ	329	U	300	U
THALLIUM	1.6	UJ	1.5	UJ	1.3	U	1.2	U
VANADIUM	15.1	BJ	15.9	BJ	10.1	B	14.8	B
ZINC	285	J	156	J	93.1		69.0	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-17
Metals - Sediments (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Bush Industries	
Location	SD04B		SD05A		SD05B	
TtFW Sample I.D.	LVBIA-SD04B-01		LVBIA-SD05A-01		LVBIA-SD05B-01	
Depth	6"-10"		0"-6"		6"-12"	
Sampling Date	12/13/00		12/13/00		12/13/00	
Units	mg/kg		mg/kg		mg/kg	
ALUMINUM	11300		9590		8050	
ANTIMONY	7.0	UJ	6.1	UJ	7.0	UJ
ARSENIC	4.5		4.5		4.0	
BARIUM	155		112		98.7	
BERYLLIUM	0.13	B	0.11	B	0.070	B
CADMIUM	0.19	B	0.23	B	0.23	B
CALCIUM	1930		1390	B	1570	B
CHROMIUM	13.9		11.9		10.4	
COBALT	10.2	B	7.6	B	6.4	B
COPPER	13.8	J	13.5	J	14.6	J
IRON	19100		16100		13100	
LEAD	23.2		15.6		14.8	
MAGNESIUM	2800		2290		2040	
MANGANESE	247		121		98.5	
MERCURY	0.080	U	0.070	U	0.080	U
NICKEL	20.6		17.0		14.8	
POTASSIUM	1190	B	981	B	904	B
SELENIUM	1.1	BJ	0.80	BJ	1.2	BJ
SILVER	0.71	B	0.51	B	0.59	B
SODIUM	310	U	273	U	312	U
THALLIUM	1.2	U	1.1	U	1.2	U
VANADIUM	16.0	B	12.9	B	10.6	B
ZINC	72.7		58.7		59.5	

See Table D-1 for abbreviations and data qualifiers.

TABLE D-18
Low Concentration Volatile Organic Compounds - Surface Water (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SWCCA1	SWCCA1N	SWCCA1S	SWCCA2
TtFW Sample I.D.	LV-SWCCA1-01 (approximately SWCCA1S)	LV-SWCCA1N-01	LV-SWCCA1S-01	LV-SWCCA2-01
Sampling Date	06/17/1998	07/15/1998	07/15/1998	07/15/1998
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	12	4 U	1 U	4 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	0.5 J	1 U	1 U	1 U
Methylene chloride	2 UJ	2 U	2 U	2 U
Acetone	6 UJ	15 UJ	5 UJ	21 UJ
Carbon disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	0.5 J	1 U	0.6 J
2-Butanone	5 UJ	5 UJ	R	6 UJ
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-18
Low Concentration Volatile Organic Compounds - Surface Water (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SWCCA1	SWCCA1N	SWCCA1S	SWCCA2
TtFW Sample I.D.	LV-SWCCA1-01 (approximately SWCCA1S)	LV-SWCCA1N-01	LV-SWCCA1S-01	LV-SWCCA2-01
Sampling Date	06/17/1998	07/15/1998	07/15/1998	07/15/1998
Units	ug/L	ug/L	ug/L	ug/L
)moform	1 U	1 U	1 U	1 U
Aethyl-2-pentanone	5 U	5 U	5 U	5 U
Hexanone	5 U	5 U	5 U	5 U
trachloroethene	1 U	1 U	1 U	1 U
,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
!-Dibromoethane	1 U	1 U	1 U	1 U
luene	1 U	1 U	1 U	1 U
ılorobenzene	1 U	1 U	1 U	1 U
ıylbenzene	1 U	1 U	1 U	1 U
/rene	1 U	1 U	1 U	1 U
lenes (total)	1 U	1 U	1 U	1 U
3-Dichlorobenzene	1 U	1 U	1 U	1 U
4-Dichlorobenzene	1 U	1 U	1 U	1 U
2-Dichlorobenzene	1 U	1 U	1 U	1 U
2-Dibromo-3-chloropropane	R	1 U	1 U	1 U
2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
tal Volatile TICs	--	--	--	--

Table D-1 for abbreviations and data qualifiers.

TABLE D-18
Low Concentration Volatile Organic Compounds - Surface Water (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SWCCA3	SWCCA1N	SWCCA1N-02	SWCCA1S
TtFW Sample I.D.	LV-SWCCA3-01	LV-SWCCA1N-02	LV-SWCCA5N-02 Duplicate of CCA1N-02	LV-SWCCA1S-02
Sampling Date	07/15/1998	07/28/1998	07/28/1998	07/28/1998
Units	ug/L	ug/L	ug/L	ug/L
hloromethane	1 U	1 U	2 J	1 U
romomethane	1 U	1 U	1 U	1 U
inyl chloride	1 U	1 U	1 U	1 U
hloroethane	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	0.4 J	2 U
cetone	R	R	R	R
arbon disulfide	1 U	1 U	1 U	1 U
,1-Dichloroethene	1 U	1 U	1 U	1 U
,1-Dichloroethane	1 U	1 U	1 U	1 U
is-1,2-Dichloroethene	1 U	1 U	1 U	1 U
ans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
hloroform	1 U	1 U	1 U	1 U
,2-Dichloroethane	1 U	1 U	1 U	1 U
-Butanone	R	R	R	R
romochloromethane	1 U	1 U	1 U	1 U
,1,1-Trichloroethane	1 U	1 U	1 U	1 U
arbon tetrachloride	1 U	1 U	1 U	1 U
romodichloromethane	1 U	1 U	1 U	1 U
,2-Dichloropropane	1 U	1 U	1 U	1 U
is-1,3-Dichloropropene	1 U	1 U	1 U	1 U
richloroethene	1 U	1 U	1 U	1 U
ibromochloromethane	1 U	1 U	1 U	1 U
,1,2-Trichloroethane	1 U	1 U	1 U	1 U
enzene	1 U	1 U	1 U	1 U
rans-1,3-Dichloropropene	1 U	1 U	1 U	1 U

e Table D-1 for abbreviations and data qualifiers.

TABLE D-18
Low Concentration Volatile Organic Compounds - Surface Water (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SWCCA3	SWCCA1N	SWCCA1N-02	SWCCA1S
TtFW Sample I.D.	LV-SWCCA3-01	LV-SWCCA1N-02	LV-SWCCA5N-02 Duplicate of CCA1N-02	LV-SWCCA1S-02
Sampling Date	07/15/1998	07/28/1998	07/28/1998	07/28/1998
Units	ug/L	ug/L	ug/L	ug/L
ıoform	1 U	1 U	1 U	1 U
lethyl-2-pentanone	5 U	5 U	5 U	5 U
lexanone	5 U	R	R	R
rachloroethene	1 U	1 U	1 U	1 U
,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
-Dibromoethane	1 U	1 U	1 U	1 U
uene	1 U	1 U	1 U	1 U
lorobenzene	1 U	1 U	1 U	1 U
ıylbenzene	1 U	1 U	1 U	1 U
rene	1 U	1 U	1 U	1 U
enes (total)	1 U	1 U	1 U	1 U
-Dichlorobenzene	1 U	1 U	1 U	1 U
-Dichlorobenzene	1 U	1 U	1 U	1 U
-Dichlorobenzene	1 U	1 U	1 U	1 U
-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U
,4-Trichlorobenzene	1 U	1 U	1 U	1 U
tal Volatile TICs	--	--	--	--

TABLE D-18
Low Concentration Volatile Organic Compounds - Surface Water (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SWCCA2	SWCCA3
TtFW Sample I.D.	LV-SWCCA2-02	LV-SWCCA3-02
Sampling Date	07/28/1998	07/28/1998
Units	ug/L	ug/L
Chloromethane	7	2 J
Bromomethane	1 U	1 U
Vinyl chloride	1 U	1 U
Chloroethane	1 U	1 U
Methylene chloride	2	2 U
Acetone	13 J	R
Carbon disulfide	1 U	1 U
1,1-Dichloroethene	1 U	1 U
1,1-Dichloroethane	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U
Chloroform	1 U	1 U
1,2-Dichloroethane	1 U	1 U
2-Butanone	R	R
Bromochloromethane	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U
Carbon tetrachloride	1 U	1 U
Bromodichloromethane	1 U	1 U
1,2-Dichloropropane	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U
Trichloroethene	1 U	1 U
Dibromochloromethane	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U
Benzene	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-18
Low Concentration Volatile Organic Compounds - Surface Water (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	SWCCA2	SWCCA3
TtFW Sample I.D.	LV-SWCCA2-02	LV-SWCCA3-02
Sampling Date	07/28/1998	07/28/1998
Units	ug/L	ug/L
Bromoform	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U
2-Hexanone	R	R
Tetrachloroethene	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U
1,2-Dibromoethane	1 U	1 U
Toluene	1 U	1 U
Chlorobenzene	1 U	1 U
Ethylbenzene	1 U	1 U
Styrene	1 U	1 U
Xylenes (total)	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U
Total Volatile TICs	--	--

Table D-19
Low Concentration Volatile Organic Compounds - Surface Water (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SW01	SW02	SW03	Duplicate of SW03	SW04
TtFW Sample I.D.	LV-BIA-SW01-01	LV-BIA-SW02-01	LV-BIA-SW03-01	LV-BIA-SW06-01	LV-BIA-SW04-01
Sampling Date	12/11/00	12/11/00	12/11/00	12/11/00	12/11/00
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Chloroethane	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U	2 U	2 U
Acetone	R	R	R	R	R
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	12	12	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U
2-Butanone	R	R	R	R	R
Bromochloromethane	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	19	18	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

Table D-19
Low Concentration Volatile Organic Compounds - Surface Water (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SW01	SW02	SW03	Duplicate of SW03	SW04
TtFW Sample I.D.	LV-BIA-SW01-01	LV-BIA-SW02-01	LV-BIA-SW03-01	LV-BIA-SW06-01	LV-BIA-SW04-01
Sampling Date	12/11/00	12/11/00	12/11/00	12/11/00	12/11/00
Units	ug/L	ug/L	ug/L	ug/L	ug/L
ıns-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U
'omoform	1 U	1 U	1 U	1 U	1 U
Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U
Hexanone	R	R	R	R	R
ətrachloroethene	1 U	1 U	1 U	1 U	1 U
1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U
2-Dibromoethane	1 U	1 U	1 U	1 U	1 U
ɔluene	1 U	1 U	1 U	1 U	1 U
hlorobenzene	1 U	1 U	1 U	1 U	1 U
:hylbenzene	1 U	1 U	1 U	1 U	1 U
lyrene	1 U	1 U	1 U	1 U	1 U
ylenes (total)	1 U	1 U	1 U	1 U	1 U
,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U
4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U
2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U
2-Dibromo-3-chloropropane	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2,4-Trichlorobenzene	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
ɨtal Volatile TICs	--	--	--	--	--

e Table D-1 fo bbreviations and data qualifiers.

Table D-20
Low Concentration Volatile Organic Compounds - Surface Water (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Ninth Street Landfill	King Windows (Second Street)	King Windows (Second Street)
Location	SW-RRAA	SW-9TH	SW-2ND	SW-2ND
TtFW Sample I.D.	LV-SW03-RRAA	LV-SW03-9TH	LV-SW03-2ND	LV-SW03-KWA Duplicate
Sampling Date	10/08/03	10/08/03	10/08/03	10/08/03
Units	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	0.5 UJ	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 UJ	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
2-Hexanone	5 U	5 U	5 U	5 U
Acetone	5 U	R	R	R
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 UJ	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 UJ	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-20
Low Concentration Volatile Organic Compounds - Surface Water (2003)
Little Valley Superfund Site

Area	Railroad Avenue	Ninth Street Landfill	King Windows (Second Street)	King Windows (Second Street)
Location	SW-RRAA	SW-9TH	SW-2ND	SW-2ND
TtFW Sample I.D.	LV-SW03-RRAA	LV-SW03-9TH	LV-SW03-2ND	LV-SW03-KWA Duplicate
Sampling Date	10/08/03	10/08/03	10/08/03	10/08/03
Units	ug/L	ug/L	ug/L	ug/L
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 UJ	R	R	R
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Methyl ethylketone	5 U	5 U	5 U	5 U
Methyl isobutyl ketone (MIBK)	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
Methylene chloride	0.5 U	0.5 U	0.5 U	0.5 U
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 UJ	0.5 U	0.5 U
Trichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	--	--	--

Table D-20
Low Concentration Volatile Organic Compounds - Surface Water (2003)
Little Valley Superfund Site

Area	First Street	Great Triangle	Great Triangle	Great Triangle
Location	SW-1ST	SW-EDSA	SW-TSW	SW-WBH
TtFW Sample I.D.	LV-SW03-1ST	LV-SW03-EDSA	LV-SW03-TSW	LV-SW03-WBH
Sampling Date	10/09/03	10/09/03	10/09/03	10/09/03
Units	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 UJ
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 UJ
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
2-Hexanone	5 U	5 U	5 U	5 U
Acetone	5 UJ	5 UJ	5 UJ	5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-20
Low Concentration Volatile Organic Compounds - Surface Water (2003)
Little Valley Superfund Site

Area	First Street	Great Triangle	Great Triangle	Great Triangle
Location	SW-1ST	SW-EDSA	SW-TSW	SW-WBH
TtFW Sample I.D.	LV-SW03-1ST	LV-SW03-EDSA	LV-SW03-TSW	LV-SW03-WBH
Sampling Date	10/09/03	10/09/03	10/09/03	10/09/03
Units	ug/L	ug/L	ug/L	ug/L
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.31 J
Methyl ethylketone	5 U	5 U	5 U	5 U
Methyl isobutyl ketone (MIBK)	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.5 U	0.5 U	0.5 U	0.5 U
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	0.63 J	--	--

Table D-20
Low Concentration Volatile Organic Compounds - Surface Water (2003)
Little Valley Superfund Site

Area	Great Triangle	Whig Street	Luminite	Luminite
Location	SW-WIN	SW-WHIG	SW-LUMN	SW-LUMP
TtFW Sample I.D.	LV-SW03-WIN	LV-SW03-WHIG	LV-SW03-LUMN	LV-SW03-LUMP
Sampling Date	10/09/03	10/09/03	10/09/03	10/09/03
Units	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
2-Hexanone	5 U	5 U	5 U	5 U
Acetone	5 UJ	5 UJ	5 UJ	5 UJ
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-20
Low Concentration Volatile Organic Compounds - Surface Water (2003)
Little Valley Superfund Site

Area	Great Triangle	Whig Street	Luminite	Luminite
Location	SW-WIN	SW-WHIG	SW-LUMN	SW-LUMP
TtFW Sample I.D.	LV-SW03-WIN	LV-SW03-WHIG	LV-SW03-LUMN	LV-SW03-LUMP
Sampling Date	10/09/03	10/09/03	10/09/03	10/09/03
Units	ug/L	ug/L	ug/L	ug/L
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Methyl ethylketone	5 U	5 U	5 U	5 U
Methyl isobutyl ketone (MIBK)	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.5 U	0.5 U	0.5 U	0.5 U
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
Trichloroethylene	0.37 J	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	--	--	--

Table D-20
Low Concentration Volatile Organic Compounds - Surface Water (2003)
Little Valley Superfund Site

Area	Luminite	State Street
Location	SW-LUMS	SW-STATE
TtFW Sample I.D.	LV-SW03-LUMS	LV-SW03-STATE
Sampling Date	10/09/03	10/09/03
Units	ug/L	ug/L
1,1,1-Trichloroethane	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 UJ	0.5 UJ
1,1-Dichloroethane	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U
2-Hexanone	5 U	5 U
Acetone	5 UJ	5 UJ
Benzene	0.5 U	0.5 U
Benzene,1-methylethyl-	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U
Chloroethane	0.5 UJ	0.5 UJ
Chloroform	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 UJ	0.5 UJ
Cyclohexane	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-20
Low Concentration Volatile Organic Compounds - Surface Water (2003)
Little Valley Superfund Site

Area	Luminite	State Street
Location	SW-LUMS	SW-STATE
TtFW Sample I.D.	LV-SW03-LUMS	LV-SW03-STATE
Sampling Date	10/09/03	10/09/03
Units	ug/L	ug/L
Dichlorodifluoromethane	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U
m-Dichlorobenzene	0.5 U	0.5 U
Methyl Acetate	0.5 UJ	0.5 UJ
Methyl bromide	0.5 U	0.5 U
Methyl chloride	0.5 U	0.5 U
Methyl ethylketone	5 U	5 U
Methyl isobutyl ketone (MIBK)	5 U	5 U
Methyl tert-butyl ether	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U
Methylene chloride	0.5 U	0.5 U
o-Dichlorobenzene	0.5 U	0.5 U
p-Dichlorobenzene	0.5 U	0.5 U
Styrene	0.5 U	0.5 U
Tetrachloroethylene	0.5 U	0.5 U
Toluene	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 UJ	0.5 UJ
Trichloroethylene	0.31 J	0.5 U
Trichlorofluoromethane	0.5 UJ	0.5 UJ
Vinyl chloride	0.5 U	0.5 U
Xylene (total)	0.5 U	0.5 U
Total Volatile TICs	--	--

Table D-21
Low Concentration Semi-Volatile Organic Compounds - Surface Water (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SW01	SW02	SW03	Duplicate of SW03	SW04
TtFW Sample I.D.	LV-BIA-SW01-01	LV-BIA-SW02-01	LV-BIA-SW03-01	LV-BIA-SW06-01	LV-BIA-SW04-01
Sampling Date	12/11/00	12/11/00	12/11/00	12/11/00	12/11/00
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Phenol	5 U	5 U	5 U	5 U	5 U
bis-(2-Chloroethyl) ether	5 U	5 U	5 U	5 U	5 U
2-Chlorophenol	5 U	5 U	5 U	5 U	5 U
2-Methylphenol	5 U	5 U	5 U	5 U	5 U
2,2'-oxybis(1-Chloropropane)	5 U	5 U	5 U	5 U	5 U
4-Methylphenol	5 U	5 U	5 U	5 U	5 U
N-Nitroso-di-n-propylamine	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	5 U	5 U	5 U	5 U	5 U
Nitrobenzene	5 U	5 U	5 U	5 U	5 U
Isophorone	5 U	5 U	5 U	5 U	5 U
2-Nitrophenol	5 U	5 U	5 U	5 U	5 U
2,4-Dimethylphenol	5 U	5 U	5 U	5 U	5 U
bis(2-Chloroethoxy)methane	5 U	5 U	5 U	5 U	5 U
2,4-Dichlorophenol	5 U	5 U	5 U	5 U	5 U
Naphthalene	5 U	5 U	5 U	5 U	5 U
4-Chloroaniline	5 U	5 U	5 U	5 U	5 U
Hexachlorobutadiene	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
4-Chloro-3-methylphenol	5 U	5 U	5 U	5 U	5 U
2-Methylnaphthalene	5 U	5 U	5 U	5 U	5 U
Hexachlorocyclopentadiene	5 U	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	5 U	5 U	5 U	5 U	5 U
2,4,5-Trichlorophenol	20 U	20 U	20 U	20 U	20 U
2-Chloronaphthalene	5 U	5 U	5 U	5 U	5 U
2-Nitroaniline	20 U	20 U	20 U	20 UJ	20 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-21
Low Concentration Semi-Volatile Organic Compounds - Surface Water (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SW01	SW02	SW03	Duplicate of SW03	SW04
TtFW Sample I.D.	LV-BIA-SW01-01	LV-BIA-SW02-01	LV-BIA-SW03-01	LV-BIA-SW06-01	LV-BIA-SW04-01
Sampling Date	12/11/00	12/11/00	12/11/00	12/11/00	12/11/00
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Dimethylphthalate	5 U	5 U	5 U	5 U	5 U
Acenaphthylene	5 U	5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline	20 UJ	20 UJ	20 UJ	20 U	20 UJ
Acenaphthene	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrophenol	20 U	20 U	20 U	20 U	20 U
4-Nitrophenol	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U
Diethylphthalate	5 U	5 U	5 U	5 U	5 U
4-Chlorophenyl-phenyl ether	5 U	5 U	5 U	5 U	5 U
Fluorene	5 U	5 U	5 U	5 U	5 U
4-Nitroaniline	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
4,6-Dinitro-2-methylphenol	20 U	20 U	20 U	20 U	20 U
N-Nitrosodiphenylamine	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
4-Bromophenyl-phenylether	5 U	5 U	5 U	5 U	5 U
Hexachlorobenzene	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Pentachlorophenol	20 U	20 U	20 U	20 U	20 U
Phenanthrene	5 U	5 U	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U	5 U	5 U
Di-n-butylphthalate	5 U	5 U	5 U	5 U	5 U
Fluoranthene	5 U	5 U	5 U	5 U	5 U
Pyrene	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	5 U	5 U	5 U	5 U	5 U

e Table D-1 f[illegible]bbreviations and data qualifiers.

Table D-21
Low Concentration Semi-Volatile Organic Compounds - Surface Water (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SW01	SW02	SW03	Duplicate of SW03	SW04
TtFW Sample I.D.	LV-BIA-SW01-01	LV-BIA-SW02-01	LV-BIA-SW03-01	LV-BIA-SW06-01	LV-BIA-SW04-01
Sampling Date	12/11/00	12/11/00	12/11/00	12/11/00	12/11/00
Units	ug/L	ug/L	ug/L	ug/L	ug/L
3,3'-Dichlorobenzidine	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Benzo(a)anthracene	5 U	5 U	5 U	5 U	5 U
Chrysene	5 U	5 U	5 U	5 U	5 U
bis(2-Ethylhexyl)phthalate	5 U	5 U	3 J	8	5 U
Di-n-octylphthalate	5 U	5 U	5 U	5 U	5 U
Benzo(b)fluoranthene	5 U	5 U	5 U	5 U	5 U
Benzo(k)fluoranthene	5 U	5 U	5 U	5 U	5 U
Benzo(a)pyrene	5 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	5 U	5 U	5 U	5 U	5 U
Dibenzo(a,h)anthracene	5 U	5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene	5 U	5 U	5 U	5 U	5 U
Total Semi-Volatile TICs	--	--	--	34 J	--

ee Table D-1 for abbreviations and data qualifiers.

Table D-22
Low Concentration Pesticides/PCBs - Surface Water (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SW01	SW02	SW03	Duplicate of SW03	SW04
TtFW Sample I.D.	LV-BIA-SW01-01	LV-BIA-SW02-01	LV-BIA-SW03-01	LV-BIA-SW06-01	LV-BIA-SW04-01
Sampling Date	12/11/00	12/11/00	12/11/00	12/11/00	12/11/00
Units	ug/L	ug/L	ug/L	ug/L	ug/L
alpha-BHC	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
beta-BHC	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
delta-BHC	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
gamma-BHC (Lindane)	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Heptachlor	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aldrin	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Heptachlor epoxide	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Endosulfan I	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Dieldrin	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
4,4'-DDE	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endrin	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endosulfan II	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
4,4'-DDD	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endosulfan sulfate	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
4,4'-DDT	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Methoxychlor	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endrin ketone	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endrin aldehyde	0.020 U	0.020 U	0.023 J	0.020 U	0.020 U
alpha-Chlordane	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
gamma-Chlordane	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Toxaphene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

See Table D-1 for abbreviations and data qualifiers.

Table D-22
Low Concentration Pesticides/PCBs - Surface Water (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SW01	SW02	SW03	Duplicate of SW03	SW04
TtFW Sample I.D.	LV-BIA-SW01-01	LV-BIA-SW02-01	LV-BIA-SW03-01	LV-BIA-SW06-01	LV-BIA-SW04-01
Sampling Date	12/11/00	12/11/00	12/11/00	12/11/00	12/11/00
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Aroclor-1016	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Aroclor-1232	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

e Table D-1 f[illegible]bbreviations and data qualifiers.

TABLE D-23
Metals - Surface Water (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	SW01	SW02	SW03	Duplicate of SW03	SW04
TtFW Sample I.D.	LV-BIA-SW01-01	LV-BIA-SW02-01	LV-BIA-SW03-01	LV-BIA-SW06-01	LV-BIA-SW04-01
Sampling Date	12/11/00	12/11/00	12/11/00	12/11/00	12/11/00
Units	ug/L	ug/L	ug/L	ug/L	ug/L
ALUMINUM	112 B	152 B	813	2000	230
ANTIMONY	21.5 U	21.5 U	21.5 U	21.5 U	21.5 U
ARSENIC	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
BARIUM	40.2 B	39.6 B	79.8 B	89.0 B	41.4 B
BERYLLIUM	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
CADMIUM	0.40 U	0.40 U	0.40 U	0.40 B	0.40 U
CALCIUM	13200	13000	21000	21000	12600
CHROMIUM	1.0 U	1.0 U	1.5 B	4.0 B	1.0 U
COBALT	2.0 U	2.0 U	2.0 U	2.0 B	2.0 U
COPPER	1.4 U	2.4 B	7.2 B	13.0 B	2.6 B
IRON	123	225	1620	3690	438
LEAD	1.9 U	1.9 U	9.8 J	20.2	2.4 BJ
MAGNESIUM	2210 B	2170 B	3520 B	3900 B	2130 B
MANGANESE	34.2	41.6	219	263	88.8
MERCURY	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
NICKEL	1.9 U	1.9 U	2.1 B	4.8 B	1.9 U
POTASSIUM	974 B	941 B	1390 B	1600 B	905 B
SELENIUM	2.2 BJ	2.0 U	2.0 U	2.6 BJ	2.0 U
SILVER	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
SODIUM	10700	9760	9470	9450	9450
THALLIUM	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
VANADIUM	1.7 U	1.7 U	1.7 U	3.0 B	1.7 U
ZINC	10.7 U	10.7 U	45.4	79.4	10.7 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area
Location	9LF1	9LF1	LV-2A	LV-1
TtFW Sample I.D.	LV-SB9LF1-66GW	LV-SB9LF1-70GW	LV-GWLV2A-01	LV-GWLV1-02
Sampling Date	06/25/1998	06/26/1998	07/15/1998	07/29/98
Matrix	SimulProbe	SimulProbe	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	2 U	1 U	1 U	9 J
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	1 U	2 U	2 U	2
Acetone	28 UJ	11 UJ	R	11 J
Carbon disulfide	1	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	0.2 J	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	0.3 J
2-Butanone	8 UJ	5 UJ	R	6 J
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	10	19	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Ninth Street Landfill Area
Location	9LF1	9LF1	LV-2A	LV-1
TtFW Sample I.D.	LV-SB9LF1-66GW	LV-SB9LF1-70GW	LV-GWLV2A-01	LV-GWLV1-02
Sampling Date	06/25/1998	06/26/1998	07/15/1998	07/29/98
Matrix	SimulProbe	SimulProbe	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
rans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	R
Tetrachloroethene	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	2	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Xylenes (total)	0.8 J	1 U	0.7 J	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	1 U	1 U
1,2,4-Trichlorobenzene	4	1 U	1 U	1 U
Total Volatile TICs	8 J	--	--	--

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Bush Industries Area	Bush Industries Area
Location	LV-1	LV-2A	BIA1	BIA1
TtFW Sample I.D.	LV-GWLV1-03	LV-GWLV2-02	LV-SBBIA1-45GW	LV-SBBIA1-46GW Duplicate of SBBIA1-45GW
Sampling Date	07/30/1998	07/30/1998	06/24/1998	06/24/1998
Matrix	Groundwater	Groundwater	SimulProbe	SimulProbe
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	2 J	27 JE	1 U	2 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	2 U	8 U	2 U	2 U
Acetone	87 J	19 J	13 UJ	15 UJ
Carbon disulfide	0.3 J	1 UJ	1	0.9 J
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 UJ	1 UJ	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	0.8 J	1 U	1 U
2-Butanone	R	R	2 J	3 J
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	0.3 J	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Ninth Street Landfill Area	Ninth Street Landfill Area	Bush Industries Area	Bush Industries Area
Location	LV-1	LV-2A	BIA1	BIA1
TtFW Sample I.D.	LV-GWLV1-03	LV-GWLV2-02	LV-SBBIA1-45GW	LV-SBBIA1-46GW Duplicate of SBBIA1-45GW
Sampling Date	07/30/1998	07/30/1998	06/24/1998	06/24/1998
Matrix	Groundwater	Groundwater	SimulProbe	SimulProbe
Units	ug/L	ug/L	ug/L	ug/L
ans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
romoform	1 U	1 U	1 U	1 U
-Methyl-2-pentanone	5 UJ	5 UJ	5 U	5 U
-Hexanone	R	R	5 U	5 U
etrachloroethene	1 U	1 U	1 U	1 U
,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
,2-Dibromoethane	1 U	1 U	1 U	1 U
oluene	1 U	1 U	1 U	1 U
hlorobenzene	1 U	1 U	1 U	1 U
thylbenzene	1 U	1 U	1 U	1 U
tyrene	1 U	1 U	1 U	1 U
ylenes (total)	1 U	1 U	1 U	1 U
,3-Dichlorobenzene	1 U	1 U	1 U	1 U
,4-Dichlorobenzene	1 U	1 U	1 U	1 U
,2-Dichlorobenzene	1 U	1 U	1 U	1 U
,2-Dibromo-3-chloropropane	1 U	1 U	R	R
,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
otal Volatile TICs	--	--	19 JN	17 JN

e Table D-1 fo[illegible]bbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	BIA1	BIA1	BIA2	BIA2
TtFW Sample I.D.	LV-SBBIA1-50GW	LV-SBBIA1-55GW	LV-SBBIA2-45GW	LV-SBBIA2-46GW Duplicate of SBBIA2-45GW
Sampling Date	06/24/1998	06/24/98	06/19/1998	06/19/1998
Matrix	SimulProbe	SimulProbe	SimulProbe	SimulProbe
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	2 U	1 U	2 U	2 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 UJ	2 UJ
Acetone	12 UJ	11 UJ	21 UJ	22 UJ
Carbon disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	3 J	2 J	6 UJ	6 UJ
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	0.8 J	1	1	1
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	0.6 J	1 UJ	1 U	1 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	BIA1	BIA1	BIA2	BIA2
TtFW Sample I.D.	LV-SBBIA1-50GW	LV-SBBIA1-55GW	LV-SBBIA2-45GW	LV-SBBIA2-46GW Duplicate of SBBIA2-45GW
Sampling Date	06/24/1998	06/24/98	06/19/1998	06/19/1998
Matrix	SimulProbe	SimulProbe	SimulProbe	SimulProbe
Units	ug/L	ug/L	ug/L	ug/L
ans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
romoform	1 U	1 U	1 U	1 U
-Methyl-2-pentanone	5 U	5 U	5 U	5 U
-Hexanone	5 U	5 U	5 U	5 U
etrachloroethene	1 U	1 U	1 U	1 U
,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
,2-Dibromoethane	1 U	1 U	1 U	1 U
oluene	1 J	0.9 J	1 U	1 U
hlorobenzene	1 UJ	1 UJ	1 U	1 U
thylbenzene	1 UJ	1 UJ	1 U	1 U
tyrene	1 UJ	1 UJ	1 U	1 U
ylenes (total)	0.9 J	1 UJ	1 U	1 U
,3-Dichlorobenzene	1 U	1 U	1 U	1 U
,4-Dichlorobenzene	1 U	1 U	1 U	1 U
,2-Dichlorobenzene	1 U	1 U	1 U	1 U
,2-Dibromo-3-chloropropane	R	R	R	R
,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
otal Volatile TICs	30 JN	8 JN	33 JN	39 JN

e Table D-1 fo bbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	BIA2	BIA2	BIA2	BIA3
TtFW Sample I.D.	LV-SBBIA2-50GW	LV-SBBIA2-57GW	LV-SBBIA2-60GW	LV-SBBIA3-52GW
Sampling Date	06/22/98	06/22/1998	06/23/1998	06/17/1998
Matrix	SimulProbe	SimulProbe	SimulProbe	SimulProbe
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	2 U
Acetone	6 UJ	28 UJ	13 UJ	9 UJ
Carbon disulfide	1 U	1 U	1	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	0.6 J	1 U	1 J	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	2 J	6 J	4 J	5 UJ
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	6	3	10	1
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 J	0.8 J	1 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	BIA2	BIA2	BIA2	BIA3
TtFW Sample I.D.	LV-SBBIA2-50GW	LV-SBBIA2-57GW	LV-SBBIA2-60GW	LV-SBBIA3-52GW
Sampling Date	06/22/98	06/22/1998	06/23/1998	06/17/1998
Matrix	SimulProbe	SimulProbe	SimulProbe	SimulProbe
Units	ug/L	ug/L	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	1 U	2 J	0.8 J	1 U
Chlorobenzene	1 U	1 UJ	1 U	1 U
Ethylbenzene	1 U	1 UJ	1 U	1 U
Styrene	1 U	1 UJ	1 U	1 U
Xylenes (total)	1 U	0.8 J	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
Total Volatile TICs	--	24 JN	21 JN	23 JN

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	BIA4	BIA5	BIA5	LV-4
TtFW Sample I.D.	LV-SBBIA4-45GW	LV-SBBIA5-40GW	LV-SBBIA5-47GW	LV-GWLV4-01
Sampling Date	07/06/98	07/08/1998	07/08/1998	07/14/98
Matrix	SimulProbe	SimulProbe	SimulProbe	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	0.8 J	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	2 U
Acetone	23 UJ	31 UJ	13 UJ	17 UJ
Carbon disulfide	1 U	3	0.6 J	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	7 UJ	6 UJ	5 UJ	5 UJ
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	0.8 J	1 UJ	0.6 J	1 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	BIA4	BIA5	BIA5	LV-4
TtFW Sample I.D.	LV-SBBIA4-45GW	LV-SBBIA5-40GW	LV-SBBIA5-47GW	LV-GWLV4-01
Sampling Date	07/06/98	07/08/1998	07/08/1998	07/14/98
Matrix	SimulProbe	SimulProbe	SimulProbe	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
rans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
3romoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	0.8 J	1 UJ	1	1 U
Chlorobenzene	1 U	1 UJ	1 U	1 U
Ethylbenzene	1 U	1 UJ	1 U	1 U
Styrene	1 U	1 UJ	1 U	1 U
Xylenes (total)	1 U	1 UJ	0.6 J	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R	1 U
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
Total Volatile TICs	56 JN	12 JN	7 JN	--

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	LV-7	LV-7	LV-4	LV-7
TtFW Sample I.D.	LV-GWLV7-01	LV-GWLV7-02	LV-GWLV4-02	LV-GWLV7-03
Sampling Date	07/09/1998	07/13/1998	07/29/1998	07/29/1998
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 UJ	4 U	5 UJ	1 UJ
Bromomethane	1 UJ	1 U	1 U	1 U
Vinyl chloride	1 UJ	1 U	1 U	1 U
Chloroethane	1 UJ	1 U	1 U	1 U
Methylene chloride	2 UJ	2 U	2 U	2 U
Acetone	10 UJ	9 UJ	R	R
Carbon disulfide	1 UJ	1 U	1 U	1 U
1,1-Dichloroethene	1 UJ	1 U	1 U	1 U
1,1-Dichloroethane	1 UJ	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 UJ	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 UJ	1 U	1 U	1 U
Chloroform	1 UJ	1 U	1 U	1 U
1,2-Dichloroethane	1 UJ	0.3 J	1 U	1 U
2-Butanone	5 UJ	R	R	R
Bromochloromethane	1 UJ	1 U	1 U	1 U
1,1,1-Trichloroethane	1 UJ	1 U	1 U	1 U
Carbon tetrachloride	1 UJ	1 U	1 U	1 U
Bromodichloromethane	1 UJ	1 U	1 U	1 U
1,2-Dichloropropane	1 UJ	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 UJ	1 U	1 U	1 U
Trichloroethene	1 UJ	1 U	1	1 U
Dibromochloromethane	1 UJ	1 U	1 U	1 U
1,1,2-Trichloroethane	1 UJ	1 U	1 U	1 U
Benzene	1 UJ	1 U	1 U	1 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Bush Industries Area	Bush Industries Area	Bush Industries Area	Bush Industries Area
Location	LV-7	LV-7	LV-4	LV-7
TtFW Sample I.D.	LV-GWLV7-01	LV-GWLV7-02	LV-GWLV4-02	LV-GWLV7-03
Sampling Date	07/09/1998	07/13/1998	07/29/1998	07/29/1998
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
rans-1,3-Dichloropropene	1 UJ	1 U	1 U	1 U
3romoform	1 UJ	1 U	1 U	1 U
4-Methyl-2-pentanone	5 UJ	5 U	5 U	5 U
2-Hexanone	5 UJ	5 U	R	R
Tetrachloroethene	1 UJ	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 UJ	1 U	1 U	1 U
1,2-Dibromoethane	1 UJ	1 U	1 U	1 U
Toluene	1 UJ	1 U	1 U	1 U
Chlorobenzene	1 UJ	1 U	1 U	1 U
Ethylbenzene	1 UJ	1 U	1 U	1 U
Styrene	1 UJ	1 U	1 U	1 U
Xylenes (total)	1 UJ	1 U	1 U	1 U
1,3-Dichlorobenzene	1 UJ	1 U	1 U	1 U
1,4-Dichlorobenzene	1 UJ	1 U	1 U	1 U
1,2-Dichlorobenzene	1 UJ	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 UJ	1 U	1 U	1 U
Total Volatile TICs	--	--	--	--

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	CCA1	CCA2	CCA3	MWCCA-1
TtFW Sample I.D.	LV-SBCCA1-30GW	LV-SBCCA2-06GW	LV-SBCCA3-33GW	LV-GWCCA1-01
Sampling Date	06/17/1998	06/16/1998	07/01/1998	07/16/1998
Matrix	SimulProbe	SimulProbe	SimulProbe	Groundwater
Units	ug/L	ug/kg	ug/L	ug/L
Chloromethane	1 U	13 UJ	1 U	1 U
Bromomethane	1 U	13 UJ	1 U	1 U
Vinyl chloride	1 U	13 UJ	1 U	1 U
Chloroethane	1 U	13 UJ	1 U	1 U
Methylene chloride	2 UJ	13 UJ	2 U	2 U
Acetone	11 UJ	13 UJ	14 UJ	29 UJ
Carbon disulfide	1 U	13 UJ	1 U	1 U
1,1-Dichloroethene	1 U	13 UJ	1 U	1 U
1,1-Dichloroethane	1 U	13 UJ	1 U	1 U
cis-1,2-Dichloroethene	1	13 UJ	1 U	0.2 J
trans-1,2-Dichloroethene	1 U	13 UJ	1 U	1 U
Chloroform	1 U	13 UJ	1 U	1 U
1,2-Dichloroethane	1 U	13 UJ	1 U	1 U
2-Butanone	5 UJ	13 UJ	5 UJ	9 UJ
Bromochloromethane	1 U	NA	1 U	1 U
1,1,1-Trichloroethane	1 U	13 UJ	1 U	1 U
Carbon tetrachloride	1 U	13 UJ	1 U	1 U
Bromodichloromethane	1 U	13 UJ	1 U	1 U
1,2-Dichloropropane	1 U	13 UJ	1 U	1 U
cis-1,3-Dichloropropene	1 U	13 UJ	1 U	1 U
Trichloroethene	36 D	9 J	12	3
Dibromochloromethane	1 U	13 UJ	1 U	1 U
1,1,2-Trichloroethane	1 U	13 UJ	1 U	1 U
Benzene	1 U	13 UJ	0.7 J	1 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	CCA1	CCA2	CCA3	MWCCA-1
TtFW Sample I.D.	LV-SBCCA1-30GW	LV-SBCCA2-06GW	LV-SBCCA3-33GW	LV-GWCCA1-01
Sampling Date	06/17/1998	06/16/1998	07/01/1998	07/16/1998
Matrix	SimulProbe	SimulProbe	SimulProbe	Groundwater
Units	ug/L	ug/kg	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	13 UJ	1 U	1 U
Bromoform	1 U	13 UJ	1 U	1 U
4-Methyl-2-pentanone	5 U	13 UJ	5 U	5 U
2-Hexanone	5 U	13 UJ	5 U	5 U
Tetrachloroethene	1 U	3 J	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	13 UJ	1 U	1 U
1,2-Dibromoethane	1 U	NA	1 U	1 U
Toluene	1 U	13 UJ	2 J	1 U
Chlorobenzene	1 U	13 UJ	1 UJ	1 U
Ethylbenzene	1 U	13 UJ	1 UJ	1 U
Styrene	1 U	13 UJ	1 UJ	1 U
Xylenes (total)	1 U	13 UJ	2 J	1 U
1,3-Dichlorobenzene	1 U	NA	1 U	1 U
1,4-Dichlorobenzene	1 U	NA	1 U	1 U
1,2-Dichlorobenzene	1 U	NA	1 U	1 U
1,2-Dibromo-3-chloropropane	R	NA	R	1 U
1,2,4-Trichlorobenzene	1 U	NA	1 U	1 U
Total Volatile TICs	2 JN	--	11 JN	--

e Table D-1 f[illegible]breviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	MWCCA-1	MWCCA-3	LV-3	MWCCA-1
TtFW Sample I.D.	LV-GWCCA4-01 Duplicate of GWCCA1-01	LV-GWCCA3-01	LV-GWLV3-01	LV-GWCCA1-02
Sampling Date	07/16/1998	07/16/1998	07/16/1998	07/30/1998
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	0.4 J	4 J
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	2 U
Acetone	33 UJ	40 UJ	R	R
Carbon disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	0.2 J	2	1 U	0.5 J
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	0.3 J	1 U
2-Butanone	11 UJ	10 UJ	R	R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	3	71 D	1 U	7
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	0.5 J	1 U	1 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	MWCCA-1	MWCCA-3	LV-3	MWCCA-1
TtFW Sample I.D.	LV-GWCCA4-01 Duplicate of GWCCA1-01	LV-GWCCA3-01	LV-GWLV3-01	LV-GWCCA1-02
Sampling Date	07/16/1998	07/16/1998	07/16/1998	07/30/1998
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
rans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
I-Methyl-2-pentanone	5 U	5 U	5 U	5 U
-Hexanone	5 U	5 U	5 U	R
Tetrachloroethene	1 U	1	1 U	1 U
,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
Total Volatile TICs	--	--	--	--

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	MWCCA-2	MWCCA-2	MWCCA-3	LV-3
TtFW Sample I.D.	LV-GWCCA2-02	LV-GWCCA2-03	LV-GWCCA3-02	LV-GWLV3-02
Sampling Date	07/27/1998	07/30/1998	07/30/1998	07/29/1998
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 UJ	1 UJ	1 UJ
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	2 U
Acetone	R	R	14 J	R
Carbon disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	3	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	R	R	R	R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	12	12	67 D	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	0.4 J	1 U

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	MWCCA-2	MWCCA-2	MWCCA-3	LV-3
TtFW Sample I.D.	LV-GWCCA2-02	LV-GWCCA2-03	LV-GWCCA3-02	LV-GWLV3-02
Sampling Date	07/27/1998	07/30/1998	07/30/1998	07/29/1998
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
rans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
3romoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
2-Hexanone	R	R	R	R
Tetrachloroethene	0.3 J	0.3 J	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
Total Volatile TICs	--	--	--	--

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	King Window Area	King Window Area	King Window Area	King Window Area
Location	LV-9	Production Well	Production Well	LV-9
TtFW Sample I.D.	LV-GWLV9-01	LV-GWKWPW-01	LV-GWKWWS-01 Duplicate of GWKWPW-01	LV-GWLV9-02
Sampling Date	07/15/1998	07/15/1998	07/15/1998	07/29/1998
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U	1 UJ
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	2 U
Acetone	9 UJ	13 UJ	R	6 UJ
Carbon disulfide	3	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	0.3 J	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	2 J	5 UJ	R	R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	0.3 J	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	3	2	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	King Window Area	King Window Area	King Window Area	King Window Area
Location	LV-9	Production Well	Production Well	LV-9
TtFW Sample I.D.	LV-GWLV9-01	LV-GWKWPW-01	LV-GWKWWS-01 Duplicate of GWKWPW-01	LV-GWLV9-02
Sampling Date	07/15/1998	07/15/1998	07/15/1998	07/29/1998
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
ns-1,3-Dichloropropene	1 U	1 U	1 U	1 U
omoform	1 U	1 U	1 U	1 U
Methyl-2-pentanone	5 U	5 U	5 U	5 U
Hexanone	5 U	5 U	5 U	R
trachloroethene	1 U	1 U	1 U	1 U
1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
2-Dibromoethane	1 U	1 U	1 U	1 U
luene	1 U	1 U	1 U	1 U
lorobenzene	1 U	1 U	1 U	1 U
hylbenzene	1 U	1 U	1 U	1 U
yrene	1 U	1 U	1 U	1 U
lenes (total)	1	1 U	1 U	1 U
3-Dichlorobenzene	1 U	1 U	1 U	1 U
4-Dichlorobenzene	1 U	1 U	1 U	1 U
2-Dichlorobenzene	1 U	1 U	1 U	1 U
2-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U
2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
tal Volatile TICs	--	--	--	--

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	King Window Area	First Street Area	First Street Area	Great Triangle Area
Location	Production Well	1ST1	1ST1	GTA1
TtFW Sample I.D.	LV-GWKWPW-02	LV-SB1ST1-25GW	LV-SB1ST1-26GW Duplicate of SB1ST1-25GW	LV-SBGTA1-79GW
Sampling Date	07/30/1998	06/10/1998	06/10/1998	07/01/1998
Matrix	Groundwater	SimulProbe	SimulProbe	SimulProbe
Units	ug/L	ug/L	ug/L	ug/L
hloromethane	1 UJ	5	10	3 UJ
romomethane	1 U	1 U	1 U	3 UJ
inyl chloride	1 U	1 U	1 U	3 UJ
hloroethane	1 U	1 U	1 U	3 UJ
lethylene chloride	2 U	2	0.8 J	7 UJ
cetone	R	R	R	310 UJ
arbon disulfide	1 U	1 U	1 U	3 UJ
,1-Dichloroethene	1 U	1 U	1 U	3 UJ
,1-Dichloroethane	1 U	1 U	1 U	3 UJ
is-1,2-Dichloroethene	1 U	1 U	1 U	3 UJ
ans-1,2-Dichloroethene	1 U	1 U	1 U	3 UJ
hloroform	1 U	2	2	2 J
,2-Dichloroethane	1 U	1 U	1 U	3 UJ
-Butanone	R	R	R	100 J
romochloromethane	1 U	1 U	1 U	3 UJ
,1,1-Trichloroethane	1 U	1 U	1 U	R
arbon tetrachloride	1 U	1 U	1 U	R
romodichloromethane	1 U	1 U	1 U	R
,2-Dichloropropane	1 U	1 U	1 U	R
is-1,3-Dichloropropene	1 U	1 U	1 U	R
richloroethene	2	1 U	1 U	R
ibromochloromethane	1 U	1 U	1 U	R
,1,2-Trichloroethane	1 U	1 U	1 U	R
enzene	1 U	1 U	1 U	R

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	King Window Area	First Street Area	First Street Area	Great Triangle Area
Location	Production Well	1ST1	1ST1	GTA1
TtFW Sample I.D.	LV-GWKWPW-02	LV-SB1ST1-25GW	LV-SB1ST1-26GW Duplicate of SB1ST1-25GW	LV-SBGTA1-79GW
Sampling Date	07/30/1998	06/10/1998	06/10/1998	07/01/1998
Matrix	Groundwater	SimulProbe	SimulProbe	SimulProbe
Units	ug/L	ug/L	ug/L	ug/L
s-1,3-Dichloropropene	1 U	1 U	1 U	R
moform	1 U	1 U	1 U	R
lethyl-2-pentanone	5 U	5 U	5 U	16 UJ
exanone	R	R	R	16 UJ
rachloroethene	1 U	1 U	1 U	3 UJ
,2,2-Tetrachloroethane	1 U	1 U	1 U	3 UJ
-Dibromoethane	1 U	1 U	1 U	3 UJ
uene	1 U	1 U	0.5 J	3 UJ
orobenzene	1 U	1 U	1 U	3 UJ
ylbenzene	1 U	1 U	1 U	3 UJ
rene	1 U	1 U	1 U	3 UJ
enes (total)	1 U	1 U	1 U	3 UJ
-Dichlorobenzene	1 U	1 U	1 U	3 UJ
-Dichlorobenzene	1 U	1 U	1 U	3 UJ
-Dichlorobenzene	1 U	1 U	1 U	3 UJ
-Dibromo-3-chloropropane	1 U	1 U	1 U	3 UJ
,4-Trichlorobenzene	1 U	1 U	1 U	3 UJ
al Volatile TICs	--	2 JN	2 JN	26 JN

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Great Triangle Area
Location	GTA1	GTA2	GTA2	GTA2
TtFW Sample I.D.	LV-SBGTA1-84GW	LV-SBGTA2-22GW	LV-SBGTA2-30GW	LV-SBGTA2-31GW Duplicate of SBGTA2-30GW
Sampling Date	07/01/1998	06/25/1998	06/25/1998	06/25/1998
Matrix	SimulProbe	SimulProbe	SimulProbe	SimulProbe
Units	ug/L	ug/L	ug/L	ug/L
hloromethane	1 UJ	1 U	1 U	1 U
romomethane	1 UJ	1 U	1 U	1 U
inyl chloride	1 UJ	1 U	1 U	1 U
hloroethane	1 UJ	1 U	1 U	1 U
lethylene chloride	2 UJ	2 U	2 U	2 U
cetone	230 J	12 UJ	8 UJ	8 UJ
arbon disulfide	1 UJ	1	1 U	1 U
,1-Dichloroethene	1 UJ	1 U	1 U	1 U
,1-Dichloroethane	1 UJ	1 U	1 U	1 U
is-1,2-Dichloroethene	1 UJ	1 U	1 U	1 U
ans-1,2-Dichloroethene	1 UJ	1 U	1 U	1 U
hloroform	1 UJ	1 U	1 U	1 U
,2-Dichloroethane	1 UJ	1 U	1 U	1 U
-Butanone	73 J	5 UJ	5 UJ	5 UJ
romochloromethane	1 UJ	1 U	1 U	1 U
,1,1-Trichloroethane	R	1 U	1 U	1 U
arbon tetrachloride	R	1 U	1 U	1 U
romodichloromethane	R	1 U	1 U	1 U
,2-Dichloropropane	R	1 U	1 U	1 U
is-1,3-Dichloropropene	R	1 U	1 U	1 U
richloroethene	4 J	1 U	1 U	1 U
ibromochloromethane	R	1 U	1 U	1 U
,1,2-Trichloroethane	R	1 U	1 U	1 U
enzene	3 J	1 U	1 U	1 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Great Triangle Area
Location	GTA1	GTA2	GTA2	GTA2
TtFW Sample I.D.	LV-SBGTA1-84GW	LV-SBGTA2-22GW	LV-SBGTA2-30GW	LV-SBGTA2-31GW Duplicate of SBGTA2-30GW
Sampling Date	07/01/1998	06/25/1998	06/25/1998	06/25/1998
Matrix	SimulProbe	SimulProbe	SimulProbe	SimulProbe
Units	ug/L	ug/L	ug/L	ug/L
ıs-1,3-Dichloropropene	R	1 U	1 U	1 U
›moform	R	1 U	1 U	1 U
Aethyl-2-pentanone	5 UJ	5 U	5 U	5 U
lexanone	5 J	5 U	5 U	5 U
rachloroethene	1 UJ	1 U	1 U	1 U
,2,2-Tetrachloroethane	1 UJ	1 U	1 U	1 U
-Dibromoethane	1 UJ	1 U	1 U	1 U
luene	3 J	1 U	1 U	1 U
lorobenzene	1 UJ	1 U	1 U	1 U
ıylbenzene	0.6 J	1 U	1 U	1 U
rene	1 UJ	1 U	1 U	1 U
lenes (total)	2 UJ	1 U	1 U	1 U
-Dichlorobenzene	1 UJ	1 U	1 U	1 U
-Dichlorobenzene	1 UJ	1 U	1 U	1 U
-Dichlorobenzene	1 UJ	1 U	1 U	1 U
-Dibromo-3-chloropropane	1 UJ	R	R	R
,4-Trichlorobenzene	1 UJ	1 U	1 U	1 U
tal Volatile TICs	181 JN	2 JN	--	2 JN

Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Great Triangle Area
Location	GTA2	LV-8	PZ-47D	PZ-48
TtFW Sample I.D.	LV-SBGTA2-35GW	LV-GWLV8-01	LV-GWPZ47D-01	LV-GWPZ48-01
Sampling Date	06/25/1998	07/14/1998	07/14/1998	07/14/1998
Matrix	SimulProbe	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	2 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	2 U
Acetone	7 UJ	25 UJ	90 UJ	11 UJ
Carbon disulfide	1 U	1 U	0.4 J	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1	1 U
1,2-Dichloroethane	1 U	1 U	2 U	1 U
2-Butanone	R	8 UJ	277 JD	5 UJ
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	0.3 J	0.4 J	6
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Great Triangle Area
Location	GTA2	LV-8	PZ-47D	PZ-48
TtFW Sample I.D.	LV-SBGTA2-35GW	LV-GWLV8-01	LV-GWPZ47D-01	LV-GWPZ48-01
Sampling Date	06/25/1998	07/14/1998	07/14/1998	07/14/1998
Matrix	SimulProbe	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
ans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
romoform	1 U	1 U	1 U	1 U
-Methyl-2-pentanone	5 U	5 U	5 U	5 U
-Hexanone	5 U	5 U	5 U	5 U
etrachloroethene	1 U	1 U	1 U	1 U
,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
,2-Dibromoethane	1 U	1 U	1 U	1 U
oluene	1 U	1 U	2	1 U
hlorobenzene	1 U	1 U	1 U	1 U
thylbenzene	1 U	1 U	1 U	1 U
tyrene	1 U	1 U	1 U	1 U
ylenes (total)	1 U	1 U	2 U	1 U
,3-Dichlorobenzene	1 U	1 U	1 U	1 U
,4-Dichlorobenzene	1 U	1 U	1 U	1 U
,2-Dichlorobenzene	1 U	1 U	1 U	1 U
,2-Dibromo-3-chloropropane	R	1 U	1 U	1 U
,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
otal Volatile TICs	--	--	12 JN	--

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Whig Street Area
Location	LV-8	PZ-47D	PZ-48	WSA1
TtFW Sample I.D.	LV-GWLV8-02	LV-GWPZ47D-02	LV-GWPZ48-02	LV-SBWSA1-30GW
Sampling Date	07/29/1998	07/29/1998	07/28/1998	06/29/1998
Matrix	Groundwater	Groundwater	Groundwater	SimulProbe
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 UJ	7	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	0.9 J	2 U
Acetone	R	27 UJ	R	8 UJ
Carbon disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	R	7 J	R	R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	0.5 J	5	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	0.6 J	1 U	1 UJ

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area	Great Triangle Area	Whig Street Area
Location	LV-8	PZ-47D	PZ-48	WSA1
TtFW Sample I.D.	LV-GWLV8-02	LV-GWPZ47D-02	LV-GWPZ48-02	LV-SBWSA1-30GW
Sampling Date	07/29/1998	07/29/1998	07/28/1998	06/29/1998
Matrix	Groundwater	Groundwater	Groundwater	SimulProbe
Units	ug/L	ug/L	ug/L	ug/L
ans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
romoform	1 U	1 U	1 U	1 U
-Methyl-2-pentanone	5 U	5 U	5 U	5 U
-Hexanone	R	R	R	5 U
etrachloroethene	1 U	1 U	1 U	1 U
,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
,2-Dibromoethane	1 U	1 U	1 U	1 U
oluene	1 U	1 U	1 U	0.8 J
hlorobenzene	1 U	1 U	1 U	1 UJ
thylbenzene	1 U	1 U	1 U	1 UJ
tyrene	1 U	1 U	1 U	1 UJ
ylenes (total)	1 U	1 U	1 U	0.8 J
,3-Dichlorobenzene	1 U	1 U	1 U	1 U
,4-Dichlorobenzene	1 U	1 U	1 U	1 U
,2-Dichlorobenzene	1 U	1 U	1 U	1 U
,2-Dibromo-3-chloropropane	1 U	1 U	1 U	R
,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
otal Volatile TICs	--	--	--	2 JN

Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Whig Street Area	Luminite Area	Luminite Area	Luminite Area
Location	WSA1	PZ-36	PZ-42	PZ-43
TtFW Sample I.D.	LV-SBWSA1-35GW	LV-GWPZ36-01	LV-GWPZ42-01	LV-GWPZ43-01
Sampling Date	06/29/1998	07/13/1998	07/13/1998	07/14/1998
Matrix	SimulProbe	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	2 U
Acetone	12 UJ	5 UJ	7 UJ	5 UJ
Carbon disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	R	R	R	R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	0.6 J	8	2	2
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	0.6 J	1 U	1 U	1 U

:e Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site
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Area	Whig Street Area	Luminite Area	Luminite Area	Luminite Area
Location	WSA1	PZ-36	PZ-42	PZ-43
TtFW Sample I.D.	LV-SBWSA1-35GW	LV-GWPZ36-01	LV-GWPZ42-01	LV-GWPZ43-01
Sampling Date	06/29/1998	07/13/1998	07/13/1998	07/14/1998
Matrix	SimulProbe	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
rans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
-Methyl-2-pentanone	5 U	5 U	5 U	5 U
-Hexanone	5 U	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U	1 U
,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	2 J	1 U	1 U	1 U
Chlorobenzene	1 UJ	1 U	1 U	1 U
Ethylbenzene	1 UJ	1 U	1 U	1 U
Styrene	1 UJ	1 U	1 U	1 U
Xylenes (total)	1 J	1 U	1 U	1 U
,3-Dichlorobenzene	1 U	1 U	1 U	1 U
,4-Dichlorobenzene	1 U	1 U	1 U	1 U
,2-Dichlorobenzene	1 U	1 U	1 U	1 U
,2-Dibromo-3-chloropropane	R	1 U	1 U	1 U
,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
Total Volatile TICs	5 JN	--	--	--

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Luminite Area	Luminite Area	Luminite Area	Luminite Area
Location	PZ-51	PZ-59	PZ-60D	PZ-60D
TtFW Sample I.D.	LV-GWPZ51-01	LV-GWPZ59-01	LV-GWPZ60D-01	LV-GWPZ60S-01 Duplicate of GWPZ60D-01
Sampling Date	07/13/1998	07/13/1998	07/13/1998	07/13/1998
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	2 U
Acetone	6 UJ	5 UJ	5 UJ	5 UJ
Carbon disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	R	R	1 J	2 J
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	8	8	10	10
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U

e Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Luminite Area	Luminite Area	Luminite Area	Luminite Area
Location	PZ-51	PZ-59	PZ-60D	PZ-60D
TtFW Sample I.D.	LV-GWPZ51-01	LV-GWPZ59-01	LV-GWPZ60D-01	LV-GWPZ60S-01 Duplicate of GWPZ60D-01
Sampling Date	07/13/1998	07/13/1998	07/13/1998	07/13/1998
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
ns-1,3-Dichloropropene	1 U	1 U	1 U	1 U
omoform	1 U	1 U	1 U	1 U
Methyl-2-pentanone	5 U	5 U	5 U	5 U
Hexanone	5 U	5 U	5 U	5 U
trachloroethene	1 U	1 U	1 U	1 U
,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
-Dibromoethane	1 U	1 U	1 U	1 U
luene	1 U	1 U	1 U	1 U
lorobenzene	1 U	1 U	1 U	1 U
ylbenzene	1 U	1 U	1 U	1 U
rene	1 U	1 U	1 U	1 U
lenes (total)	1 U	1 U	1 U	1 U
-Dichlorobenzene	1 U	1 U	1 U	1 U
-Dichlorobenzene	1 U	1 U	1 U	1 U
-Dichlorobenzene	1 U	1 U	1 U	1 U
-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U
,4-Trichlorobenzene	1 U	1 U	1 U	1 U
tal Volatile TICs	--	--	--	--

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Luminite Area	Luminite Area	Luminite Area	Luminite Area
Location	PZ-36	PZ-42	PZ-43	PZ-43
TtFW Sample I.D.	LV-GWPZ36-02	LV-GWPZ42-02	LV-GWPZ43-02	LV-GWPZ83-02 Duplicate of GWPZ43-02
Sampling Date	07/28/1998	07/28/1998	07/28/98	07/28/1998
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	2	1 U	3	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene chloride	0.4 J	2 U	0.6 J	2 U
Acetone	R	R	R	R
Carbon disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	R	R	R	R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	6	2	0.5 J	0.5 J
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U

e Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Luminite Area	Luminite Area	Luminite Area	Luminite Area
Location	PZ-36	PZ-42	PZ-43	PZ-43
TtFW Sample I.D.	LV-GWPZ36-02	LV-GWPZ42-02	LV-GWPZ43-02	LV-GWPZ83-02 Duplicate of GWPZ43-02
Sampling Date	07/28/1998	07/28/1998	07/28/98	07/28/1998
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
ans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
romoform	1 U	1 U	1 U	1 U
Methyl-2-pentanone	5 U	5 U	5 U	5 U
Hexanone	R	R	R	R
etrachloroethene	1 U	1 U	1 U	1 U
1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
2-Dibromoethane	1 U	1 U	1 U	1 U
oluene	1 U	1 U	1 U	1 U
hlorobenzene	1 U	1 U	1 U	1 U
thylbenzene	1 U	1 U	1 U	1 U
tyrene	1 U	1 U	1 U	1 U
ylenes (total)	1 U	1 U	1 U	1 U
3-Dichlorobenzene	1 U	1 U	1 U	1 U
4-Dichlorobenzene	1 U	1 U	1 U	1 U
2-Dichlorobenzene	1 U	1 U	1 U	1 U
2-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U
2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
otal Volatile TICs	--	--	--	--

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Luminite Area	Luminite Area	Luminite Area
Location	PZ-51	PZ-59	PZ-60D
TtFW Sample I.D.	LV-GWPZ51-02	LV-GWPZ59-02	LV-GWPZ60D-02
Sampling Date	07/27/1998	07/29/1998	07/28/1998
Matrix	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U
Acetone	R	R	R
Carbon disulfide	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
2-Butanone	R	R	R
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	8	7	8
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	1 U	1 U	1 U

e Table D-1 for abbreviations and data qualifiers.

TABLE D-24
Low Concentration Volatile Organic Compounds - Groundwater (1998)
Little Valley Superfund Site

Area	Luminite Area	Luminite Area	Luminite Area
Location	PZ-51	PZ-59	PZ-60D
TtFW Sample I.D.	LV-GWPZ51-02	LV-GWPZ59-02	LV-GWPZ60D-02
Sampling Date	07/27/1998	07/29/1998	07/28/1998
Matrix	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U
2-Hexanone	R	R	R
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	--	--	--

TABLE D-25
Low Concentration Volatile Organic Compounds - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-2	MWCCA-4	MWCCA-5	MWCCA-8
TtFW Sample I.D.	LI-GW-CCA2-04	LI-GW-CCA4-01	LI-GW-CCA5-01	LI-GW-CCA8-01 Duplicate of MWCCA-5
Sampling Date	10/13/1999	10/12/1999	10/12/1999	10/12/1999
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U	2 U
Acetone	29 J	12 UJ	12 UJ	R
Carbon Disulfide	2 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.4 J	1 U	1 U	1 U
2-Butanone	8 J	R	R	R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	8	1 U	3	2
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-25
Low Concentration Volatile Organic Compounds - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-2	MWCCA-4	MWCCA-5	MWCCA-8
TtFW Sample I.D.	LI-GW-CCA2-04	LI-GW-CCA4-01	LI-GW-CCA5-01	LI-GW-CCA8-01 Duplicate of MWCCA-5
Sampling Date	10/13/1999	10/12/1999	10/12/1999	10/12/1999
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U
Tetrachloroethene	0.3 J	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	1 UJ	1 UJ	1 UJ	1 UJ
Chlorobenzene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
Total Volatile TICs	--	--	--	--

See Table D-[illegible] abbreviations and data qualifiers.

TABLE D-25
Low Concentration Volatile Organic Compounds - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-6	MWCCA-7	Production Well	MWCCA-2
TtFW Sample I.D.	LI-GW-CCA6-01	LI-GW-CCA7-01	LI-GW-CCAPW-01	LI-GW-CCA2-05
Sampling Date	10/13/1999	10/13/1999	10/13/1999	10/27/1999
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U	0.7 J
Bromomethane	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U	2 U
Acetone	8 J	13 J	R	18 UJ
Carbon Disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	0.5 J	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	R	R	R	R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	31 D	0.8 J	1 U	3
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-25
Low Concentration Volatile Organic Compounds - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-6	MWCCA-7	Production Well	MWCCA-2
TtFW Sample I.D.	LI-GW-CCA6-01	LI-GW-CCA7-01	LI-GW-CCAPW-01	LI-GW-CCA2-05
Sampling Date	10/13/1999	10/13/1999	10/13/1999	10/27/1999
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 UJ
Bromoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	R
2-Hexanone	R	R	5 U	R
Tetrachloroethene	1	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 UJ	1 U
Chlorobenzene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R	1 UJ
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 UJ
Total Volatile TICs	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

TABLE D-25
Low Concentration Volatile Organic Compounds - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-4	MWCCA-5	MWCCA-6	MWCCA-9
TtFW Sample I.D.	LI-GW-CCA4-02	LI-GW-CCA5-02	LI-GW-CCA6-02	LI-GW-CCA9-02 Duplicate of MWCCA-6
Sampling Date	10/26/1999	10/26/1999	10/26/1999	10/26/1999
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	0.5 J	0.9 J	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U	2 U
Acetone	R	9 UJ	14 UJ	7 UJ
Carbon Disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	2	2
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	R	R	R	R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1	62 D	62 D
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-25
Low Concentration Volatile Organic Compounds - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-4	MWCCA-5	MWCCA-6	MWCCA-9
TtFW Sample I.D.	LI-GW-CCA4-02	LI-GW-CCA5-02	LI-GW-CCA6-02	LI-GW-CCA9-02
				Duplicate of MWCCA-6
Sampling Date	10/26/1999	10/26/1999	10/26/1999	10/26/1999
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
2-Hexanone	R	R	R	R
Tetrachloroethene	1 U	1 U	3	2
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	1 U	2 U	1 U	1 UJ
Chlorobenzene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 UJ	1 UJ	1 UJ	1 UJ
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
Total Volatile TICs	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

TABLE D-25
Low Concentration Volatile Organic Compounds - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-7	Production Well
TtFW Sample I.D.	LI-GW-CCA7-02	LI-GW-CCAPW-02
Sampling Date	10/27/1999	10/27/1999
Matrix	Groundwater	Groundwater
Units	ug/L	ug/L
Chloromethane	1 U	1 U
Bromomethane	1 U	1 U
Vinyl Chloride	1 U	1 U
Chloroethane	1 U	1 U
Methylene Chloride	2 U	2 U
Acetone	R	R
Carbon Disulfide	1 U	1 U
1,1-Dichloroethene	1 U	1 U
1,1-Dichloroethane	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U
Chloroform	1 U	1 U
1,2-Dichloroethane	1 U	1 U
2-Butanone	R	R
Bromochloromethane	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U
Carbon Tetrachloride	1 U	1 U
Bromodichloromethane	1 U	1 U
1,2-Dichloropropane	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U
Trichloroethene	2	1 U
Dibromochloromethane	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U
Benzene	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-25
Low Concentration Volatile Organic Compounds - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-7	Production Well
TtFW Sample I.D.	LI-GW-CCA7-02	LI-GW-CCAPW-02
Sampling Date	10/27/1999	10/27/1999
Matrix	Groundwater	Groundwater
Units	ug/L	ug/L
trans-1,3-Dichloropropene	1 UJ	1 UJ
Bromoform	1 U	1 U
4-Methyl-2-pentanone	R	R
2-Hexanone	R	R
Tetrachloroethene	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U
1,2-Dibromoethane	1 U	1 U
Toluene	1 U	1 U
Chlorobenzene	1 U	1 U
Ethylbenzene	1 U	1 U
Styrene	1 U	1 U
Xylenes (total)	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U
1,2-Dibromo-3-chloropropane	1 UJ	1 UJ
1,2,4-Trichlorobenzene	1 UJ	1 UJ
Total Volatile TICs	--	--

See Table D-[illegible] abbreviations and data qualifiers.

Table D-26
Low Concentration Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-1	MW-D1	MW-2	MW-D2	MW-D2 Duplicate of MW-D2
TtFW Sample I.D.	LV-BIA-GW-MW1-01	LV-BIA-GW-MWD1-01	LV-BIA-GW-MW2-01	LV-BIA-GW-MWD2-01	LV-BIA-GW-MWD3-01
Sampling Date	1/4/01	1/10/01	1/10/01	1/10/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	10 U	10 U	10 U
Bromomethane	1 U	1 U	10 U	10 U	10 U
Vinyl Chloride	1 U	1 U	10 U	10 U	10 U
Chloroethane	1 U	1 U	10 U	10 U	10 U
Methylene Chloride	2 U	2 U	20 U	20 U	20 U
Acetone	R	R	R	R	R
Carbon Disulfide	1 U	1 U	10 U	10 U	10 U
1,1-Dichloroethene	1 U	1 U	10 U	10 U	10 U
1,1-Dichloroethane	1 U	1 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	1 U	8	44	36	29
trans-1,2-Dichloroethene	1 U	1 U	10 U	10 U	10 U
Chloroform	1 U	1 U	10 U	10 U	10 U
1,2-Dichloroethane	1 U	1 U	10 U	10 U	10 U
2-Butanone	R	R	R	R	R
Bromochloromethane	1 U	1 U	10 U	10 U	10 U
1,1,1-Trichloroethane	1 U	1 U	10 U	10 U	10 U
Carbon Tetrachloride	1 U	1 U	10 U	10 U	10 U
Bromodichloromethane	1 U	1 U	10 U	10 U	10 U
1,2-Dichloropropane	1 U	1 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	1 U	1 U	10 U	10 U	10 U
Trichloroethene	1 U	18	110	140	110
Dibromochloromethane	1 U	1 U	10 U	10 U	10 U
1,1,2-Trichloroethane	1 U	1 U	10 U	10 U	10 U
Benzene	1 U	1 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

Table D-26
Low Concentration Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-1	MW-D1	MW-2	MW-D2	MW-D2 Duplicate of MW-D2
TtFW Sample I.D.	LV-BIA-GW-MW1-01	LV-BIA-GW-MWD1-01	LV-BIA-GW-MW2-01	LV-BIA-GW-MWD2-01	LV-BIA-GW-MWD3-01
Sampling Date	1/4/01	1/10/01	1/10/01	1/10/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
rans-1,3-Dichloropropene	1 U	1 U	10 U	10 U	10 U
Bromoform	1 U	1 U	10 U	10 U	10 U
4-Methyl-2-pentanone	5 U	5 U	50 U	50 U	50 U
2-Hexanone	R	R	R	R	R
Tetrachloroethene	1 U	1 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	1 U	1 U	10 U	10 U	10 U
1,2-Dibromoethane	1 U	1 U	10 U	10 U	10 U
Toluene	1 U	1 U	10 U	10 U	10 U
Chlorobenzene	1 U	1 U	10 U	10 U	10 U
Ethylbenzene	1 U	1 U	10 U	10 U	10 U
Styrene	1 U	1 U	10 U	10 U	10 U
Xylenes (total)	1 U	1 U	10 U	10 U	10 U
1,3-Dichlorobenzene	1 U	1 U	10 U	10 U	10 U
1,4-Dichlorobenzene	1 U	1 U	10 U	10 U	10 U
1,2-Dichlorobenzene	1 U	1 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	R	R	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	10 U	10 U	10 U
Total Volatile TICs	--	--	--	--	--

Table D-26
Low Concentration Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-3	MW-4	MW-5	MW-6	MW-7
TtFW Sample I.D.	LV-BIA-GW-MW3-01	LV-BIA-GW-MW4-01	LV-BIA-GW-MW5-01	LV-BIA-GW-MW6-01	LV-BIA-GW-MW7-01
Sampling Date	1/9/01	1/8/01	1/4/01	1/10/01	1/9/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U	5 U	1 U
Bromomethane	1 U	1 U	1 U	5 U	1 U
Vinyl Chloride	1 U	1 U	1 U	5 U	1 U
Chloroethane	1 U	1 U	1 U	5 U	1 U
Methylene Chloride	2 U	2 U	2 U	10 U	2 U
Acetone	R	R	R	R	R
Carbon Disulfide	1 U	1 U	1 U	5 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	5 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	5 U	1 U
cis-1,2-Dichloroethene	3	1 U	1 U	44	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	5 U	1 U
Chloroform	1 U	1 U	1 U	5 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	5 U	1 U
2-Butanone	R	R	R	R	R
Bromochloromethane	1 U	1 U	1 U	5 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	5 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U	5 U	1 U
Bromodichloromethane	1 U	1 U	1 U	5 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	5 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	5 U	1 U
Trichloroethene	8	0.9 J	1 U	37	0.9 J
Dibromochloromethane	1 U	1 U	1 U	5 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	5 U	1 U
Benzene	1 U	1 U	1 U	5 U	1 U

See Table D-1 for abbreviations and data qualifiers.

Table D-26
Low Concentration Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-3	MW-4	MW-5	MW-6	MW-7
TtFW Sample I.D.	LV-BIA-GW-MW3-01	LV-BIA-GW-MW4-01	LV-BIA-GW-MW5-01	LV-BIA-GW-MW6-01	LV-BIA-GW-MW7-01
Sampling Date	1/9/01	1/8/01	1/4/01	1/10/01	1/9/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
ans-1,3-Dichloropropene	1 U	1 U	1 U	5 U	1 U
Bromoform	1 U	1 U	1 U	5 U	1 U
-Methyl-2-pentanone	5 U	5 U	5 U	25 U	5 U
-Hexanone	R	R	R	R	R
Tetrachloroethene	1 U	1 U	1 U	5 U	1 U
,1,2,2-Tetrachloroethane	1 U	1 U	1 U	5 U	1 U
,2-Dibromoethane	1 U	1 U	1 U	5 U	1 U
Toluene	1 U	1 U	1 U	5 U	1 U
Chlorobenzene	1 U	1 U	1 U	5 U	1 U
Ethylbenzene	1 U	1 U	1 U	5 U	1 U
Styrene	1 U	1 U	1 U	5 U	1 U
Xylenes (total)	1 U	1 U	1 U	5 U	1 U
,3-Dichlorobenzene	1 U	1 U	1 U	5 U	1 U
,4-Dichlorobenzene	1 U	1 U	1 U	5 U	1 U
,2-Dichlorobenzene	1 U	1 U	1 U	5 U	1 U
,2-Dibromo-3-chloropropane	R	R	R	R	R
,2,4-Trichlorobenzene	1 U	1 U	1 U	5 U	1 U
otal Volatile TICs	--	--	--	--	--

e Table D-1 fo abbreviations and data qualifiers.

Table D-26
Low Concentration Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Cattaraugus Cutlery
Location	MW-8	MW-U1	MW-8
TtFW Sample I.D.	LV-BIA-GW-MW8-01	LV-BIA-GW-MWU1-01	LV-CCA-GW-MW8-01
Sampling Date	1/12/01	1/8/01	1/10/01
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U
Acetone	R	R	R
Carbon Disulfide	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	0.6 J	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
2-Butanone	R	R	R
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	4	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

Table D-26
Low Concentration Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Cattaraugus Cutlery
Location	MW-8	MW-U1	MW-8
TtFW Sample I.D.	LV-BIA-GW-MW8-01	LV-BIA-GW-MWU1-01	LV-CCA-GW-MW8-01
Sampling Date	1/12/01	1/8/01	1/10/01
Units	ug/L	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U
2-Hexanone	R	R	R
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	--	--	--

ee Table D-1 (bbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	BIAMW-1	BIAMW-2	BIAMW-3	BIAMW-7
TtFW Sample I.D.	LV-GW-BIA-MW1-MNA	LV-GW-BIA-MW2-MNA	LV-GW-BIA-MW3-MNA	LV-GW-BIA-MW7-MNA
Sampling Date	12/09/03	12/11/03	12/10/03	12/09/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.63	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	5 U	5 U	5 U	5 U
Acetone	5 U	5 U	5 U	5 U
Benzene	0.5 U	0.32 J	0.5 U	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	BIAMW-1	BIAMW-2	BIAMW-3	BIAMW-7
TtFW Sample I.D.	LV-GW-BIA-MW1-MNA	LV-GW-BIA-MW2-MNA	LV-GW-BIA-MW3-MNA	LV-GW-BIA-MW7-MNA
Sampling Date	12/09/03	12/11/03	12/10/03	12/09/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 UJ	0.5 U	0.5 U	0.5 UJ
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	40 D	2.2	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	NA	NA	NA	NA
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Methyl ethylketone	5 U	5 U	5 U	5 U
Methyl isobutyl ketone (MIBK)	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U

ee Table D-1 abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	BIAMW-1	BIAMW-2	BIAMW-3	BIAMW-7
TtFW Sample I.D.	LV-GW-BIA-MW1-MNA	LV-GW-BIA-MW2-MNA	LV-GW-BIA-MW3-MNA	LV-GW-BIA-MW7-MNA
Sampling Date	12/09/03	12/11/03	12/10/03	12/09/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	NA	NA	NA	NA
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.28 J	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene	0.5 U	36 D	6.3	0.75
Trichlorofluoromethane	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Vinyl chloride	0.5 U	4.8	0.5 U	0.5 U
Xylene (total)	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	R	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Bush Industries	Bush Industries	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWD-1	MWD-2	CCAGEO-1	CCAGEO-1
TtFW Sample I.D.	LV-GW-BIA-MWD1-MNA	LV-GW-BIA-MWD2-MNA	LV-GW-CCA-GEO1-34	LV-GW-CCA-GEO7-34 Duplicate
Sampling Date	12/10/03	12/11/03	09/08/03	09/08/03
Matrix	Groundwater	Groundwater	Direct Push (34.00)	Direct Push (34.00)
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 UJ	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.81	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 UJ	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	5 U	5 U	0.5 U	0.5 U
Acetone	5 U	5 U	2.5 U	2.5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

ee Table D-1 abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWD-1	MWD-2	CCAGEO-1	CCAGEO-1
TtFW Sample I.D.	LV-GW-BIA-MWD1-MNA	LV-GW-BIA-MWD2-MNA	LV-GW-CCA-GEO1-34	LV-GW-CCA-GEO7-34 Duplicate
Sampling Date	12/10/03	12/11/03	09/08/03	09/08/03
Matrix	Groundwater	Groundwater	Direct Push (34.00)	Direct Push (34.00)
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	NA	NA
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	4.8	18 D	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 UJ	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.71	0.75
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	NA	NA	0.73	0.75
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Methyl ethylketone	5 U	5 U	0.5 U	0.5 U
Methyl isobutyl ketone (MIBK)	5 U	5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWD-1	MWD-2	CCAGEO-1	CCAGEO-1
TtFW Sample I.D.	LV-GW-BIA-MWD1-MNA	LV-GW-BIA-MWD2-MNA	LV-GW-CCA-GEO1-34	LV-GW-CCA-GEO7-34 Duplicate
Sampling Date	12/10/03	12/11/03	09/08/03	09/08/03
Matrix	Groundwater	Groundwater	Direct Push (34.00)	Direct Push (34.00)
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	0.5 U	0.5 U	0.97 UJ	1.4 UJ
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	NA	NA	0.5 U	0.5 U
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.86	0.86
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 UJ	0.5 U	0.5 U	0.5 U
Trichloroethylene	12	78 D	0.79	0.9
Trichlorofluoromethane	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.5 U	0.5 U	NA	NA
Total Volatile TICs	--	--	--	--

ee Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-2	CCAGEO-3	CCAGEO-4	CCAGEO-5
TtFW Sample I.D.	LV-GW-CCA-GE02-30	LV-GW-CCA-GE03-30	LV-GW-CCA-GE04-30	LV-GW-CCA-GE05-30
Sampling Date	09/09/03	09/09/03	09/10/03	09/10/03
Matrix	Direct Push (30.00)	Direct Push (30.00)	Direct Push (30.00)	Direct Push (30.00)
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	2.5 U	2.5 U	2.5 U	2.5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-2	CCAGEO-3	CCAGEO-4	CCAGEO-5
TtFW Sample I.D.	LV-GW-CCA-GE02-30	LV-GW-CCA-GE03-30	LV-GW-CCA-GE04-30	LV-GW-CCA-GE05-30
Sampling Date	09/09/03	09/09/03	09/10/03	09/10/03
Matrix	Direct Push (30.00)	Direct Push (30.00)	Direct Push (30.00)	Direct Push (30.00)
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	NA	NA	NA	NA
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.7	0.72	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	0.5 U	0.5 U	0.5 U	0.5 U
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Methyl ethylketone	0.5 U	0.5 U	0.5 U	0.5 U
Methyl isobutyl ketone (MIBK)	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-2	CCAGEO-3	CCAGEO-4	CCAGEO-5
TtFW Sample I.D.	LV-GW-CCA-GE02-30	LV-GW-CCA-GE03-30	LV-GW-CCA-GE04-30	LV-GW-CCA-GE05-30
Sampling Date	09/09/03	09/09/03	09/10/03	09/10/03
Matrix	Direct Push (30.00)	Direct Push (30.00)	Direct Push (30.00)	Direct Push (30.00)
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	1.3 UJ	1.3 UJ	2.5 UJ	2.3 UJ
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	10	12	0.65	2.6
Toluene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene	63 D	76 D	62 D	76 D
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	NA	NA	NA	NA
Total Volatile TICs	--	--	--	--

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-6	MWCCA-2	MWCCA-3	MWCCA-4
TtFW Sample I.D.	LV-GW-CCA-GE06-30	LV-GW-CCA2-MNA	LV-GW-CCA3-MNA	LV-GW-CCA4-MNA
Sampling Date	09/10/03	12/03/03	12/02/03	11/19/03
Matrix	Direct Push (30.00)	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	0.50 U
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.50 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.50 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.50 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.50 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.50 U
1,1-Dichloropropene	NA	NA	NA	0.50 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.50 U
1,2,3-Trichloropropane	NA	NA	NA	0.50 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.50 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.50 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.50 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.50 U
1,3-Dichloropropane	NA	NA	NA	0.50 U
2,2-Dichloropropane	NA	NA	NA	0.50 U
2-Hexanone	0.5 U	5 U	5 U	1.0 U
Acetone	2.5 U	5 U	5 U	1.0 U
Benzene	0.5 U	0.5 U	0.5 U	0.50 U
Benzene, 1,2,4-trimethyl	NA	NA	NA	0.50 U
Benzene, 1,3,5-trimethyl-	NA	NA	NA	0.50 U
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.50 U
Bromobenzene	NA	NA	NA	0.50 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.50 U
Bromoform	0.5 U	0.5 U	0.5 U	0.50 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-6	MWCCA-2	MWCCA-3	MWCCA-4
TtFW Sample I.D.	LV-GW-CCA-GE06-30	LV-GW-CCA2-MNA	LV-GW-CCA3-MNA	LV-GW-CCA4-MNA
Sampling Date	09/10/03	12/03/03	12/02/03	11/19/03
Matrix	Direct Push (30.00)	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.50 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.50 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.50 U
Chlorobromomethane	NA	0.5 U	0.5 U	0.50 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.50 U
Chloroform	0.5 U	0.5 U	0.5 U	0.50 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	3.7	0.50 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.50 U
Cyclohexane	0.52	0.5 U	0.5 U	0.50 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.50 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.50 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.50 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.50 U
Freon 113	0.5 U	0.5 U	0.5 U	0.50 U
Hexachlorobutadiene	NA	NA	NA	0.50 U
m/p-xylene	0.5 U	NA	NA	0.50 U
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.50 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.50 U
Methyl bromide	0.5 U	0.5 U	0.5 U	0.50 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.50 U
Methyl ethylketone	0.5 U	5 U	5 U	1.0 U
Methyl isobutyl ketone (MIBK)	0.5 U	5 U	5 U	1.0 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.50 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.50 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	CCAGEO-6	MWCCA-2	MWCCA-3	MWCCA-4
TtFW Sample I.D.	LV-GW-CCA-GE06-30	LV-GW-CCA2-MNA	LV-GW-CCA3-MNA	LV-GW-CCA4-MNA
Sampling Date	09/10/03	12/03/03	12/02/03	11/19/03
Matrix	Direct Push (30.00)	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	0.50 U
Methylene chloride	2.5 UJ	0.5 U	0.5 U	0.50 U
Naphthalene	NA	NA	NA	0.50 U
n-Butylbenzene	NA	NA	NA	0.50 U
n-Propylbenzene	NA	NA	NA	0.50 U
o-Chlorotoluene	NA	NA	NA	0.50 U
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.50 U
o-Xylene	0.5 U	NA	NA	0.50 U
p-Chlorotoluene	NA	NA	NA	0.50 U
p-Cymene	NA	NA	NA	0.50 U
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.50 U
sec-Butylbenzene	NA	NA	NA	0.50 U
Styrene	0.5 U	0.5 U	0.5 U	0.50 U
tert-Butylbenzene	NA	NA	NA	0.50 U
Tetrachloroethylene	1.1	0.2 J	0.67	0.50 U
Toluene	0.66	0.5 U	0.5 U	0.50 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.50 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.50 U
Trichloroethylene	23	9.8	58 D	0.50 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.50 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.50 U
Xylene (total)	NA	0.5 U	0.5 U	NA
Total Volatile TICs	--	--	--	--

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-6	MWCCA-6	MWCCA-9D	MWCCA-10
TtFW Sample I.D.	LV-GW-CCA6-MNA	LV-GW-CCA16-MNA Duplicate	LV-GW-CCA9D-01	LV-GW-CCA10-01
Sampling Date	12/01/03	12/01/03	11/18/03	11/12/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	0.50 U	0.5 U
1,1,1-Trichloroethane	0.5 U	0.5 U	0.50 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.50 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.50 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.50 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.50 U	0.5 U
1,1-Dichloropropene	NA	NA	0.50 U	0.5 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.50 U	0.5 U
1,2,3-Trichloropropane	NA	NA	0.50 U	0.5 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.50 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.50 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.50 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.50 U	0.5 U
1,3-Dichloropropane	NA	NA	0.50 U	0.5 U
2,2-Dichloropropane	NA	NA	0.50 U	0.5 U
2-Hexanone	5 U	5 U	1.0 U	1 U
Acetone	5 U	5 U	1.1	1.2
Benzene	0.5 U	0.5 U	0.50 U	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	0.50 U	0.5 U
Benzene, 1,3,5-trimethyl-	NA	NA	0.50 U	0.5 U
Benzene,1-methylethyl-	0.5 U	0.5 U	0.50 U	0.5 U
Bromobenzene	NA	NA	0.50 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.50 U	0.5 U
Bromoform	0.5 U	0.5 U	0.50 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-6	MWCCA-6	MWCCA-9D	MWCCA-10
TtFW Sample I.D.	LV-GW-CCA6-MNA	LV-GW-CCA16-MNA Duplicate	LV-GW-CCA9D-01	LV-GW-CCA10-01
Sampling Date	12/01/03	12/01/03	11/18/03	11/12/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.50 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.50 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.50 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.50 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.50 U	0.5 U
Chloroform	0.5 U	0.5 U	0.50 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.50 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.50 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.50 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.50 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.50 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.50 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.50 U	0.5 U
Freon 113	0.5 U	0.5 U	0.50 U	0.5 U
Hexachlorobutadiene	NA	NA	0.50 U	0.5 U
m/p-xylene	NA	NA	0.50 U	0.5 U
m-Dichlorobenzene	0.5 U	0.5 U	0.50 U	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.50 U	0.5 U
Methyl bromide	0.5 U	0.5 U	0.50 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.50 U	0.5 U
Methyl ethylketone	5 U	5 U	1.0 U	1 U
Methyl isobutyl ketone (MIBK)	5 U	5 U	1.0 U	1 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.50 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.50 U	0.5 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-6	MWCCA-6	MWCCA-9D	MWCCA-10
TtFW Sample I.D.	LV-GW-CCA6-MNA	LV-GW-CCA16-MNA Duplicate	LV-GW-CCA9D-01	LV-GW-CCA10-01
Sampling Date	12/01/03	12/01/03	11/18/03	11/12/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	0.50 U	0.5 U
Methylene chloride	0.5 U	0.5 U	0.50 U	0.5 U
Naphthalene	NA	NA	0.50 U	0.5 U
n-Butylbenzene	NA	NA	0.50 U	0.5 U
n-Propylbenzene	NA	NA	0.50 U	0.5 U
o-Chlorotoluene	NA	NA	0.50 U	0.5 U
o-Dichlorobenzene	0.5 U	0.5 U	0.50 U	0.5 U
o-Xylene	NA	NA	0.50 U	0.5 U
p-Chlorotoluene	NA	NA	0.50 U	0.5 U
p-Cymene	NA	NA	0.50 U	0.5 U
p-Dichlorobenzene	0.5 U	0.5 U	0.50 U	0.5 U
sec-Butylbenzene	NA	NA	0.50 U	0.5 U
Styrene	0.5 U	0.5 U	0.50 U	0.5 U
tert-Butylbenzene	NA	NA	0.50 U	0.5 U
Tetrachloroethylene	0.5 U	0.5 U	0.50 U	0.5 U
Toluene	0.5 U	0.5 U	0.50 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.50 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.50 U	0.5 U
Trichloroethylene	0.2 J	0.22 J	1.4	1.4
Trichlorofluoromethane	0.5 U	0.5 U	0.50 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.50 U	0.5 U
Xylene (total)	0.5 U	0.5 U	NA	NA
Total Volatile TICs	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-11D	MWCCA-12	MWCCA-12	PZ-20D
TtFW Sample I.D.	LV-GW-CCA11D-01	LV-GW-CCA12-01	LV-GW-CCA13-01 Duplicate	LV-GW-PZ20DMNA
Sampling Date	11/18/03	11/12/03	11/12/03	11/19/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	0.50 U	0.5 U	0.5 U	0.50 U
1,1,1-Trichloroethane	0.50 U	0.5 U	0.5 U	0.50 U
1,1,2,2-Tetrachloroethane	0.50 U	0.5 U	0.5 U	0.50 U
1,1,2-Trichloroethane	0.50 U	0.5 U	0.5 U	0.50 U
1,1-Dichloroethane	0.50 U	0.5 U	0.5 U	0.50 U
1,1-Dichloroethylene	0.50 U	0.5 U	0.5 U	0.50 U
1,1-Dichloropropene	0.50 U	0.5 U	0.5 U	0.50 U
1,2,3-Trichlorobenzene	0.50 U	0.5 U	0.5 U	0.50 U
1,2,3-Trichloropropane	0.50 U	0.5 U	0.5 U	0.50 U
1,2,4-Trichlorobenzene	0.50 U	0.5 U	0.5 U	0.50 U
1,2-Dibromoethane	0.50 U	0.5 U	0.5 U	0.50 U
1,2-Dichloroethane	0.50 U	0.5 U	0.5 U	0.50 U
1,2-Dichloropropane	0.50 U	0.5 U	0.5 U	0.50 U
1,3-Dichloropropane	0.50 U	0.5 U	0.5 U	0.50 U
2,2-Dichloropropane	0.50 U	0.5 U	0.5 U	0.50 U
2-Hexanone	1.0 U	1 U	1 U	1.0 U
Acetone	1.0 U	1 U	1.2	1.0 U
Benzene	0.50 U	0.5 U	0.5 U	0.50 U
Benzene, 1,2,4-trimethyl	0.50 U	0.5 U	0.5 U	0.50 U
Benzene, 1,3,5-trimethyl-	0.50 U	0.5 U	0.5 U	0.50 U
Benzene,1-methylethyl-	0.50 U	0.5 U	0.5 U	0.50 U
Bromobenzene	0.50 U	0.5 U	0.5 U	0.50 U
Bromodichloromethane	0.50 U	0.5 U	0.5 U	0.50 U
Bromoform	0.50 U	0.5 U	0.5 U	0.50 U

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-11D	MWCCA-12	MWCCA-12	PZ-20D
TtFW Sample I.D.	LV-GW-CCA11D-01	LV-GW-CCA12-01	LV-GW-CCA13-01 Duplicate	LV-GW-PZ20DMNA
Sampling Date	11/18/03	11/12/03	11/12/03	11/19/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.50 U	0.5 U	0.5 U	0.50 U
Carbon tetrachloride	0.50 U	0.5 U	0.5 U	0.50 U
Chlorobenzene	0.50 U	0.5 U	0.5 U	0.50 U
Chlorobromomethane	0.50 U	0.5 U	0.5 U	0.50 U
Chloroethane	0.50 U	0.5 U	0.5 U	0.50 U
Chloroform	0.50 U	0.5 U	0.5 U	0.50 U
cis-1,2-Dichloroethylene	0.50 U	0.5 U	0.5 U	0.50 U
cis-1,3-Dichloropropene	0.50 U	0.5 U	0.5 U	0.50 U
Cyclohexane	0.50 U	0.5 U	0.5 U	0.50 U
Dibromochloromethane	0.50 U	0.5 U	0.5 U	0.50 U
Dibromochloropropane	0.50 U	0.5 U	0.5 U	0.50 U
Dichlorodifluoromethane	0.50 U	0.5 U	0.5 U	0.50 U
Ethylbenzene	0.50 U	0.5 U	0.5 U	0.50 U
Freon 113	0.50 U	0.5 U	0.5 U	0.50 U
Hexachlorobutadiene	0.50 U	0.5 U	0.5 U	0.50 U
m/p-xylene	0.50 U	0.5 U	0.5 U	0.50 U
m-Dichlorobenzene	0.50 U	0.5 U	0.5 U	0.50 U
Methyl Acetate	0.50 U	0.5 U	0.5 U	0.50 U
Methyl bromide	0.50 U	0.5 U	0.5 U	0.50 U
Methyl chloride	0.50 U	0.5 U	0.5 U	0.50 U
Methyl ethylketone	1.0 U	1 U	1 U	1.0 U
Methyl isobutyl ketone (MIBK)	1.0 U	1 U	1 U	1.0 U
Methyl tert-butyl ether	0.50 U	0.5 U	0.5 U	0.50 U
Methylcyclohexane	0.50 U	0.5 U	0.5 U	0.50 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
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Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-11D	MWCCA-12	MWCCA-12	PZ-20D
TtFW Sample I.D.	LV-GW-CCA11D-01	LV-GW-CCA12-01	LV-GW-CCA13-01 Duplicate	LV-GW-PZ20DMNA
Sampling Date	11/18/03	11/12/03	11/12/03	11/19/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	0.50 U	0.5 U	0.5 U	0.50 U
Methylene chloride	0.50 U	0.5 U	0.5 U	9.0 U
Naphthalene	0.50 U	0.5 U	0.5 U	0.50 U
n-Butylbenzene	0.50 U	0.5 U	0.5 U	0.50 U
n-Propylbenzene	0.50 U	0.5 U	0.5 U	0.50 U
o-Chlorotoluene	0.50 U	0.5 U	0.5 U	0.50 U
o-Dichlorobenzene	0.50 U	0.5 U	0.5 U	0.50 U
o-Xylene	0.50 U	0.5 U	0.5 U	0.50 U
p-Chlorotoluene	0.50 U	0.5 U	0.5 U	0.50 U
p-Cymene	0.50 U	0.5 U	0.5 U	0.50 U
p-Dichlorobenzene	0.50 U	0.5 U	0.5 U	0.50 U
sec-Butylbenzene	0.50 U	0.5 U	0.5 U	0.50 U
Styrene	0.50 U	0.5 U	0.5 U	0.50 U
tert-Butylbenzene	0.50 U	0.5 U	0.5 U	0.50 U
Tetrachloroethylene	0.50 U	0.5 U	0.5 U	0.50 U
Toluene	0.50 U	0.5 U	0.5 U	0.50 U
trans-1,2-Dichloroethene	0.50 U	0.5 U	0.5 U	0.50 U
trans-1,3-Dichloropropene	0.50 U	0.5 U	0.5 U	0.50 U
Trichloroethylene	0.50 U	11	10	0.50 U
Trichlorofluoromethane	0.50 U	0.5 U	0.5 U	0.50 U
Vinyl chloride	0.50 U	0.5 U	0.5 U	0.50 U
Xylene (total)	NA	NA	NA	NA
Total Volatile TICs	--	--	--	--

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-1	RRAAGEO-1	RRAAGEO-1	RRAAGEO-2
TtFW Sample I.D.	LV-GW-RRAA-GEO1-32	LV-GW-RRAA-GEO1-40	LV-GW-RRAA-GE01-72	LV-GW-RRAA-GEO2-50
Sampling Date	09/15/03	09/15/03	09/17/03	09/23/03
Matrix	Direct Push (32.00)	Direct Push (40.00)	Direct Push (72.00)	Direct Push (50.00)
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 UJ	0.16 J	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.16 J	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	5	5 U	0.5 U	5 U
Acetone	91	30	28 U	5 U
Benzene	0.16 J	0.5 U	0.5 U	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-1	RRAAGEO-1	RRAAGEO-1	RRAAGEO-2
TtFW Sample I.D.	LV-GW-RRAA-GEO1-32	LV-GW-RRAA-GEO1-40	LV-GW-RRAA-GE01-72	LV-GW-RRAA-GEO2-50
Sampling Date	09/15/03	09/15/03	09/17/03	09/23/03
Matrix	Direct Push (32.00)	Direct Push (40.00)	Direct Push (72.00)	Direct Push (50.00)
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	NA	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	NA	NA	0.5 U	NA
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 UJ
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Methyl ethylketone	5 U	7.7	5.1	5 U
Methyl isobutyl ketone (MIBK)	1.9 J	5 U	0.5 U	5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-1	RRAAGEO-1	RRAAGEO-1	RRAAGEO-2
TtFW Sample I.D.	LV-GW-RRAA-GEO1-32	LV-GW-RRAA-GEO1-40	LV-GW-RRAA-GE01-72	LV-GW-RRAA-GEO2-50
Sampling Date	09/15/03	09/15/03	09/17/03	09/23/03
Matrix	Direct Push (32.00)	Direct Push (40.00)	Direct Push (72.00)	Direct Push (50.00)
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	0.5 U	0.5 U	1.8 UJ	0.59 UJ
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	NA	NA	0.5 U	NA
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.3 J	0.5 U	0.81	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene	0.22 J	0.5 U	0.57	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.5 U	0.5 U	NA	0.5 U
Total Volatile TICs	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-2	RRAAGEO-2	RRAAGEO-2	RRAAGEO-3
TtFW Sample I.D.	LV-GW-RRAA-GEO2-60	LV-GW-RRAA-GEO13-60 Duplicate	LV-GW-RRAA-GE02-70	LV-GW-RRAA-GEO3-40
Sampling Date	09/23/03	09/23/03	09/24/03	09/18/03
Matrix	Direct Push (60.00)	Direct Push (60.00)	Direct Push (70.00)	Direct Push (40.00)
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 UJ
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	5 U	5 U	2.5 U	5 U
Acetone	5 U	5 U	2.5 U	9.8
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-2	RRAAGEO-2	RRAAGEO-2	RRAAGEO-3
TtFW Sample I.D.	LV-GW-RRAA-GEO2-60	LV-GW-RRAA-GEO13-60 Duplicate	LV-GW-RRAA-GE02-70	LV-GW-RRAA-GEO3-40
Sampling Date	09/23/03	09/23/03	09/24/03	09/18/03
Matrix	Direct Push (60.00)	Direct Push (60.00)	Direct Push (70.00)	Direct Push (40.00)
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.22 J
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 UJ
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	NA	NA	0.5 U	NA
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ
Methyl bromide	0.5 U	0.5 U	0.5 UJ	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.21 U
Methyl ethylketone	5 U	5 U	2.5 U	5 UJ
Methyl isobutyl ketone (MIBK)	5 U	5 U	2.5 U	5 UJ
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-2	RRAAGEO-2	RRAAGEO-2	RRAAGEO-3
TtFW Sample I.D.	LV-GW-RRAA-GEO2-60	LV-GW-RRAA-GEO13-60 Duplicate	LV-GW-RRAA-GE02-70	LV-GW-RRAA-GEO3-40
Sampling Date	09/23/03	09/23/03	09/24/03	09/18/03
Matrix	Direct Push (60.00)	Direct Push (60.00)	Direct Push (70.00)	Direct Push (40.00)
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	0.5 U	1 UJ	1.1 UJ	0.5 U
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	NA	NA	0.5 U	NA
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 UJ
Trichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.5 U	0.5 U	NA	0.5 U
Total Volatile TICs	--	--	--	--

ee Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-3	RRAAGEO-3	RRAAGEO-4	RRAAGEO-4
TtFW Sample I.D.	LV-GW-RRAA-GEO3-56	LV-GW-RRAA-GE03-72	LV-GW-RRAA-GEO4-30	LV-GW-RRAA-GEO4-40
Sampling Date	09/18/03	09/19/03	09/24/03	09/24/03
Matrix	Direct Push (56.00)	Direct Push (72.00)	Direct Push (30.00)	Direct Push (40.00)
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	5 U	0.5 U	5 U	5 U
Acetone	12	16 U	5 U	5 U
Benzene	0.41 J	0.58	0.5 U	0.43 J
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-3	RRAAGEO-3	RRAAGEO-4	RRAAGEO-4
TtFW Sample I.D.	LV-GW-RRAA-GEO3-56	LV-GW-RRAA-GE03-72	LV-GW-RRAA-GEO4-30	LV-GW-RRAA-GEO4-40
Sampling Date	09/18/03	09/19/03	09/24/03	09/24/03
Matrix	Direct Push (56.00)	Direct Push (72.00)	Direct Push (30.00)	Direct Push (40.00)
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 UJ
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	NA	0.5 U	0.5 UJ
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.53	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.55 J	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.18 J	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	NA	0.5 U	NA	NA
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.81	0.5 U	0.5 U	0.5 U
Methyl ethylketone	2.6 J	2.6	5 U	5 U
Methyl isobutyl ketone (MIBK)	5 UJ	0.5 U	5 U	5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.57 J	0.5 U	0.5 U	0.5 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-3	RRAAGEO-3	RRAAGEO-4	RRAAGEO-4
TtFW Sample I.D.	LV-GW-RRAA-GEO3-56	LV-GW-RRAA-GE03-72	LV-GW-RRAA-GEO4-30	LV-GW-RRAA-GEO4-40
Sampling Date	09/18/03	09/19/03	09/24/03	09/24/03
Matrix	Direct Push (56.00)	Direct Push (72.00)	Direct Push (30.00)	Direct Push (40.00)
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	0.5 U	1.3 UJ	0.5 U	0.5 U
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	NA	0.5 U	NA	NA
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.78 J	0.75	0.5 U	0.69
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene	0.5 U	1.1	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.86 J	NA	0.5 U	0.41 J
Total Volatile TICs	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-4	RRAAGEO-5	RRAAGEO-5	RRAAGEO-5
TtFW Sample I.D.	LV-GW-RRAA-GE04-70	LV-GW-RRAA-GE05-30	LV-GW-RRAA-GEO5-50	LV-GW-RRAA-GEO5-70
Sampling Date	09/25/03	10/07/03	10/07/03	10/07/03
Matrix	Direct Push (70.00)	Direct Push (30.00)	Direct Push (50.00)	Direct Push (70.00)
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	24 UJ	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	24 UJ	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	24 UJ	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	24 UJ	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	24 UJ	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	NA	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	24 UJ	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	24 UJ	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	24 UJ	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	24 UJ	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	2.5 U	5 U	24 UJ	2.5 U
Acetone	10	6.2	24 UJ	2.5 U
Benzene	0.5 U	0.5 U	24 UJ	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	24 UJ	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	24 UJ	0.5 U
Bromoform	0.5 U	0.5 U	24 UJ	0.5 U

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-4	RRAAGEO-5	RRAAGEO-5	RRAAGEO-5
TtFW Sample I.D.	LV-GW-RRAA-GE04-70	LV-GW-RRAA-GE05-30	LV-GW-RRAA-GEO5-50	LV-GW-RRAA-GEO5-70
Sampling Date	09/25/03	10/07/03	10/07/03	10/07/03
Matrix	Direct Push (70.00)	Direct Push (30.00)	Direct Push (50.00)	Direct Push (70.00)
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	24 UJ	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	24 UJ	0.5 U
Chlorobenzene	0.5 U	0.5 U	24 UJ	0.5 U
Chlorobromomethane	0.5 U	0.5 U	NA	0.5 U
Chloroethane	0.5 U	0.5 U	24 UJ	0.5 U
Chloroform	0.5 U	0.5 U	24 UJ	0.5 U
cis-1,2-Dichloroethylene	0.5 U	6.2	24 UJ	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	24 UJ	0.5 U
Cyclohexane	0.5 U	0.5 U	24 UJ	0.5 U
Dibromochloromethane	0.5 U	0.5 U	24 UJ	0.5 U
Dibromochloropropane	0.5 U	0.5 U	24 UJ	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	24 UJ	0.5 U
Ethylbenzene	0.5 U	0.5 U	24 UJ	0.5 U
Freon 113	0.5 U	0.5 U	24 UJ	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	0.5 U	NA	NA	0.5 U
m-Dichlorobenzene	0.5 U	0.5 U	24 UJ	0.5 U
Methyl Acetate	0.5 U	0.5 U	24 UJ	0.5 U
Methyl bromide	0.5 UJ	0.5 U	24 UJ	0.5 U
Methyl chloride	0.5 U	0.5 U	24 UJ	0.5 U
Methyl ethylketone	2.5 U	5 U	24 UJ	2.5 U
Methyl isobutyl ketone (MIBK)	2.5 U	5 U	24 UJ	2.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	24 UJ	0.5 U
Methylcyclohexane	0.5 U	0.5 U	24 UJ	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-4	RRAAGEO-5	RRAAGEO-5	RRAAGEO-5
TtFW Sample I.D.	LV-GW-RRAA-GE04-70	LV-GW-RRAA-GE05-30	LV-GW-RRAA-GEO5-50	LV-GW-RRAA-GEO5-70
Sampling Date	09/25/03	10/07/03	10/07/03	10/07/03
Matrix	Direct Push (70.00)	Direct Push (30.00)	Direct Push (50.00)	Direct Push (70.00)
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	0.8 UJ	0.5 U	37 UJ	0.5 U
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	24 UJ	0.5 U
o-Xylene	0.5 U	NA	NA	0.5 U
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	24 UJ	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	24 UJ	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	0.5 U	0.5 U	24 UJ	0.5 U
Toluene	0.5 U	0.5 U	24 UJ	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	24 UJ	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	24 UJ	0.5 U
Trichloroethylene	0.5 U	0.5 U	24 UJ	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	24 UJ	0.5 U
Vinyl chloride	0.5 U	0.5 U	24 UJ	0.5 U
Xylene (total)	NA	0.5 U	24 UJ	NA
Total Volatile TICs	--	--	--	--

e Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-6	RRAAGEO-6	RRAAGEO-6	RRAAGEO-6
TtFW Sample I.D.	LV-GW-RRAA-GE06-50	LV-GW-RRAA-GE06-60	LV-GW-RRAA-GE014-60 Duplicate	LV-GW-RRAA-GEO6-70
Sampling Date	10/06/03	10/06/03	10/06/03	10/06/03
Matrix	Direct Push (50.00)	Direct Push (60.00)	Direct Push (60.00)	Direct Push (70.00)
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	5 U	5 U	5 U	2.5 U
Acetone	5 U	5 U	5 U	2.5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-6	RRAAGEO-6	RRAAGEO-6	RRAAGEO-6
TtFW Sample I.D.	LV-GW-RRAA-GE06-50	LV-GW-RRAA-GE06-60	LV-GW-RRAA-GE014-60 Duplicate	LV-GW-RRAA-GEO6-70
Sampling Date	10/06/03	10/06/03	10/06/03	10/06/03
Matrix	Direct Push (50.00)	Direct Push (60.00)	Direct Push (60.00)	Direct Push (70.00)
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	NA	NA	NA	0.5 U
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Methyl ethylketone	5 U	5 U	5 U	2.5 U
Methyl isobutyl ketone (MIBK)	5 U	5 U	5 U	2.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U

e Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-6	RRAAGEO-6	RRAAGEO-6	RRAAGEO-6
TtFW Sample I.D.	LV-GW-RRAA-GE06-50	LV-GW-RRAA-GE06-60	LV-GW-RRAA-GE014-60 Duplicate	LV-GW-RRAA-GEO6-70
Sampling Date	10/06/03	10/06/03	10/06/03	10/06/03
Matrix	Direct Push (50.00)	Direct Push (60.00)	Direct Push (60.00)	Direct Push (70.00)
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	NA	NA	NA	0.5 U
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.5 U	0.5 U	0.5 U	NA
Total Volatile TICs	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-7	RRAAGEO-7	RRAAGEO-7	RRAAGEO-8
TtFW Sample I.D.	LV-GW-RRAA-GEO7-50	LV-GW-RRAA-GEO7-30	LV-GW-RRAA-GE07-70	LV-GW-RRAA-GEO8-30
Sampling Date	09/19/03	09/26/03	09/26/03	09/29/03
Matrix	Direct Push (50.00)	Direct Push (30.00)	Direct Push (70.00)	Direct Push (30.00)
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 UJ
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	5 U	5 U	2.5 U	5 U
Acetone	5 U	5 U	2.5 U	6.6 J
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

e Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-7	RRAAGEO-7	RRAAGEO-7	RRAAGEO-8
TtFW Sample I.D.	LV-GW-RRAA-GEO7-50	LV-GW-RRAA-GEO7-30	LV-GW-RRAA-GE07-70	LV-GW-RRAA-GEO8-30
Sampling Date	09/19/03	09/26/03	09/26/03	09/29/03
Matrix	Direct Push (50.00)	Direct Push (30.00)	Direct Push (70.00)	Direct Push (30.00)
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	NA	NA	0.5 U	NA
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Methyl bromide	0.5 U	0.5 U	0.5 UJ	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Methyl ethylketone	5 U	5 U	2.5 U	5 U
Methyl isobutyl ketone (MIBK)	5 U	5 U	2.5 U	5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-7	RRAAGEO-7	RRAAGEO-7	RRAAGEO-8
TtFW Sample I.D.	LV-GW-RRAA-GEO7-50	LV-GW-RRAA-GEO7-30	LV-GW-RRAA-GE07-70	LV-GW-RRAA-GEO8-30
Sampling Date	09/19/03	09/26/03	09/26/03	09/29/03
Matrix	Direct Push (50.00)	Direct Push (30.00)	Direct Push (70.00)	Direct Push (30.00)
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	0.5 U	0.5 U	0.5 UJ	0.67 UJ
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	NA	NA	0.5 U	NA
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.5 U	0.5 U	NA	0.5 U
Total Volatile TICs	--	--	--	--

e Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-8	RRAAGEO-8	RRAAGEO-9	RRAAGEO-9
TtFW Sample I.D.	LV-GW-RRAA-GEO8-40	LV-GW-RRAA-GEO8-70	LV-GW-RRAA-GEO9-50	LV-GW-RRAA-GEO9-60
Sampling Date	09/29/03	09/30/03	10/02/03	10/02/03
Matrix	Direct Push (40.00)	Direct Push (70.00)	Direct Push (50.00)	Direct Push (60.00)
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 UJ	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	5 U	2.5 U	5 U	5 U
Acetone	5 U	2.5 U	5 U	5 U
Benzene	0.16 J	0.5 U	0.25 J	0.22 J
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-8	RRAAGEO-8	RRAAGEO-9	RRAAGEO-9
TtFW Sample I.D.	LV-GW-RRAA-GEO8-40	LV-GW-RRAA-GEO8-70	LV-GW-RRAA-GEO9-50	LV-GW-RRAA-GEO9-60
Sampling Date	09/29/03	09/30/03	10/02/03	10/02/03
Matrix	Direct Push (40.00)	Direct Push (70.00)	Direct Push (50.00)	Direct Push (60.00)
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.94	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	NA	0.5 U	NA	NA
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Methyl ethylketone	5 U	2.5 U	5 U	5 U
Methyl isobutyl ketone (MIBK)	5 U	2.5 U	5 U	5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.17 J	0.19 J

ee Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-8	RRAAGEO-8	RRAAGEO-9	RRAAGEO-9
TtFW Sample I.D.	LV-GW-RRAA-GEO8-40	LV-GW-RRAA-GEO8-70	LV-GW-RRAA-GEO9-50	LV-GW-RRAA-GEO9-60
Sampling Date	09/29/03	09/30/03	10/02/03	10/02/03
Matrix	Direct Push (40.00)	Direct Push (70.00)	Direct Push (50.00)	Direct Push (60.00)
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	0.7 U	0.5 U	0.6 U	0.56 U
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	NA	0.5 U	NA	NA
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.34 J	0.28 J
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene	0.5 U	0.5 U	0.5 U	0.26 J
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.5 U	NA	0.5 U	0.5 U
Total Volatile TICs	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-9	RRAAGEO-10	RRAAGEO-10	RRAAGEO-10
TtFW Sample I.D.	LV-GW-RRAA-GEO9-70	LV-GW-RRAA-GEO10-30	LV-GW-RRAA-GEO10-60	LV-GW-RRAA-GEO10-70
Sampling Date	10/02/03	09/30/03	10/01/03	10/01/03
Matrix	Direct Push (70.00)	Direct Push (30.00)	Direct Push (60.00)	Direct Push (70.00)
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 UJ	0.5 UJ	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	2.5 U	5 U	5 U	2.5 U
Acetone	2.5 U	26	15	2.5 U
Benzene	0.5 U	0.5 U	0.24 J	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

ee Table D-1 abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-9	RRAAGEO-10	RRAAGEO-10	RRAAGEO-10
TtFW Sample I.D.	LV-GW-RRAA-GEO9-70	LV-GW-RRAA-GEO10-30	LV-GW-RRAA-GEO10-60	LV-GW-RRAA-GEO10-70
Sampling Date	10/02/03	09/30/03	10/01/03	10/01/03
Matrix	Direct Push (70.00)	Direct Push (30.00)	Direct Push (60.00)	Direct Push (70.00)
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	0.5 U	NA	NA	0.5 U
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U
Methyl bromide	0.5 UJ	0.5 U	0.5 U	0.5 UJ
Methyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Methyl ethylketone	2.5 U	5 U	5 U	2.5 U
Methyl isobutyl ketone (MIBK)	2.5 U	5 U	5 U	2.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-9	RRAAGEO-10	RRAAGEO-10	RRAAGEO-10
TtFW Sample I.D.	LV-GW-RRAA-GEO9-70	LV-GW-RRAA-GEO10-30	LV-GW-RRAA-GEO10-60	LV-GW-RRAA-GEO10-70
Sampling Date	10/02/03	09/30/03	10/01/03	10/01/03
Matrix	Direct Push (70.00)	Direct Push (30.00)	Direct Push (60.00)	Direct Push (70.00)
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	1.1 UJ	0.54 U	0.5 U	1.3 UJ
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	0.5 U	NA	NA	0.5 U
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.7	0.5 U	0.22 J	0.5 J
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene	1	0.5 U	0.5 U	0.5
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	NA	0.5 U	0.5 U	NA
Total Volatile TICs	--	--	--	--

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-11	RRAAGEO-11	RRAAGEO-11	RRAAGEO-12
TtFW Sample I.D.	LV-GW-RRAA-GE011-50	LV-GW-RRAA-GE011-60	LV-GW-RRAA-GEO11-70	LV-GW-RRAA-GEO12-40
Sampling Date	10/08/03	10/08/03	10/08/03	09/22/03
Matrix	Direct Push (50.00)	Direct Push (60.00)	Direct Push (70.00)	Direct Push (40.00)
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 UJ	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	5 U	5 U	2.5 U	5 U
Acetone	5 R	5 R	2.5 U	5 U
Benzene	0.5 U	0.31 J	0.5 U	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-11	RRAAGEO-11	RRAAGEO-11	RRAAGEO-12
TtFW Sample I.D.	LV-GW-RRAA-GE011-50	LV-GW-RRAA-GE011-60	LV-GW-RRAA-GEO11-70	LV-GW-RRAA-GEO12-40
Sampling Date	10/08/03	10/08/03	10/08/03	09/22/03
Matrix	Direct Push (50.00)	Direct Push (60.00)	Direct Push (70.00)	Direct Push (40.00)
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.17 J	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 UJ	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	NA	NA	0.5 U	NA
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 R	0.5 R	0.5 U	0.5 UJ
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.5 U	0.45 J	0.5 U	0.5 U
Methyl ethylketone	5 U	5 U	2.5 U	5 U
Methyl isobutyl ketone (MIBK)	5 U	5 U	2.5 U	5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 UJ	0.44 J	0.5 U	0.5 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-11	RRAAGEO-11	RRAAGEO-11	RRAAGEO-12
TtFW Sample I.D.	LV-GW-RRAA-GE011-50	LV-GW-RRAA-GE011-60	LV-GW-RRAA-GEO11-70	LV-GW-RRAA-GEO12-40
Sampling Date	10/08/03	10/08/03	10/08/03	09/22/03
Matrix	Direct Push (50.00)	Direct Push (60.00)	Direct Push (70.00)	Direct Push (40.00)
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	0.5 U	0.5 U	1 U	0.5 UJ
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	NA	NA	0.5 U	NA
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.32 J	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 UJ	0.5 U	0.5 U	0.5 U
Trichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.5 U	0.5 U	NA	0.5 U
Total Volatile TICs	--	2.99 J	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-12	RRAAGEO-12	MWRRAA-1	MWRRAA-2D
TtFW Sample I.D.	LV-GW-RRAA-GEO12-60	LV-GW-RRAA-GEO12-70	LV-GW-RRAA1-01	LV-GW-RRAA2D-01
Sampling Date	09/22/03	09/22/03	11/12/03	11/12/03
Matrix	Direct Push (60.00)	Direct Push (70.00)	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	0.5 U	0.5 U
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	0.5 U	0.5 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	0.5 U	0.5 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	0.5 U	0.5 U
2,2-Dichloropropane	NA	NA	0.5 U	0.5 U
2-Hexanone	5 UJ	2.5 U	1 U	1 U
Acetone	5 U	2.5 U	1 U	1 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	0.5 U	0.5 U
Benzene, 1,3,5-trimethyl-	NA	NA	0.5 U	0.5 U
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-12	RRAAGEO-12	MWRRAA-1	MWRRAA-2D
TtFW Sample I.D.	LV-GW-RRAA-GEO12-60	LV-GW-RRAA-GEO12-70	LV-GW-RRAA1-01	LV-GW-RRAA2D-01
Sampling Date	09/22/03	09/22/03	11/12/03	11/12/03
Matrix	Direct Push (60.00)	Direct Push (70.00)	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.63	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	0.5 U	0.5 U
m/p-xylene	NA	0.5 U	0.5 U	0.5 U
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 UJ	0.5 U	0.5 U	0.5 U
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Methyl ethylketone	5 U	2.5 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	5 UJ	2.5 U	1 U	1 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Railroad Avenue	Railroad Avenue	Railroad Avenue	Railroad Avenue
Location	RRAAGEO-12	RRAAGEO-12	MWRRAA-1	MWRRAA-2D
TtFW Sample I.D.	LV-GW-RRAA-GEO12-60	LV-GW-RRAA-GEO12-70	LV-GW-RRAA1-01	LV-GW-RRAA2D-01
Sampling Date	09/22/03	09/22/03	11/12/03	11/12/03
Matrix	Direct Push (60.00)	Direct Push (70.00)	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	0.5 U	0.5 U
Methylene chloride	0.55 UJ	1.2 UJ	0.5 U	0.5 U
Naphthalene	NA	NA	0.5 U	0.5 U
n-Butylbenzene	NA	NA	0.5 U	0.5 U
n-Propylbenzene	NA	NA	0.5 U	0.5 U
o-Chlorotoluene	NA	NA	0.5 U	0.5 U
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	NA	0.5 U	0.5 U	0.5 U
p-Chlorotoluene	NA	NA	0.5 U	0.5 U
p-Cymene	NA	NA	0.5 U	0.5 U
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	0.5 U	0.5 U
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	0.5 U	0.5 U
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene	0.31 J	1.9	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.5 U	NA	NA	NA
Total Volatile TICs	--	--	--	--

e Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Whig Street	Whig Street	Great Triangle	Great Triangle
Location	PZ-39	PZ-45D	MWEDSA-1	PZ-5
TtFW Sample I.D.	LV-GW-PZ39-MNA	LV-GW-PZ45D-MNA	LV-GW-EDSA1-MNA	LV-GW-PZ5-MNA
Sampling Date	12/04/03	12/04/03	11/20/03	12/01/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	0.50 U	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.50 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.50 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.50 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.50 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.50 U	0.5 U
1,1-Dichloropropene	NA	NA	0.50 U	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.50 U	0.5 U
1,2,3-Trichloropropane	NA	NA	0.50 U	NA
1,2,4-Trichlorobenzene	0.5 UJ	0.5 UJ	0.50 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.50 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.50 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.50 U	0.5 U
1,3-Dichloropropane	NA	NA	0.50 U	NA
2,2-Dichloropropane	NA	NA	0.50 U	NA
2-Hexanone	5 U	5 U	1.0 U	5 U
Acetone	5 U	5 U	2.2	5 U
Benzene	0.5 U	0.5 U	0.50 U	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	0.50 U	NA
Benzene, 1,3,5-trimethyl-	NA	NA	0.50 U	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.50 U	0.5 U
Bromobenzene	NA	NA	0.50 U	NA
Bromodichloromethane	0.5 U	0.5 U	0.50 U	0.5 U
Bromoform	0.5 U	0.5 U	0.50 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site
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Area	Whig Street	Whig Street	Great Triangle	Great Triangle
Location	PZ-39	PZ-45D	MWEDSA-1	PZ-5
TtFW Sample I.D.	LV-GW-PZ39-MNA	LV-GW-PZ45D-MNA	LV-GW-EDSA1-MNA	LV-GW-PZ5-MNA
Sampling Date	12/04/03	12/04/03	11/20/03	12/01/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.5 U	0.50 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.50 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.50 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.50 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.50 U	0.5 U
Chloroform	0.5 U	0.5 U	0.50 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 U	0.50 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.50 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.50 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.50 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.50 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.50 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.50 U	0.5 U
Freon 113	0.5 U	0.5 U	0.50 U	0.5 U
Hexachlorobutadiene	NA	NA	0.50 U	NA
m/p-xylene	NA	NA	0.50 U	NA
m-Dichlorobenzene	0.5 U	0.5 U	0.50 U	0.5 U
Methyl Acetate	0.5 UJ	0.5 UJ	0.50 U	0.5 U
Methyl bromide	0.5 U	0.5 U	0.50 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.50 U	0.5 U
Methyl ethylketone	5 U	5 U	1.0 U	5 U
Methyl isobutyl ketone (MIBK)	5 U	5 U	1.0 U	5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.50 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.50 U	0.5 U

ee Table D-1 abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Whig Street	Whig Street	Great Triangle	Great Triangle
Location	PZ-39	PZ-45D	MWEDSA-1	PZ-5
TtFW Sample I.D.	LV-GW-PZ39-MNA	LV-GW-PZ45D-MNA	LV-GW-EDSA1-MNA	LV-GW-PZ5-MNA
Sampling Date	12/04/03	12/04/03	11/20/03	12/01/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	0.50 U	NA
Methylene chloride	0.5 U	0.5 U	9.0 U	0.5 U
Naphthalene	NA	NA	0.50 U	NA
n-Butylbenzene	NA	NA	0.50 U	NA
n-Propylbenzene	NA	NA	0.50 U	NA
o-Chlorotoluene	NA	NA	0.50 U	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.50 U	0.5 U
o-Xylene	NA	NA	0.50 U	NA
p-Chlorotoluene	NA	NA	0.50 U	NA
p-Cymene	NA	NA	0.50 U	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.50 U	0.5 U
sec-Butylbenzene	NA	NA	0.50 U	NA
Styrene	0.5 U	0.5 U	0.50 U	0.5 U
tert-Butylbenzene	NA	NA	0.50 U	NA
Tetrachloroethylene	0.5 U	0.5 U	0.50 U	0.5 U
Toluene	0.5 U	0.5 U	0.50 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.50 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.50 U	0.5 U
Trichloroethylene	0.5 U	2.1	14	6.6
Trichlorofluoromethane	0.5 U	0.5 U	0.50 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.50 U	0.5 U
Xylene (total)	0.5 U	0.5 U	NA	0.5 U
Total Volatile TICs	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Great Triangle	Great Triangle	Great Triangle	Luminite
Location	PZ-6D	PZ-47D	PZ-48	PZ-46
TtFW Sample I.D.	LV-GW-PZ6D-MNA	PZ-47D	PZ48	LV-GW-PZ46-MNA
Sampling Date	12/03/03	05/02/02	05/02/02	12/08/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 UJ
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2-Hexanone	5 U	5 U	5 U	5 U
Acetone	5 U	5.7 U	5.6 U	5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA	NA	NA
Benzene,1-methylethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U

ee Table D-1 abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Great Triangle	Great Triangle	Great Triangle	Luminite
Location	PZ-6D	PZ-47D	PZ-48	PZ-46
TtFW Sample I.D.	LV-GW-PZ6D-MNA	PZ-47D	PZ48	LV-GW-PZ46-MNA
Sampling Date	12/03/03	05/02/02	05/02/02	12/08/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Carbon disulfide	0.5 U	0.38 J	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 UJ
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethylene	0.5 U	0.5 UJ	0.5 UJ	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloropropane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Freon 113	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	NA	NA	NA	NA
m/p-xylene	NA	NA	NA	NA
m-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U
Methyl bromide	0.5 U	0.5 U	0.5 U	0.5 U
Methyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Methyl ethylketone	5 U	2.9 J	5 U	5 U
Methyl isobutyl ketone (MIBK)	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Great Triangle	Great Triangle	Great Triangle	Luminite
Location	PZ-6D	PZ-47D	PZ-48	PZ-46
TtFW Sample I.D.	LV-GW-PZ6D-MNA	PZ-47D	PZ48	LV-GW-PZ46-MNA
Sampling Date	12/03/03	05/02/02	05/02/02	12/08/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Methylene bromide	NA	NA	NA	NA
Methylene chloride	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Chlorotoluene	NA	NA	NA	NA
o-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	NA	NA	NA	NA
p-Chlorotoluene	NA	NA	NA	NA
p-Cymene	NA	NA	NA	NA
p-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.22 J	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 UJ	0.5 UJ	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethylene	6.9	1.6	3.4	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	0.5 U	0.14 J	0.5 U	0.5 U
Total Volatile TICs	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Luminite	Municipal Well #3
Location	PZ-55D	MUNWELL3
TtFW Sample I.D.	LV-GW-PZ55D-MNA	MUNICIPAL WELL #3
Sampling Date	12/08/03	05/02/02
Matrix	Groundwater	Groundwater
Units	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA
1,1,1-Trichloroethane	0.5 UJ	0.5 U
1,1,2,2-Tetrachloroethane	0.5 UJ	0.5 U
1,1,2-Trichloroethane	0.5 UJ	0.5 U
1,1-Dichloroethane	0.5 UJ	0.5 U
1,1-Dichloroethylene	0.5 UJ	0.5 U
1,1-Dichloropropene	NA	NA
1,2,3-Trichlorobenzene	0.5 R	0.5 U
1,2,3-Trichloropropane	NA	NA
1,2,4-Trichlorobenzene	0.5 R	0.5 U
1,2-Dibromoethane	0.5 UJ	0.5 U
1,2-Dichloroethane	0.5 UJ	0.5 U
1,2-Dichloropropane	0.5 UJ	0.5 U
1,3-Dichloropropane	NA	NA
2,2-Dichloropropane	NA	NA
2-Hexanone	5 R	5 U
Acetone	5 R	5 U
Benzene	0.5 R	0.5 U
Benzene, 1,2,4-trimethyl	NA	NA
Benzene, 1,3,5-trimethyl-	NA	NA
Benzene,1-methylethyl-	0.5 R	0.5 U
Bromobenzene	NA	NA
Bromodichloromethane	0.5 UJ	0.5 U
Bromoform	0.5 UJ	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Luminite	Municipal Well #3
Location	PZ-55D	MUNWELL3
TtFW Sample I.D.	LV-GW-PZ55D-MNA	MUNICIPAL WELL #3
Sampling Date	12/08/03	05/02/02
Matrix	Groundwater	Groundwater
Units	ug/L	ug/L
Carbon disulfide	0.5 UJ	0.5 U
Carbon tetrachloride	0.5 UJ	0.5 U
Chlorobenzene	0.5 R	0.5 U
Chlorobromomethane	0.5 UJ	0.5 U
Chloroethane	0.5 UJ	0.5 U
Chloroform	0.5 UJ	0.5 U
cis-1,2-Dichloroethylene	0.5 UJ	0.5 U
cis-1,3-Dichloropropene	0.5 UJ	0.5 U
Cyclohexane	0.5 UJ	0.5 U
Dibromochloromethane	0.5 UJ	0.5 U
Dibromochloropropane	0.5 UJ	0.5 U
Dichlorodifluoromethane	0.5 UJ	0.5 UJ
Ethylbenzene	0.5 R	0.5 U
Freon 113	0.5 UJ	0.5 U
Hexachlorobutadiene	NA	NA
m/p-xylene	NA	NA
m-Dichlorobenzene	0.5 R	0.5 U
Methyl Acetate	0.5 UJ	0.5 U
Methyl bromide	0.5 UJ	0.5 U
Methyl chloride	0.5 UJ	0.5 UJ
Methyl ethylketone	5 R	5 U
Methyl isobutyl ketone (MIBK)	5 R	5 U
Methyl tert-butyl ether	0.5 UJ	0.5 U
Methylcyclohexane	0.5 UJ	0.5 U

See Table D-[illegible] abbreviations and data qualifiers.

Table D-27
Low Concentration Volatile Organic Compounds - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Luminite	Municipal Well #3
Location	PZ-55D	MUNWELL3
TtFW Sample I.D.	LV-GW-PZ55D-MNA	MUNICIPAL WELL #3
Sampling Date	12/08/03	05/02/02
Matrix	Groundwater	Groundwater
Units	ug/L	ug/L
Methylene bromide	NA	NA
Methylene chloride	0.5 UJ	0.5 U
Naphthalene	NA	NA
n-Butylbenzene	NA	NA
n-Propylbenzene	NA	NA
o-Chlorotoluene	NA	NA
o-Dichlorobenzene	0.5 R	0.5 U
o-Xylene	NA	NA
p-Chlorotoluene	NA	NA
p-Cymene	NA	NA
p-Dichlorobenzene	0.5 R	0.5 U
sec-Butylbenzene	NA	NA
Styrene	0.5 R	0.5 U
tert-Butylbenzene	NA	NA
Tetrachloroethylene	0.5 UJ	0.5 U
Toluene	0.5 R	0.5 U
trans-1,2-Dichloroethene	0.5 UJ	0.5 U
trans-1,3-Dichloropropene	0.5 UJ	0.5 U
Trichloroethylene	4.4 J	0.5 U
Trichlorofluoromethane	0.5 UJ	0.5 U
Vinyl chloride	0.5 UJ	0.5 U
Xylene (total)	0.5 R	0.5 U
Total Volatile TICs	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-28
Low Concentration Semi-Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-1	MW-D1	MW-2	MW-D2	MW-D2 Duplicate of MW-D2
TtFW Sample I.D.	LV-BIA-GW-MW1-01	LV-BIA-GW-MWD1-01	LV-BIA-GW-MW2-01	LV-BIA-GW-MWD2-01	LV-BIA-GW-MWD3-01
Sampling Date	1/4/01	1/10/01	1/10/01	1/10/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Phenol	5 U	5 U	5 U	5 U	5 U
bis-(2-Chloroethyl) ether	5 U	5 U	5 U	5 U	5 U
2-Chlorophenol	5 U	5 U	5 U	5 U	5 U
2-Methylphenol	5 U	5 U	5 U	5 U	5 U
2,2'-oxybis(1-Chloropropane)	5 U	5 U	5 U	5 U	5 U
4-Methylphenol	5 U	5 U	5 U	5 U	5 U
N-Nitroso-di-n-propylamine	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	5 U	5 U	5 U	5 U	5 U
Nitrobenzene	5 U	5 U	5 U	5 U	5 U
Isophorone	5 U	5 U	5 U	5 U	5 U
2-Nitrophenol	5 U	5 U	5 U	5 U	5 U
2,4-Dimethylphenol	5 U	5 U	5 U	5 U	5 U
bis(2-Chloroethoxy)methane	5 U	5 U	5 U	5 U	5 U
2,4-Dichlorophenol	5 U	5 U	5 U	5 U	5 U
Naphthalene	5 U	5 U	5 U	5 U	5 U
4-Chloroaniline	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Hexachlorobutadiene	5 UJ	5 U	5 U	5 U	5 U
4-Chloro-3-methylphenol	5 U	5 U	5 U	5 U	5 U
2-Methylnaphthalene	5 U	5 U	5 U	5 U	5 U
Hexachlorocyclopentadiene	5 U	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	5 U	5 U	5 U	5 U	5 U
2,4,5-Trichlorophenol	20 U	20 U	20 U	20 U	20 U
2-Chloronaphthalene	5 U	5 U	5 U	5 U	5 U
2-Nitroaniline	20 U	20 U	20 U	20 U	20 U

See Table D-1 for abbreviations and data qualifiers.

Table D-28
Low Concentration Semi-Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-1	MW-D1	MW-2	MW-D2	MW-D2 Duplicate of MW-D2
TtFW Sample I.D.	LV-BIA-GW-MW1-01	LV-BIA-GW-MWD1-01	LV-BIA-GW-MW2-01	LV-BIA-GW-MWD2-01	LV-BIA-GW-MWD3-01
Sampling Date	1/4/01	1/10/01	1/10/01	1/10/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Dimethylphthalate	5 U	5 U	5 U	5 U	5 U
Acenaphthylene	5 U	5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline	R	R	R	R	R
Acenaphthene	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrophenol	20 UJ	20 U	20 U	20 U	20 U
4-Nitrophenol	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U
Diethylphthalate	5 U	5 U	5 U	5 U	5 U
4-Chlorophenyl-phenyl ether	5 U	5 U	5 U	5 U	5 U
Fluorene	5 U	5 U	5 U	5 U	5 U
4-Nitroaniline	20 U	20 UJ	20 UJ	20 UJ	20 UJ
4,6-Dinitro-2-methylphenol	20 U	20 U	20 U	20 U	20 U
N-Nitrosodiphenylamine	5 U	5 UJ	5 UJ	5 UJ	5 UJ
4-Bromophenyl-phenylether	5 U	5 U	5 U	5 U	5 U
Hexachlorobenzene	5 U	5 U	5 U	5 U	5 U
Pentachlorophenol	20 U	20 U	20 U	20 U	20 U
Phenanthrene	5 U	5 U	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U	5 U	5 U
Di-n-butylphthalate	5 U	5 U	5 U	5 U	5 U
Fluoranthene	5 U	5 U	5 U	5 U	5 U
Pyrene	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	5 U	5 U	5 U	5 U	5 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-28
Low Concentration Semi-Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-1	MW-D1	MW-2	MW-D2	MW-D2 Duplicate of MW-D2
TtFW Sample I.D.	LV-BIA-GW-MW1-01	LV-BIA-GW-MWD1-01	LV-BIA-GW-MW2-01	LV-BIA-GW-MWD2-01	LV-BIA-GW-MWD3-01
Sampling Date	1/4/01	1/10/01	1/10/01	1/10/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
3,3'-Dichlorobenzidine	5 U	5 U	5 U	5 U	5 U
Benzo(a)anthracene	5 U	5 U	5 U	5 U	5 U
Chrysene	5 U	5 U	5 U	5 U	5 U
bis(2-Ethylhexyl)phthalate	5 U	5 U	5 U	5 U	5 U
Di-n-octylphthalate	5 U	5 U	5 U	5 U	5 U
Benzo(b)fluoranthene	5 U	5 U	5 U	5 U	5 U
Benzo(k)fluoranthene	5 U	5 U	5 U	5 U	5 U
Benzo(a)pyrene	5 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	5 U	5 U	5 U	5 U	5 U
Dibenzo(a,h)anthracene	5 U	5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene	5 U	5 U	5 U	5 U	5 U
Total Semi-Volatile TICs	--	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-28
Low Concentration Semi-Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-3	MW-4	MW-5	MW-6	MW-7
TtFW Sample I.D.	LV-BIA-GW-MW3-01	LV-BIA-GW-MW4-01	LV-BIA-GW-MW5-01	LV-BIA-GW-MW6-01	LV-BIA-GW-MW7-01
Sampling Date	1/9/01	1/8/01	1/4/01	1/10/01	1/9/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Phenol	5 U	5 U	5 U	5 U	5 U
bis-(2-Chloroethyl) ether	5 U	5 U	5 U	5 U	5 U
2-Chlorophenol	5 U	5 U	5 U	5 U	5 U
2-Methylphenol	5 U	5 U	5 U	5 U	5 U
2,2'-oxybis(1-Chloropropane)	5 U	5 U	5 U	5 U	5 U
4-Methylphenol	5 U	5 U	5 U	5 U	5 U
N-Nitroso-di-n-propylamine	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	5 U	5 U	5 U	5 U	5 U
Nitrobenzene	5 U	5 U	5 U	5 U	5 U
Isophorone	5 U	5 U	5 U	5 U	5 U
2-Nitrophenol	5 U	5 U	5 U	5 U	5 U
2,4-Dimethylphenol	5 U	5 U	5 U	5 U	5 U
bis(2-Chloroethoxy)methane	5 U	5 U	5 U	5 U	5 U
2,4-Dichlorophenol	5 U	5 U	5 U	5 U	5 U
Naphthalene	5 U	5 U	5 U	5 U	5 U
4-Chloroaniline	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Hexachlorobutadiene	5 UJ	5 UJ	5 UJ	5 U	5 UJ
4-Chloro-3-methylphenol	5 U	5 U	5 U	5 U	5 U
2-Methylnaphthalene	5 U	5 U	5 U	5 U	5 U
Hexachlorocyclopentadiene	5 U	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	5 U	5 U	5 U	5 U	5 U
2,4,5-Trichlorophenol	20 U	20 U	20 U	20 U	20 U
2-Chloronaphthalene	5 U	5 U	5 U	5 U	5 U
2-Nitroaniline	20 U	20 U	20 U	20 U	20 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-28
Low Concentration Semi-Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-3	MW-4	MW-5	MW-6	MW-7
TtFW Sample I.D.	LV-BIA-GW-MW3-01	LV-BIA-GW-MW4-01	LV-BIA-GW-MW5-01	LV-BIA-GW-MW6-01	LV-BIA-GW-MW7-01
Sampling Date	1/9/01	1/8/01	1/4/01	1/10/01	1/9/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Dimethylphthalate	5 U	5 U	5 U	5 U	5 U
Acenaphthylene	5 U	5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline	R	R	R	R	R
Acenaphthene	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrophenol	20 UJ	20 UJ	20 UJ	20 U	20 UJ
4-Nitrophenol	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U
Diethylphthalate	5 U	5 U	5 U	5 U	5 U
4-Chlorophenyl-phenyl ether	5 U	5 U	5 U	5 U	5 U
Fluorene	5 U	5 U	5 U	5 U	5 U
4-Nitroaniline	20 U	20 U	20 U	20 UJ	20 U
4,6-Dinitro-2-methylphenol	20 U	20 U	20 U	20 U	20 U
N-Nitrosodiphenylamine	5 U	5 U	5 U	5 UJ	5 U
4-Bromophenyl-phenylether	5 U	5 U	5 U	5 U	5 U
Hexachlorobenzene	5 U	5 U	5 U	5 U	5 U
Pentachlorophenol	20 U	20 U	20 U	20 U	20 U
Phenanthrene	5 U	5 U	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U	5 U	5 U
Di-n-butylphthalate	5 U	5 U	1 J	5 U	5 U
Fluoranthene	5 U	5 U	5 U	5 U	5 U
Pyrene	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	5 U	5 U	5 U	5 U	5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-28
Low Concentration Semi-Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-3	MW-4	MW-5	MW-6	MW-7
TtFW Sample I.D.	LV-BIA-GW-MW3-01	LV-BIA-GW-MW4-01	LV-BIA-GW-MW5-01	LV-BIA-GW-MW6-01	LV-BIA-GW-MW7-01
Sampling Date	1/9/01	1/8/01	1/4/01	1/10/01	1/9/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
3,3'-Dichlorobenzidine	5 U	5 U	5 U	5 U	5 U
Benzo(a)anthracene	5 U	5 U	5 U	5 U	5 U
Chrysene	5 U	5 U	5 U	5 U	5 U
bis(2-Ethylhexyl)phthalate	5 U	5 U	5 U	5 U	5 U
Di-n-octylphthalate	5 U	5 U	5 U	5 U	5 U
Benzo(b)fluoranthene	5 U	5 U	5 U	5 U	5 U
Benzo(k)fluoranthene	5 U	5 U	5 U	5 U	5 U
Benzo(a)pyrene	5 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	5 U	5 U	5 U	5 U	5 U
Dibenzo(a,h)anthracene	5 U	5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene	5 U	5 U	5 U	5 U	5 U
Total Semi-Volatile TICs	--	--	--	--	4 J

Table D-28
Low Concentration Semi-Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Cattaraugus Cutlery
Location	MW-8	MW-U1	MW-8
TtFW Sample I.D.	LV-BIA-GW-MW8-01	LV-BIA-GW-MWU1-01	LV-CCA-GW-MW8-01
Sampling Date	1/12/01	1/8/01	1/10/01
Units	ug/L	ug/L	ug/L
Phenol	5 U	5 U	5 U
bis-(2-Chloroethyl) ether	5 U	5 U	5 U
2-Chlorophenol	5 U	5 U	5 U
2-Methylphenol	5 U	5 U	5 U
2,2'-oxybis(1-Chloropropane)	5 U	5 U	5 U
4-Methylphenol	5 U	5 U	5 U
N-Nitroso-di-n-propylamine	5 U	5 U	5 U
Hexachloroethane	5 U	5 U	5 U
Nitrobenzene	5 U	5 U	5 U
Isophorone	5 U	5 U	5 U
2-Nitrophenol	5 U	5 U	5 U
2,4-Dimethylphenol	5 U	5 U	5 U
bis(2-Chloroethoxy)methane	5 U	5 U	5 U
2,4-Dichlorophenol	5 U	5 U	5 U
Naphthalene	5 U	5 U	5 U
4-Chloroaniline	5 UJ	5 UJ	5 UJ
Hexachlorobutadiene	5 U	5 UJ	5 U
4-Chloro-3-methylphenol	5 U	5 U	5 U
2-Methylnaphthalene	5 U	5 U	5 U
Hexachlorocyclopentadiene	5 U	5 U	5 U
2,4,6-Trichlorophenol	5 U	5 U	5 U
2,4,5-Trichlorophenol	20 U	20 U	20 U
2-Chloronaphthalene	5 U	5 U	5 U
2-Nitroaniline	20 U	20 U	20 U

See Table D-1 for abbreviations and data qualifiers.

Table D-28
Low Concentration Semi-Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Cattaraugus Cutlery
Location	MW-8	MW-U1	MW-8
TtFW Sample I.D.	LV-BIA-GW-MW8-01	LV-BIA-GW-MWU1-01	LV-CCA-GW-MW8-01
Sampling Date	1/12/01	1/8/01	1/10/01
Units	ug/L	ug/L	ug/L
Dimethylphthalate	5 U	5 U	5 U
Acenaphthylene	5 U	5 U	5 U
2,6-Dinitrotoluene	5 U	5 U	5 U
3-Nitroaniline	R	R	R
Acenaphthene	5 U	5 U	5 U
2,4-Dinitrophenol	20 U	20 UJ	20 U
4-Nitrophenol	20 U	20 U	20 U
Dibenzofuran	5 U	5 U	5 U
2,4-Dinitrotoluene	5 U	5 U	5 U
Diethylphthalate	5 U	5 U	5 U
4-Chlorophenyl-phenyl ether	5 U	5 U	5 U
Fluorene	5 U	5 U	5 U
4-Nitroaniline	20 U	20 U	20 UJ
4,6-Dinitro-2-methylphenol	20 U	20 U	20 U
N-Nitrosodiphenylamine	5 U	5 U	5 UJ
4-Bromophenyl-phenylether	5 U	5 U	5 U
Hexachlorobenzene	5 U	5 U	5 U
Pentachlorophenol	20 U	20 U	20 U
Phenanthrene	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U
Di-n-butylphthalate	5 U	5 U	5 U
Fluoranthene	5 U	5 U	5 U
Pyrene	5 U	5 U	5 U
Butylbenzylphthalate	5 U	5 U	5 U

ee Table D-1 f abbreviations and data qualifiers.

Table D-28
Low Concentration Semi-Volatile Organic Compounds - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Cattaraugus Cutlery
Location	MW-8	MW-U1	MW-8
TtFW Sample I.D.	LV-BIA-GW-MW8-01	LV-BIA-GW-MWU1-01	LV-CCA-GW-MW8-01
Sampling Date	1/12/01	1/8/01	1/10/01
Units	ug/L	ug/L	ug/L
3,3'-Dichlorobenzidine	5 UJ	5 U	5 U
Benzo(a)anthracene	5 U	5 U	5 U
Chrysene	5 U	5 U	5 U
bis(2-Ethylhexyl)phthalate	5 U	5 U	5 U
Di-n-octylphthalate	5 U	5 U	5 U
Benzo(b)fluoranthene	5 U	5 U	5 U
Benzo(k)fluoranthene	5 U	5 U	5 U
Benzo(a)pyrene	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	5 U	5 U	5 U
Dibenzo(a,h)anthracene	5 U	5 U	5 U
Benzo(g,h,i)perylene	5 U	5 U	5 U
Total Semi-Volatile TICs	24 J	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-29
Low Concentration Pesticides/PCBs - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-1	MW-D1	MW-2	MW-D2	MW-D2 Duplicate of MW-D2
TtFW Sample I.D.	LV-BIA-GW-MW1-01	LV-BIA-GW-MWD1-01	LV-BIA-GW-MW2-01	LV-BIA-GW-MWD2-01	LV-BIA-GW-MWD3-01
Sampling Date	1/4/01	1/10/01	1/10/01	1/10/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
alpha-BHC	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
beta-BHC	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
delta-BHC	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
gamma-BHC (Lindane)	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Heptachlor	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aldrin	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Heptachlor epoxide	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Endosulfan I	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Dieldrin	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
4,4'-DDE	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endrin	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endosulfan II	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
4,4'-DDD	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endosulfan sulfate	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
4,4'-DDT	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Methoxychlor	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endrin ketone	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endrin aldehyde	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
alpha-Chlordane	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
gamma-Chlordane	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Toxaphene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

See Table D-1 for abbreviations and data qualifiers.

Table D-29
Low Concentration Pesticides/PCBs - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-1	MW-D1	MW-2	MW-D2	MW-D2 Duplicate of MW-D2
TtFW Sample I.D.	LV-BIA-GW-MW1-01	LV-BIA-GW-MWD1-01	LV-BIA-GW-MW2-01	LV-BIA-GW-MWD2-01	LV-BIA-GW-MWD3-01
Sampling Date	1/4/01	1/10/01	1/10/01	1/10/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Aroclor-1016	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Aroclor-1232	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

See Table D for abbreviations and data qualifiers.

Table D-29
Low Concentration Pesticides/PCBs - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-3	MW-4	MW-5	MW-6	MW-7
TtFW Sample I.D.	LV-BIA-GW-MW3-01	LV-BIA-GW-MW4-01	LV-BIA-GW-MW5-01	LV-BIA-GW-MW6-01	LV-BIA-GW-MW7-01
Sampling Date	1/9/01	1/8/01	1/4/01	1/10/01	1/9/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
alpha-BHC	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
beta-BHC	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
delta-BHC	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
gamma-BHC (Lindane)	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Heptachlor	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aldrin	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Heptachlor epoxide	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Endosulfan I	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Dieldrin	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
4,4'-DDE	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endrin	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endosulfan II	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
4,4'-DDD	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endosulfan sulfate	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
4,4'-DDT	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Methoxychlor	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endrin ketone	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endrin aldehyde	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
alpha-Chlordane	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
gamma-Chlordane	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Toxaphene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

See Table D-1 for abbreviations and data qualifiers.

Table D-29
Low Concentration Pesticides/PCBs - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-3	MW-4	MW-5	MW-6	MW-7
TtFW Sample I.D.	LV-BIA-GW-MW3-01	LV-BIA-GW-MW4-01	LV-BIA-GW-MW5-01	LV-BIA-GW-MW6-01	LV-BIA-GW-MW7-01
Sampling Date	1/9/01	1/8/01	1/4/01	1/10/01	1/9/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Aroclor-1016	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Aroclor-1232	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

See Table D[illegible]or abbreviations and data qualifiers.

Table D-29
Low Concentration Pesticides/PCBs - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Cattaraugus Cutlery
Location	MW-8	MW-U1	MW-8
TtFW Sample I.D.	LV-BIA-GW-MW8-01	LV-BIA-GW-MWU1-01	LV-CCA-GW-MW8-01
Sampling Date	1/12/01	1/8/01	1/10/01
Units	ug/L	ug/L	ug/L
alpha-BHC	0.010 U	0.010 U	0.010 U
beta-BHC	0.010 U	0.010 U	0.010 U
delta-BHC	0.010 U	0.010 U	0.010 U
gamma-BHC (Lindane)	0.010 U	0.010 U	0.010 U
Heptachlor	0.010 U	0.010 U	0.010 U
Aldrin	0.010 U	0.010 U	0.010 U
Heptachlor epoxide	0.010 U	0.010 U	0.010 U
Endosulfan I	0.010 U	0.010 U	0.010 U
Dieldrin	0.020 U	0.020 U	0.020 U
4,4'-DDE	0.020 U	0.020 U	0.020 U
Endrin	0.020 U	0.020 U	0.020 U
Endosulfan II	0.020 U	0.020 U	0.020 U
4,4'-DDD	0.020 U	0.020 U	0.020 U
Endosulfan sulfate	0.020 U	0.020 U	0.020 U
4,4'-DDT	0.020 U	0.020 U	0.020 U
Methoxychlor	0.10 U	0.10 U	0.10 U
Endrin ketone	0.020 U	0.020 U	0.020 U
Endrin aldehyde	0.020 U	0.020 U	0.020 U
alpha-Chlordane	0.010 U	0.010 U	0.010 U
gamma-Chlordane	0.010 U	0.010 U	0.010 U
Toxaphene	1.0 U	1.0 U	1.0 U

See Table D-1 for abbreviations and data qualifiers.

Table D-29
Low Concentration Pesticides/PCBs - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Cattaraugus Cutlery
Location	MW-8	MW-U1	MW-8
TtFW Sample I.D.	LV-BIA-GW-MW8-01	LV-BIA-GW-MWU1-01	LV-CCA-GW-MW8-01
Sampling Date	1/12/01	1/8/01	1/10/01
Units	ug/L	ug/L	ug/L
Aroclor-1016	0.20 U	0.20 U	0.20 U
Aroclor-1221	0.40 U	0.40 U	0.40 U
Aroclor-1232	0.20 U	0.20 U	0.20 U
Aroclor-1242	0.20 U	0.20 U	0.20 U
Aroclor-1248	0.20 U	0.20 U	0.20 U
Aroclor-1254	0.20 U	0.20 U	0.20 U
Aroclor-1260	0.20 U	0.20 U	0.20 U

See Table D[illegible]r abbreviations and data qualifiers.

TABLE D-30
Metals and Cyanide - Groundwater (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	MWCCA-1	MWCCA-2	MWCCA-3	MWCCA-3
TtFW Sample I.D.	LV-GWCCA1-01	LV-GWCCA2-01	LV-GWCCA3-01	LV-GWCCA5-01 Duplicate of MWCCA3-01
Sampling Date	07/16/1998	07/16/1998	07/16/1998	07/16/1998
Units	ug/l	ug/l	ug/l	ug/l
Aluminum	1110	121 B	4330	5010
Antimony	3.3 U	3.3 UJ	3.3 UJ	3.3 UJ
Arsenic	3 U	5.2 B	6.4 B	4.9 B
Barium	194 B	190 B	182 B	179 B
Beryllium	0.3 U	0.3 U	0.3 U	0.3 U
Cadmium	0.3 U	0.3 U	0.76 B	0.38 B
Calcium	51300 J	98500 J	41100 J	39400 J
Chromium	11.7 J	17.2 J	38.7 J	39.5 J
Cobalt	40 B	50.9 J	33.6 B	49.2 B
Copper	7 B	5.6 B	37.2	36.1
Iron	2200	196	9820	10200
Lead	R	R	40.6	28.6
Magnesium	8350 J	2920 B	7490 J	7080 J
Manganese	209 J	12.7 B	505 J	470 J
Mercury	0.1 U	0.1 U	0.11 B	0.1 B
Nickel	30.4 B	16.1 B	42.6	55.4
Potassium	1920 B	10700 J	5410 J	5690 J
Selenium	2.3 B	2.2 U	2.6 B	3.1 B
Silver	1.5 B	1.4 B	1.8 B	2.2 B
Sodium	8460 J	11200 J	23200 J	23300 J
Thallium	3.4 U	3.4 U	3.4 U	3.4 U
Vanadium	2.7 B	2.4 U	7.4 B	8.4 B
Zinc	17.7 B	19 B	106	72.1
Cyanide	1.8 U	1.8 U	1.8 U	1.8 U

e Table D-1 for abbreviations and data qualifiers.

TABLE D-30
Metals and Cyanide - Groundwater (1998)
Little Valley Superfund Site

Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area	Cattaraugus Cutlery Area
Location	MWCCA-1	MWCCA-2	MWCCA-3	MWCCA-3
TtFW Sample I.D.	LV-GWCCA1-02	LV-GWCCA2-02	LV-GWCCA3-02	LV-GWCCA4-02 Duplicate of MWCCA3-02
Sampling Date	07/30/1998	07/30/1998	07/30/1998	07/30/1998
Units	ug/l	ug/l	ug/l	ug/l
luminum	200	225	389	906
ntimony	5 U	5 U	5 U	5 U
rsenic	5 U	5 U	6.1 B	5.7 B
arium	166 B	276	88.7 B	106 B
eryllium	1 U	1 U	1 U	1 U
admium	1 U	1 U	1 U	1 U
alcium	55900	162000	33700	36000
hromium	3.7 B	8 B	13.5	40.9
obalt	2 U	2 U	2 U	2 U
opper	10.6 B	2 U	5.8 B	10.5 B
on	414	303	853	2240
ead	2.7 B	1.7 B	4.2	8
lagnesium	8490	3430 B	4810 B	5490
anganese	353	23.9	128	200
ercury	0.2 U	0.2 U	0.2 U	0.2 U
ickel	2.7 B	2 U	15 B	37.1 B
otassium	2160 B	7290	3900 B	4330 B
elenium	5 U	5 U	5 U	5 U
ilver	2 U	2 U	2 U	2 U
odium	9910	10400	24100	24900
hallium	4 UJ	4 UJ	4 U	4 U
anadium	2 U	2 U	2 U	2.2 B
inc	17.1 B	12.8 B	18.2 B	26.2
yanide	2 U	2 U	2 U	2 U

Table D-1 for abbreviations and data qualifiers.

TABLE D-30
Metals and Cyanide - Groundwater (1998)
Little Valley Superfund Site

Area	Great Triangle Area	Great Triangle Area
Location	PZ-47D	PZ-47D
TtFW Sample I.D.	LV-PZ47D-01	LV-PZ47D-02
Sampling Date	07/14/1998	07/29/1998
Units	ug/l	ug/l
Aluminum	274	1250
Antimony	3.3 UJ	5 U
Arsenic	7.2 B	5 U
Barium	120 B	101 B
Beryllium	0.3 U	1 U
Cadmium	1.3 B	1 U
Calcium	36100 J	21500
Chromium	9.5 B	53.9
Cobalt	29.4 B	4.4 B
Copper	4.2 B	6.7 B
Iron	730	2710
Lead	R	28.3
Magnesium	5430 J	4410 B
Manganese	96.5 J	94.7
Mercury	0.1 U	0.2 U
Nickel	10.6 B	34.3 B
Potassium	8430 J	8800
Selenium	7.3	5 U
Silver	1.1 B	2 U
Sodium	21400 J	20300
Thallium	3.4 U	4 UJ
Vanadium	2.4 U	2 U
Zinc	27.3	20.3
Cyanide	1.8 U	2 U

e Table D-1 for abbreviations and data qualifiers.

TABLE D-31
Metals - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-2	MWCCA-4	MWCCA-5
TtFW Sample I.D.	LI-GW-CCA2-04	LI-GW-CCA4-01	LI-GW-CCA5-01
Sampling Date	10/13/1999	10/12/1999	10/12/1999
Matrix	Water	Water	Water
Units	ug/L	ug/L	ug/L
Aluminum	22000	444	86.2 B
Antimony	2.1 UJ	2.1 UJ	2.1 UJ
Arsenic	20.8	2.2 U	2.2 U
Barium	884	234	233
Beryllium	0.9 B	0.1 U	0.1 U
Cadmium	0.4 B	0.3 U	0.3 U
Calcium	487000	50600	52500
Chromium	97.6 J	11.6 J	4.9 B
Cobalt	21.6 B	1 B	0.6 U
Copper	115	13.8 B	2.1 B
Iron	45900	976	171
Lead	56.1	3.8	1.7 B
Magnesium	25100	7710	7850
Manganese	1610	53.2	30.3
Mercury	0.1 UJ	0.1 UJ	0.1 UJ
Nickel	115	9.2 B	3.6 B
Potassium	7280 J	1300 B	1250 B
Selenium	1.8 U	1.8 U	1.8 U
Silver	1.3 B	0.4 B	0.4 U
Sodium	10000	6880	7600
Thallium	2.1 U	2.1 U	2.1 U
Vanadium	26.9 B	0.5 B	0.5 U
Zinc	406	R	12.9 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-31
Metals - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-8	MWCCA-6	MWCCA-7
TtFW Sample I.D.	LI-GW-CCA8-01 Duplicate of CCA5-01	LI-GW-CCA6-01	LI-GW-CCA7-01
Sampling Date	10/12/1999	10/13/1999	10/13/1999
Matrix	Water	Water	Water
Units	ug/L	ug/L	ug/L
Aluminum	34.9 U	1270	712
Antimony	2.1 UJ	2.1 UJ	2.1 UJ
Arsenic	2.2 U	5 B	2.2 U
Barium	246	83.2 B	245
Beryllium	0.1 U	0.1 B	0.1 U
Cadmium	0.3 U	0.3 U	0.3 U
Calcium	55200	31300	52700
Chromium	4.6 B	22.8	10
Cobalt	0.6 U	2.4 B	1 B
Copper	1 B	42.2	6.6 B
Iron	135	2690	1740
Lead	1.1 U	8.4	2.9 B
Magnesium	8230	3310 B	8410
Manganese	26.6	157	111
Mercury	0.1 UJ	0.1 UJ	0.1 UJ
Nickel	4.2 B	9.7 B	9.4 B
Potassium	1260 B	7250 J	1480 B
Selenium	1.8 U	1.8 U	1.8 U
Silver	0.4 U	0.4 U	0.4 B
Sodium	7770	5590	7040
Thallium	2.1 U	2.3 B	2.1 U
Vanadium	0.5 U	4.4 B	0.8 B
Zinc	R	R	R

See Table D-1 for abbreviations and data qualifiers.

TABLE D-31
Metals - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	Production Well	MWCCA-2	MWCCA-4
TtFW Sample I.D.	LI-GW-CCAPW-01	LI-GW-CCA2-05	LI-GW-CCA4-02
Sampling Date	10/13/1999	10/27/1999	10/26/1999
Matrix	Water	Water	Water
Units	ug/L	ug/L	ug/L
Aluminum	34.9 U	25300 J	13000 J
Antimony	2.1 UJ	5 U	5 U
Arsenic	2.2 U	30	28.8
Barium	0.8 U	611 J	498 J
Beryllium	0.1 U	1.2 B	1 U
Cadmium	2.4 B	1 U	1 U
Calcium	2590 U	378000 J	R
Chromium	0.3 U	72.8 J	247 J
Cobalt	0.6 U	14.2 B	24.7 B
Copper	0.5 U	96 J	R
Iron	18.6 U	47900 J	34900 J
Lead	1.9 B	44.9	34
Magnesium	38.8 U	23000 J	R
Manganese	2.4 U	1430 J	908 J
Mercury	0.12 J	0.2 U	0.2 U
Nickel	1.3 U	65.7	184
Potassium	75.5 B	7270 J	3280 B
Selenium	1.8 U	5 U	5 U
Silver	0.4 U	1 U	10.4
Sodium	5940	4630 B	R
Thallium	2.1 U	7 U	7 U
Vanadium	0.5 U	29.2 B	16.9 B
Zinc	12.9 U	303 J	R

See Table D-1 for abbreviations and data qualifiers.

TABLE D-31
Metals - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-5	MWCCA-6	MWCCA-9
TtFW Sample I.D.	LI-GW-CCA5-02	LI-GW-CCA6-02	LI-GW-CCA9-02 Duplicate of CCA6-02
Sampling Date	10/26/1999	10/26/1999	10/26/1999
Matrix	Water	Water	Water
Units	ug/L	ug/L	ug/L
Aluminum	R	R	R
Antimony	5 U	5 U	5 U
Arsenic	9.9 B	8.5 B	6.3 B
Barium	309 J	196 B	187 B
Beryllium	1 U	1 U	1 U
Cadmium	1 U	1 U	1 U
Calcium	R	R	R
Chromium	R	R	R
Cobalt	1.6 B	1 U	1 U
Copper	R	R	R
Iron	R	R	R
Lead	8.3	2 U	2.1 B
Magnesium	R	R	R
Manganese	R	R	R
Mercury	0.2 U	0.2 U	0.2 U
Nickel	31.2 B	12 B	11 B
Potassium	1980 B	2920 B	2690 B
Selenium	5 U	5 U	5 U
Silver	1.6 B	2.1 B	1.7 B
Sodium	R	R	R
Thallium	7 U	7 U	7 U
Vanadium	4.9 B	2 U	2 U
Zinc	R	R	R

See Table D[illegible]r abbreviations and data qualifiers.

TABLE D-31
Metals - Groundwater (1999)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-7	Production Well
TtFW Sample I.D.	LI-GW-CCA7-02	LI-GW-CCAPW-02
Sampling Date	10/27/1999	10/27/1999
Matrix	Water	Water
Units	ug/L	ug/L
Aluminum	2760 J	43.7 B
Antimony	5 U	5 U
Arsenic	8.9 B	6 U
Barium	259 J	207 J
Beryllium	1 U	1 U
Cadmium	1 U	1 U
Calcium	53700 J	40300 J
Chromium	24.4 J	1.3 B
Cobalt	1 U	1 U
Copper	28.4 J	11.7 B
Iron	7050 J	12200 J
Lead	4.1	2 U
Magnesium	9280 J	6690 J
Manganese	253 J	72.9 J
Mercury	0.2 U	0.2 U
Nickel	19.9 B	2 U
Potassium	1570 B	652 B
Selenium	5 U	5 U
Silver	1 U	1.9 B
Sodium	7520 J	4750 B
Thallium	7 U	7 U
Vanadium	2.9 B	2 U
Zinc	62.8 J	698 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-32
Metals - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-1	MW-D1	MW-2	MW-D2	MW-D2 Duplicate of MW-D2
TtFW Sample I.D.	LV-BIA-GW-MW1-01	LV-BIA-GWMWD1-01	LV-BIA-GW-MW2-01	LV-BIA-GW-MWD2-01	LV-BIA-GW-MWD3-01
Sampling Date	1/4/01	1/10/01	1/10/01	1/10/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
ALUMINUM	177 BJ	92.0 B	639 J	182 B	247 J
ANTIMONY	21.5 UJ	2.5 U	2.5 U	2.5 U	2.5 U
ARSENIC	1.6 UJ	4.2 U	4.2 U	4.2 U	4.2 U
BARIUM	146 BJ	258	116 B	127 B	125 B
BERYLLIUM	0.20 UJ	0.10 U	0.10 U	0.10 U	0.10 U
CADMIUM	0.40 UJ	0.60 U	0.60 U	0.60 U	0.60 U
CALCIUM	28900 J	76300	64600	47200	47100
CHROMIUM	6.4 BJ	0.50 U	11.8	3.1 B	3.2 B
COBALT	8.6 BJ	0.70 U	5.4 B	0.70 U	0.94 B
COPPER	1.4 UJ	0.70 U	0.73 B	0.70 U	0.98 B
IRON	222 J	44.4 B	1040	127	117
LEAD	1.9 UJ	1.7 U	1.7 U	1.7 U	1.7 U
MAGNESIUM	3280 BJ	8020	8150	6090	6080
MANGANESE	13.5 BJ	2.0 B	867	11.0 B	12.4 B
MERCURY	0.10 UJ	0.10 U	0.10 U	0.10 U	0.10 U
NICKEL	4.8 BJ	1.3 U	9.1 B	3.3 B	3.7 B
POTASSIUM	2230 BJ	1900 B	1170 B	875 B	920 B
SELENIUM	2.0 UJ	4.8 U	4.8 U	4.8 U	4.8 U
SILVER	1.4 UJ	0.50 U	0.50 U	0.50 U	0.50 U
SODIUM	10500 J	28000	10900	13900	14200
THALLIUM	3.7 UJ	6.2 U	6.2 U	6.2 U	6.2 U
VANADIUM	1.7 UJ	0.72 B	1.7 B	1.1 B	0.98 B
ZINC	10.7 UJ	4.8 B	1.1 U	1.1 U	1.3 B

See Table D-1 for abbreviations and data qualifiers.

TABLE D-32
Metals - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	MW-3	MW-4	MW-5	MW-6	MW-7
TtFW Sample I.D.	LV-BIA-GW-MW3-01	LV-BIA-GW-MW4-01	LV-BIA-GW-MW5-01	LV-BIA-GW-MW6-01	LV-BIA-GW-MW7-01
Sampling Date	1/9/01	1/8/01	1/4/01	1/10/01	1/9/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
ALUMINUM	280 J	2120 J	215	248 J	5710 J
ANTIMONY	2.5 U	2.5 U	21.5 U	2.5 U	2.5 U
ARSENIC	4.2 U	4.2 U	2.2 B	4.2 U	5.0 B
BARIUM	191 B	113 B	96.9 B	60.1 B	281
BERYLLIUM	0.10 U	0.10 U	0.20 U	0.10 U	0.19 B
CADMIUM	0.60 U	0.60 U	0.60 B	0.60 U	0.60 U
CALCIUM	63700	21500	23400	19500	60300
CHROMIUM	R	33.3	2.3 B	1.9 B	R
COBALT	0.83 B	12.5 B	2.0 U	1.3 B	6.3 B
COPPER	0.70 U	8.0 B	1.8 B	0.70 U	19.4 B
IRON	R	4390	264	314	13300
LEAD	1.7 U	4.3	1.9 U	1.7 U	12.6
MAGNESIUM	7540	3880 B	3260 B	2940 B	8490
MANGANESE	18.0	197	6.1 B	648	737
MERCURY	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
NICKEL	3.3 B	25.3 B	1.9 U	2.3 B	75.6
POTASSIUM	1580 B	1280 B	2150 B	792 B	3120 B
SELENIUM	4.8 U	4.8 U	2.0 U	4.8 U	4.8 U
SILVER	0.50 U	0.50 U	1.4 U	0.50 U	0.50 U
SODIUM	24000	20400	41500	10400	19000
THALLIUM	6.2 U	6.2 U	3.7 U	6.2 U	6.2 U
VANADIUM	1.2 B	4.3 B	1.7 U	1.0 B	8.9 B
ZINC	1.1 U	17.6 B	10.7 U	18.7 B	43.1

See Table D r abbreviations and data qualifiers.

TABLE D-32
Metals - Groundwater (2000/2001)
Little Valley Superfund Site

Area	Bush Industries		Bush Industries		Cattaraugus Cutlery	
Location	MW-8		MW-U1		MW-8	
TtFW Sample I.D.	LV-BIA-GW-MW8-01		LV-BIA-GW-MWU1-01		LV-GW-CCA-MW8-01	
Sampling Date	1/12/01		1/8/01		1/11/01	
Units	ug/L		ug/L		ug/L	
ALUMINUM	404	J	124	B	242	J
ANTIMONY	2.5	U	2.5	U	2.5	U
ARSENIC	6.4	B	4.2	U	4.2	U
BARIUM	244		90.3	B	189	B
BERYLLIUM	0.10	U	0.10	U	0.12	B
CADMIUM	0.60	U	0.60	U	0.60	U
CALCIUM	42900		17600		45200	
CHROMIUM	2.1	B	3.2	B	3.7	B
COBALT	0.70	U	1.1	B	0.70	U
COPPER	0.70	U	0.70	U	2.0	B
IRON	624		53.4	B	511	
LEAD	1.7	U	1.7	U	1.7	U
MAGNESIUM	7180		2370	B	7160	
MANGANESE	105		2.1	B	83.6	
MERCURY	0.10	U	0.10	U	0.10	U
NICKEL	3.5	B	1.6	B	3.0	B
POTASSIUM	949	B	759	B	1440	B
SELENIUM	4.8	U	4.8	U	4.8	U
SILVER	0.50	U	0.50	U	0.50	U
SODIUM	6680		12100		10400	
THALLIUM	6.2	U	6.2	U	6.2	U
VANADIUM	1.3	B	0.93	B	0.70	U
ZINC	1.4	B	1.1	U	4.9	B

See Table D-1 for abbreviations and data qualifiers.

TABLE D-33
Metals and Cyanide - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-9D	MWCCA-10	MWCCA-11D	MWCCA-12
TtFW Sample I.D.	LV-GW-CCA9D-01	LV-GW-CCA10-01	LV-GW-CCA11D-01	LV-GW-CCA12-01
Sampling Date	11/18/03	11/12/03	11/18/03	11/12/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Aluminum	200 U	200 U	200 U	200 U
Antimony	60 U	60 U	60 U	60 U
Arsenic	15 U	15 U	15 U	15 U
Barium	200 U	220	260	200 U
Beryllium	5.0 U	5 U	5.0 U	5 U
Cadmium	5.0 U	5 U	5.0 U	5 U
Calcium	41000	53000	51000	57000
Chromium	10 U	16	10 U	10 U
Cobalt	50 U	50 U	50 U	50 U
Copper	25 U	25 U	25 U	25 U
Cyanide	0.010 U	0.010 U	0.010 U	0.010 U
Iron	400	320	100 U	200
Lead	10 U	10 U	10 U	10 U
Magnesium	6200	6800	7500	7200
Manganese	180	28	15 U	74
Mercury	0.20 U	0.2 U	0.20 U	0.2 U
Nickel	40 U	40 U	40 U	40 U
Potassium	5000 U	5000 U	5000 U	5000 U
Selenium	35 U	35 U	35 U	35 U
Silver	10 U	10 U	10 U	10 U
Sodium	7000	7900	6900	11000
Thallium	25 U	25 U	25 U	25 U
Vanadium	50 U	50 U	50 U	50 U
Zinc	60 U	60 U	60 U	60 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-33
Metals and Cyanide - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Railroad Avenue	Railroad Avenue	Great Triangle
Location	MWCCA-12	MWRRAA-1	MWRRAA-2D	MWEDSA-1
TtFW Sample I.D.	LV-GW-CCA13-01 Duplicate	LV-GW-RRAA1-01	LV-GW-RRAA2D-01	LV-GW-EDSA1-MNA
Sampling Date	11/12/03	11/12/03	11/12/03	11/20/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L	ug/L
Aluminum	200 U	200 U	1800	3500
Antimony	60 U	60 U	60 U	60 U
Arsenic	15 U	15 U	15 U	15 U
Barium	200 U	200 U	270	200 U
Beryllium	5 U	5 U	5 U	5.0 U
Cadmium	5 U	5 U	5 U	5.0 U
Calcium	58000	49000	66000	46000
Chromium	10 U	10 U	44	96
Cobalt	50 U	50 U	50 U	50 U
Copper	25 U	25 U	25 U	25 U
Cyanide	0.010 U	0.010 U	0.010 U	0.005 UL
Iron	190	120	2700	7100
Lead	10 U	10 U	10 U	10 U
Magnesium	7300	6000	8000	6500
Manganese	72	15 U	130	1100
Mercury	0.2 U	0.2 U	0.2 U	0.20 U
Nickel	40 U	40 U	40 U	62
Potassium	5000 U	5000 U	5000 U	11000
Selenium	35 U	35 U	35 U	35 U
Silver	10 U	10 U	10 U	10 U
Sodium	11000	31000	36000	15000
Thallium	25 U	25 U	25 U	25 U
Vanadium	50 U	50 U	50 U	50 U
Zinc	60 U	60 U	60 U	60 U

See Table for abbreviations and data qualifiers.

TABLE D-33
Metals and Cyanide - Groundwater (2002/2003)
Little Valley Superfund Site

Area	Great Triangle	Great Triangle	Great Triangle
Location	PZ-47D	PZ-47D	PZ-48
TtFW Sample I.D.	PZ-47D	PZ-47D-DUP	PZ48
		Duplicate	
Sampling Date	05/02/02	05/02/02	05/02/02
Matrix	Groundwater	Groundwater	Groundwater
Units	ug/L	ug/L	ug/L
Aluminum	R	R	R
Antimony	4.7 U	4.7 U	4.7 U
Arsenic	6.4 B	4.8 B	4.1 B
Barium	269	286	313
Beryllium	0.29 B	0.26 B	0.2 B
Cadmium	0.52 B	0.4 U	0.4 U
Calcium	51400	54900	62100
Chromium	111 J	98.4 J	28.2 J
Cobalt	9.1 B	7.9 B	2.6 B
Copper	23.4 B	25.3 J	19.1 B
Cyanide	0.0087 B	0.0035 U	0.0035 U
Iron	12500	13000	8710
Lead	16.5 J	18.8 J	8.6 J
Magnesium	10100	10600	9540
Manganese	461	504	223
Mercury	0.2 U	0.2 U	0.2 U
Nickel	70.8 J	64.3 J	30.3 B
Potassium	5580 J	5450 J	1730 B
Selenium	3 U	3 U	3 U
Silver	1.7 B	1.4 B	1 U
Sodium	13100	12300	16100
Thallium	5.4 U	5.4 U	5.4 U
Vanadium	6.5 B	7 B	4.7 B
Zinc	77.6 J	84.7 J	37.8 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-34
Monitored Natural Attenuation Parameters - Groundwater (2003)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Bush Industries	Bush Industries
Location	BIAMW-1	BIAMW-2	BIAMW-3	BIAMW-7
TtFW Sample I.D.	LV-GW-BIA-MW1-MNA	LV-GW-BIA-MW2-MNA	LV-GW-BIA-MW3-MNA	LV-GW-BIA-MW7-MNA
Sampling Date	12/09/03	12/11/03	12/10/03	12/09/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	mg/L	mg/L	mg/L	mg/L
Alkalinity (as CaCO3)	83	180	160	150
Chloride	46	19	44	44
Ethane	0.02 UJ	0.02 UJ	0.02 UJ	0.02 UJ
Ethylene	0.03 UJ	0.03 UJ	0.03 UJ	0.03 UJ
Ferrous Iron	0.1 U	0.1 U	0.1 U	0.1 U
Hydrogen	0.163 U	0.163 U	0.163 U	0.163 U
Methane	0.07 JN	0.54 JD	0.07 JN	0.08 JN
Nitrate	2	0.050 U	1.2	1
Sulfate	11	16	12	12
TOC	1.0 U	2.6	1.0 U	1.0 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-34
Monitored Natural Attenuation Parameters - Groundwater (2003)
Little Valley Superfund Site

Area	Bush Industries	Bush Industries	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWD-1	MWD-2	MWCCA-2	MWCCA-3
TtFW Sample I.D.	LV-GW-BIA-MWD1-MNA	LV-GW-BIA-MWD2-MNA	LV-GW-CCA2-MNA	LV-GW-CCA3-MNA
Sampling Date	12/10/03	12/11/03	12/03/03	12/02/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	mg/L	mg/L	mg/L	mg/L
Alkalinity (as CaCO3)	190	130	130 J	160
Chloride	42	22	12	18
Ethane	0.02 UJ	0.02 UJ	0.02 UJ	0.02 UJ
Ethylene	0.03 UJ	0.03 UJ	0.03 UJ	0.03 UJ
Ferrous Iron	0.1 U	0.1 U	0.10 U	0.10 U
Hydrogen	0.163 U	0.163 U	0.163 U	0.163 U
Methane	0.06 JN	0.07 JN	0.07 JN	0.07 JN
Nitrate	1.4	0.29	0.5	0.51
Sulfate	13	15	20	19
TOC	1.0 U	2.4	1.0 U	1.0 U

See Table [illegible] for abbreviations and data qualifiers.

TABLE D-34
Monitored Natural Attenuation Parameters - Groundwater (2003)
Little Valley Superfund Site

Area	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery	Cattaraugus Cutlery
Location	MWCCA-4	MWCCA-6	MWCCA-6	PZ-20D
TtFW Sample I.D.	LV-GW-CCA4-MNA	LV-GW-CCA6-MNA	LV-GW-CCA16-MNA Duplicate	LV-GW-PZ20DMNA
Sampling Date	11/19/03	12/01/03	12/01/03	11/19/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	mg/L	mg/L	mg/L	mg/L
Alkalinity (as CaCO3)	150	130	130	280
Chloride	110	14	4.8	51
Ethane	0.02 UJ	0.02 UJ	0.02 UJ	0.02 UJ
Ethylene	0.03 UJ	0.03 UJ	0.03 UJ	0.03 UJ
Ferrous Iron	0.10 U	0.10 U	0.10 U	0.10 U
Hydrogen	0.163 UJ	0.163 U	0.163 U	0.163 UJ
Methane	0.08 JN	0.05 JN	0.03 JN	0.07 JN
Nitrate	0.79	0.59	0.59	1.5
Sulfate	78 L	16	5.1 L	19
TOC	1.0 U	1.0 U	1.3	1.5 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-34
Monitored Natural Attenuation Parameters - Groundwater (2003)
Little Valley Superfund Site
Page 4 of 5

Area	Whig Street	Whig Street	Great Triangle	Great Triangle
Location	PZ-39	PZ-45D	MWEDSA-1	PZ-5
TtFW Sample I.D.	LV-GW-PZ39-MNA	LV-GW-PZ45D-MNA	LV-GW-EDSA1-MNA	LV-GW-PZ5-MNA
Sampling Date	12/04/03	12/04/03	11/20/03	12/01/03
Matrix	Groundwater	Groundwater	Groundwater	Groundwater
Units	mg/L	mg/L	mg/L	mg/L
Alkalinity (as CaCO3)	100	6300 J	110	170
Chloride	19	16	19	14
Ethane	0.02 UJ	0.02 UJ	0.02 UJ	0.02 UJ
Ethylene	0.03 UJ	0.03 UJ	0.03 UJ	0.03 UJ
Ferrous Iron	0.10 U	0.10 U	0.10 U	0.10 U
Hydrogen	0.163 UJ	0.163 UJ	0.163 UJ	0.163 U
Methane	0.07 JN	0.06 JN	0.07 JN	0.06 JN
Nitrate	2.4	0.06	0.3	1.6
Sulfate	350	29	97	39
TOC	3.2	9.2 J	3	1.0 U

See Table D[illegible]r abbreviations and data qualifiers.

TABLE D-34
Monitored Natural Attenuation Parameters - Groundwater (2003)
Little Valley Superfund Site

Area	Great Triangle	Luminite	Luminite
Location	PZ-6D	PZ-46	PZ-55D
TtFW Sample I.D.	LV-GW-PZ6D-MNA	LV-GW-PZ46-MNA	LV-GW-PZ55D-MNA
Sampling Date	12/03/03	12/08/03	12/08/03
Matrix	Groundwater	Groundwater	Groundwater
Units	mg/L	mg/L	mg/L
Alkalinity (as CaCO3)	150	68	470 J
Chloride	12	17	39
Ethane	0.02 UJ	0.02 UJ	0.02 UJ
Ethylene	0.03 UJ	0.03 UJ	0.03 UJ
Ferrous Iron	0.10 U	0.1 U	0.1 U
Hydrogen	0.163 U	0.163 U	0.163 U
Methane	0.07 JN	0.07 JN	0.04 JN
Nitrate	1.1	1.3	1.5
Sulfate	37	9	14
TOC	1.0 U	1.0 U	1.9

See Table D-1 for abbreviations and data qualifiers.

TABLE D-35
CRA INVESTIGATION OF BUSH INDUSTRIES - MAY 1999
Volatile Organic Compounds - Groundwater
Little Valley Superfund Site

Area	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA
Location	MW-1	MW-2	MW-2	MW-3
Sample I.D.	MW-1	MW-2	MW-D3 Duplicate of MW-2	MW-3
Sampling Date	05/05/1999	05/05/1999	05/05/1999	05/05/1999
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	10 UJ	20 UJ	20 U	10 UJ
Bromomethane	10 U	20 U	20 U	10 U
Vinyl chloride	10 U	4 J	2 J	10 U
Chloroethane	10 U	0.8 J	20 U	10 U
Methylene chloride	10 U	20 U	20 U	10 U
Acetone	10 UJ	20 UJ	20 UJ	10 UJ
Carbon disulfide	10 U	20 U	20 U	10 U
1,1-Dichloroethene	10 U	1 J	20 U	10 U
1,1-Dichloroethane	10 U	20 U	20 U	10 U
1,2-Dichloroethene (total)	10 U	54	51	2 J
cis-1,2-Dichloroethene	NR	NR	NR	NR
trans-1,2-Dichloroethene	NR	NR	NR	NR
Chloroform	10 U	20 U	20 U	10 U
1,2-Dichloroethane	10 U	20 U	20 U	10 U
2-Butanone	10 UJ	20 UJ	20 U	10 UJ
1,1,1-Trichloroethane	10 U	20 U	20 U	10 U
Carbon Tetrachloride	10 U	20 U	20 U	10 U
Bromodichloromethane	10 U	20 U	20 U	10 U
1,2-Dichloropropane	10 U	20 U	20 U	10 U
cis-1,3-Dichloropropene	10 U	20 U	20 U	10 U
Trichloroethene	10 U	230	190	5 J
Dibromochloromethane	10 U	20 U	20 U	10 U
1,1,2-Trichloroethane	10 U	20 U	20 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-35
CRA INVESTIGATION OF BUSH INDUSTRIES - MAY 1999
Volatile Organic Compounds - Groundwater
Little Valley Superfund Site

Area	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA
Location	MW-1	MW-2	MW-2	MW-3
Sample I.D.	MW-1	MW-2	MW-D3 Duplicate of MW-2	MW-3
Sampling Date	05/05/1999	05/05/1999	05/05/1999	05/05/1999
Units	ug/L	ug/L	ug/L	ug/L
Benzene	10 U	0.7 J	20 U	10 U
trans-1,3-Dichloropropene	10 U	20 U	20 U	10 U
Bromoform	10 U	20 U	20 U	10 U
4-Methyl-2-pentanone	10 U	20 U	20 U	10 U
2-Hexanone	10 U	20 U	20 U	10 U
Tetrachloroethene	10 U	20 U	20 U	10 U
1,1,2,2-Tetrachloroethane	10 U	20 U	20 U	10 U
Toluene	10 U	20 U	20 U	10 U
Chlorobenzene	10 U	20 U	20 U	10 U
Ethylbenzene	10 U	20 U	20 U	10 U
Styrene	10 U	20 U	20 U	10 U
Xylenes (total)	10 U	20 U	20 U	10 U
Bromochloromethane	NR	NR	NR	NR
1,2-Dibromoethane	NR	NR	NR	NR
1,3-Dichlorobenzene	NR	NR	NR	NR
1,4-Dichlorobenzene	NR	NR	NR	NR
1,2-Dichlorobenzene	NR	NR	NR	NR
1,2-Dibromo-3-chloropropane	NR	NR	NR	NR
1,2,4-Trichlorobenzene	NR	NR	NR	NR

TABLE D-35
CRA INVESTIGATION OF BUSH INDUSTRIES - MAY 1999
Volatile Organic Compounds - Groundwater
Little Valley Superfund Site

Area	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA
Location	MW-4	MW-5	MW-D1	MW-D2
Sample I.D.	MW-4	MW-5	MW-D1	MW-D2
Sampling Date	05/05/1999	05/05/1999	05/05/1999	05/05/1999
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	10 UJ	10 UJ	10 UJ	10 UJ
Bromomethane	10 U	10 U	10 U	10 U
Vinyl chloride	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 U	10 U
Acetone	10 UJ	10 UJ	10 UJ	10 UJ
Carbon disulfide	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	1 J
1,1-Dichloroethane	10 U	10 U	10 U	10 U
1,2-Dichloroethene (total)	10 U	10 U	6 J	58
cis-1,2-Dichloroethene	NR	NR	NR	NR
trans-1,2-Dichloroethene	NR	NR	NR	NR
Chloroform	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U
2-Butanone	10 UJ	10 UJ	10 UJ	10 UJ
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Trichloroethene	2 J	10 U	11	160
Dibromochloromethane	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-35
CRA INVESTIGATION OF BUSH INDUSTRIES - MAY 1999
Volatile Organic Compounds - Groundwater
Little Valley Superfund Site

Area	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA
Location	MW-4	MW-5	MW-D1	MW-D2
Sample I.D.	MW-4	MW-5	MW-D1	MW-D2
Sampling Date	05/05/1999	05/05/1999	05/05/1999	05/05/1999
Units	ug/L	ug/L	ug/L	ug/L
Benzene	2 J	10 U	10 U	2 J
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U
Xylenes (total)	10 U	10 U	10 U	10 U
Bromochloromethane	NR	NR	NR	NR
1,2-Dibromoethane	NR	NR	NR	NR
1,3-Dichlorobenzene	NR	NR	NR	NR
1,4-Dichlorobenzene	NR	NR	NR	NR
1,2-Dichlorobenzene	NR	NR	NR	NR
1,2-Dibromo-3-chloropropane	NR	NR	NR	NR
1,2,4-Trichlorobenzene	NR	NR	NR	NR

See Table D for abbreviations and data qualifiers.

TABLE D-35
CRA INVESTIGATION OF BUSH INDUSTRIES - MAY 1999
Volatile Organic Compounds - Groundwater
Little Valley Superfund Site

Area	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA
Location	MW-U1	LV-4	LV-7
Sample I.D.	MW-U1	B78404	B78407
Sampling Date	05/05/1999	05/05/1999	05/05/1999
Units	ug/L	ug/L	ug/L
Chloromethane	10 UJ	1 U	1 U
Bromomethane	10 U	1 U	1 U
Vinyl chloride	10 U	1 U	1 U
Chloroethane	10 U	1 U	1 U
Methylene chloride	10 U	1 U	1 U
Acetone	10 UJ	5 U	5 U
Carbon disulfide	10 U	1 U	1 U
1,1-Dichloroethene	10 U	1 U	1 U
1,1-Dichloroethane	10 U	1 U	1 U
1,2-Dichloroethene (total)	10 U	NR	NR
cis-1,2-Dichloroethene	NR	1 U	1 U
trans-1,2-Dichloroethene	NR	1 U	1 U
Chloroform	10 U	1 U	1 U
1,2-Dichloroethane	10 U	1 U	1 U
2-Butanone	10 UJ	5 U	5 U
1,1,1-Trichloroethane	10 U	1 U	1 U
Carbon Tetrachloride	10 U	1 U	1 U
Bromodichloromethane	10 U	1 U	1 U
1,2-Dichloropropane	10 U	1 U	1 U
cis-1,3-Dichloropropene	10 U	1 U	1 U
Trichloroethene	10 U	1 U	0.5 J
Dibromochloromethane	10 U	1 U	1 U
1,1,2-Trichloroethane	10 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-35
CRA INVESTIGATION OF BUSH INDUSTRIES - MAY 1999
Volatile Organic Compounds - Groundwater
Little Valley Superfund Site

Area	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA
Location	MW-U1	LV-4	LV-7
Sample I.D.	MW-U1	B78404	B78407
Sampling Date	05/05/1999	05/05/1999	05/05/1999
Units	ug/L	ug/L	ug/L
Benzene	10 U	1 U	1 U
trans-1,3-Dichloropropene	10 U	1 U	1 U
Bromoform	10 U	1 U	1 U
4-Methyl-2-pentanone	10 U	5 U	5 U
2-Hexanone	10 U	5 U	5 U
Tetrachloroethene	10 U	1 U	1 U
1,1,2,2-Tetrachloroethane	10 U	1 U	1 U
Toluene	10 U	1 U	1 U
Chlorobenzene	10 U	1 U	1 U
Ethylbenzene	10 U	1 U	1 U
Styrene	10 U	1 U	1 U
Xylenes (total)	10 U	1 U	1 U
Bromochloromethane	NR	1 U	1 U
1,2-Dibromoethane	NR	1 U	1 U
1,3-Dichlorobenzene	NR	1 U	1 U
1,4-Dichlorobenzene	NR	1 U	1 U
1,2-Dichlorobenzene	NR	1 U	1 U
1,2-Dibromo-3-chloropropane	NR	1 U	1 U
1,2,4-Trichlorobenzene	NR	1 U	1 U

See Table for abbreviations and data qualifiers.

TABLE D-36
CRA INVESTIGATION OF BUSH INDUSTRIES - DECEMBER 1999
Volatile Organic Compounds - Groundwater
Little Valley Superfund Site

Area	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA
Location	MW-1	MW-2	MW-2	MW-4
Sample I.D.	MW-1	MW-2	MW-D3 Duplicate of MW-2	MW-4
Sampling Date	12/13/1999	12/14/1999	12/14/1999	12/13/1999
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U
Vinyl chloride	10 U	1 J	1 J	10 U
Chloroethane	10 U	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	0.7 J	0.7 J	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U
1,2-Dichloroethene (total)	10 U	40	42	0.7 J
cis-1,2-Dichloroethene	NR	NR	NR	NR
trans-1,2-Dichloroethene	NR	NR	NR	NR
Chloroform	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Trichloroethene	10 U	84	87	1 J
Dibromochloromethane	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.
Well MW-3 was dry and could not be sampled.

TABLE D-36
CRA INVESTIGATION OF BUSH INDUSTRIES - DECEMBER 1999
Volatile Organic Compounds - Groundwater
Little Valley Superfund Site

Area	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA
Location	MW-1	MW-2	MW-2	MW-4
Sample I.D.	MW-1	MW-2	MW-D3 Duplicate of MW-2	MW-4
Sampling Date	12/13/1999	12/14/1999	12/14/1999	12/13/1999
Units	ug/L	ug/L	ug/L	ug/L
Benzene	10 U	0.4 J	0.4 J	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U
Xylenes (total)	10 U	10 U	10 U	10 U
Bromochloromethane	NR	NR	NR	NR
1,2-Dibromoethane	NR	NR	NR	NR
1,3-Dichlorobenzene	NR	NR	NR	NR
1,4-Dichlorobenzene	NR	NR	NR	NR
1,2-Dichlorobenzene	NR	NR	NR	NR
1,2-Dibromo-3-chloropropane	NR	NR	NR	NR
1,2,4-Trichlorobenzene	NR	NR	NR	NR

See Table D-1 for abbreviations and data qualifiers.
Well MW-3 dry and could not be sampled.

TABLE D-36
CRA INVESTIGATION OF BUSH INDUSTRIES - DECEMBER 1999
Volatile Organic Compounds - Groundwater
Little Valley Superfund Site

Area	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA
Location	MW-5	MW-6	MW-7	MW-D1
Sample I.D.	MW-5	MW-6	MW-7	MW-D1
Sampling Date	12/13/1999	12/13/1999	12/13/1999	12/13/1999
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U
Vinyl chloride	10 U	4 J	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U
1,2-Dichloroethene (total)	10 U	30	0.3 J	4 J
cis-1,2-Dichloroethene	NR	NR	NR	NR
trans-1,2-Dichloroethene	NR	NR	NR	NR
Chloroform	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Trichloroethene	10 U	17	2 J	9 J
Dibromochloromethane	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.
Well MW-3 was dry and could not be sampled.

TABLE D-36
CRA INVESTIGATION OF BUSH INDUSTRIES - DECEMBER 1999
Volatile Organic Compounds - Groundwater
Little Valley Superfund Site

Area	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA	Bush Industries - CRA
Location	MW-5	MW-6	MW-7	MW-D1
Sample I.D.	MW-5	MW-6	MW-7	MW-D1
Sampling Date	12/13/1999	12/13/1999	12/13/1999	12/13/1999
Units	ug/L	ug/L	ug/L	ug/L
Benzene	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U
Xylenes (total)	10 U	10 U	10 U	10 U
Bromochloromethane	NR	NR	NR	NR
1,2-Dibromoethane	NR	NR	NR	NR
1,3-Dichlorobenzene	NR	NR	NR	NR
1,4-Dichlorobenzene	NR	NR	NR	NR
1,2-Dichlorobenzene	NR	NR	NR	NR
1,2-Dibromo-3-chloropropane	NR	NR	NR	NR
1,2,4-Trichlorobenzene	NR	NR	NR	NR

See Table D-1 for abbreviations and data qualifiers.
Well MW-3 was dry and could not be sampled.

TABLE D-36
CRA INVESTIGATION OF BUSH INDUSTRIES - DECEMBER 1999
Volatile Organic Compounds - Groundwater
Little Valley Superfund Site

Area	Bush Industries - CRA	Bush Industries - CRA
Location	MW-D2	MW-U1
Sample I.D.	MW-D2	MW-U1
Sampling Date	12/14/1999	12/13/1999
Units	ug/L	ug/L
Chloromethane	10 U	10 U
Bromomethane	10 U	10 U
Vinyl chloride	10 U	10 U
Chloroethane	10 U	10 U
Methylene chloride	10 U	10 U
Acetone	10 U	10 U
Carbon disulfide	10 U	10 U
1,1-Dichloroethene	0.4 J	10 U
1,1-Dichloroethane	10 U	10 U
1,2-Dichloroethene (total)	16	10 U
cis-1,2-Dichloroethene	NR	NR
trans-1,2-Dichloroethene	NR	NR
Chloroform	10 U	10 U
1,2-Dichloroethane	10 U	10 U
2-Butanone	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U
Carbon Tetrachloride	10 U	10 U
Bromodichloromethane	10 U	10 U
1,2-Dichloropropane	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U
Trichloroethene	58	10 U
Dibromochloromethane	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.
Well MW-3 was dry and could not be sampled.

TABLE D-36
CRA INVESTIGATION OF BUSH INDUSTRIES - DECEMBER 1999
Volatile Organic Compounds - Groundwater
Little Valley Superfund Site

Area	Bush Industries - CRA	Bush Industries - CRA
Location	MW-D2	MW-U1
Sample I.D.	MW-D2	MW-U1
Sampling Date	12/14/1999	12/13/1999
Units	ug/L	ug/L
Benzene	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U
Bromoform	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U
2-Hexanone	10 U	10 U
Tetrachloroethene	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U
Toluene	10 U	10 U
Chlorobenzene	10 U	10 U
Ethylbenzene	10 U	10 U
Styrene	10 U	10 U
Xylenes (total)	10 U	10 U
Bromochloromethane	NR	NR
1,2-Dibromoethane	NR	NR
1,3-Dichlorobenzene	NR	NR
1,4-Dichlorobenzene	NR	NR
1,2-Dichlorobenzene	NR	NR
1,2-Dibromo-3-chloropropane	NR	NR
1,2,4-Trichlorobenzene	NR	NR

See Table D-1 for abbreviations and data qualifiers.
Well MW-3 was dry and could not be sampled.

TABLE D-37
Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank - Soil Boring	Field Blank - Soil Boring	Field Blank - Soil Boring	Field Blank - Soil Boring
TtFW Sample I.D.	LV-FBSB-061798	LV-FBSB-061998	LV-FBSB-062298	LV-FBSB-062498
Sampling Date	06/17/1998	06/19/98	06/22/98	06/24/98
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	10 UJ	10 UJ	10 UJ	10 UJ
Bromomethane	10 UJ	10 UJ	10 U	10 U
Vinyl chloride	10 UJ	10 UJ	10 U	10 U
Chloroethane	10 UJ	10 UJ	10 U	10 U
Methylene chloride	10 UJ	2 J	1 J	34
Acetone	10 UJ	8 J	10 U	10 U
Carbon disulfide	10 UJ	10 UJ	10 U	10 U
1,1-Dichloroethene	10 UJ	10 UJ	10 U	10 U
1,1-Dichloroethane	10 UJ	10 UJ	10 U	10 U
1,2-Dichloroethene (total)	10 UJ	10 UJ	10 U	10 U
Chloroform	10 UJ	10 UJ	10 U	10 U
1,2-Dichloroethane	10 UJ	10 UJ	10 U	10 U
2-Butanone	10 UJ	10 UJ	10 U	10 U
1,1,1-Trichloroethane	10 UJ	10 UJ	10 U	10 U
Carbon Tetrachloride	10 UJ	10 UJ	10 U	10 U
Bromodichloromethane	10 UJ	10 UJ	10 U	10 U
1,2-Dichloropropane	10 UJ	10 UJ	10 U	10 U
cis-1,3-Dichloropropene	10 UJ	10 UJ	10 U	10 U
Trichloroethene	10 UJ	10 UJ	10 U	10 U
Dibromochloromethane	10 UJ	10 UJ	10 U	10 U
1,1,2-Trichloroethane	10 UJ	10 UJ	10 U	10 U
Benzene	10 UJ	4 J	10 U	10 U
trans-1,3-Dichloropropene	10 UJ	10 UJ	10 U	10 U
Bromoform	10 UJ	10 UJ	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-37
Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank - Soil Boring	Field Blank - Soil Boring	Field Blank - Soil Boring	Field Blank - Soil Boring
TtFW Sample I.D.	LV-FBSB-061798	LV-FBSB-061998	LV-FBSB-062298	LV-FBSB-062498
Sampling Date	06/17/1998	06/19/98	06/22/98	06/24/98
Units	ug/L	ug/L	ug/L	ug/L
-Methyl-2-pentanone	10 UJ	10 UJ	10 U	10 U
-Hexanone	10 UJ	10 UJ	10 U	10 U
etrachloroethene	10 UJ	10 UJ	10 U	10 U
,1,2,2-Tetrachloroethane	10 UJ	10 UJ	10 U	10 U
oluene	10 UJ	9 J	10 U	10 U
hlorobenzene	10 UJ	10 UJ	10 U	10 U
thylbenzene	10 UJ	10 UJ	10 U	10 U
tyrene	10 UJ	10 UJ	10 U	10 U
ylenes (total)	10 UJ	2 J	10 U	10 U
otal Volatile TICs	--	--	--	--

e Table D-1 bbreviations and data qualifiers.

TABLE D-37
Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank - Soil Boring	Field Blank - Soil Boring	Field Blank - Soil Boring	Field Blank - Soil Boring
TtFW Sample I.D.	LV-FBSB-062598	LV-FBSB-062998	LV-FBSB-063098	LV-FBSB-070298
Sampling Date	06/25/98	06/29/98	06/30/98	07/01/98
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	10 UJ	10 U	10 U	10 U
Bromomethane	10 U	10 U	2 J	10 U
Vinyl chloride	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U
Methylene chloride	10 U	8 J	3 BJ	4 J
Acetone	9 J	38	16	10 U
Carbon disulfide	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U
1,2-Dichloroethene (total)	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-37
Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank - Soil Boring	Field Blank - Soil Boring	Field Blank - Soil Boring	Field Blank - Soil Boring
TtFW Sample I.D.	LV-FBSB-062598	LV-FBSB-062998	LV-FBSB-063098	LV-FBSB-070298
Sampling Date	06/25/98	06/29/98	06/30/98	07/01/98
Units	ug/L	ug/L	ug/L	ug/L
-Methyl-2-pentanone	6 J	10 U	10 U	10 U
-Hexanone	6 J	10 U	10 U	10 U
etrachloroethene	10 U	10 U	10 U	10 U
,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
oluene	10 U	10 U	10 U	10 U
hlorobenzene	10 U	10 U	10 U	10 U
thylbenzene	10 U	10 U	10 U	10 U
tyrene	1 J	10 U	10 U	10 U
ylenes (total)	10 U	10 U	10 U	10 U
otal Volatile TICs	7 JN	--	--	9 NJ

e Table D-1 for abbreviations and data qualifiers.

TABLE D-37
Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank - Soil Boring	Field Blank - Soil Boring	Field Blank - Soil Boring	Field Blank - Sediments
TtFW Sample I.D.	LV-FBSB-070198	LV-FBSB-070698	LV-FBSB-070898	LV-FBSD-071598
Sampling Date	07/01/98	07/06/98	07/08/98	07/15/98
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U
Vinyl chloride	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U
Methylene chloride	4 J	10 U	10 U	10 U
Acetone	13	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U
1,2-Dichloroethene (total)	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 UJ	10 UJ	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Trichloroethene	10 U	2 J	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-37
Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank - Soil Boring	Field Blank - Soil Boring	Field Blank - Soil Boring	Field Blank - Sediments
TtFW Sample I.D.	LV-FBSB-070198	LV-FBSB-070698	LV-FBSB-070898	LV-FBSD-071598
Sampling Date	07/01/98	07/06/98	07/08/98	07/15/98
Units	ug/L	ug/L	ug/L	ug/L
-Methyl-2-pentanone	10 U	10 UJ	10 UJ	10 U
-Hexanone	10 U	10 UJ	10 UJ	10 U
etrachloroethene	10 U	10 U	10 U	10 U
,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
oluene	10 U	10 U	10 U	10 U
hlorobenzene	10 U	10 U	10 U	10 U
thylbenzene	10 U	10 U	10 U	10 U
tyrene	10 U	10 U	10 U	10 U
ylenes (total)	10 U	10 U	10 U	10 U
otal Volatile TICs	--	--	R	--

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-37
Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample
Location	Field Blank - Sediments
TtFW Sample I.D.	LV-FBSD-072898
Sampling Date	07/28/98
Units	ug/L
Chloromethane	10 U
Bromomethane	10 UJ
Vinyl chloride	10 U
Chloroethane	10 U
Methylene chloride	14 B
Acetone	14 B
Carbon disulfide	10 UJ
1,1-Dichloroethene	10 U
1,1-Dichloroethane	10 U
1,2-Dichloroethene (total)	10 UJ
Chloroform	10 U
1,2-Dichloroethane	10 U
2-Butanone	10 U
1,1,1-Trichloroethane	10 U
Carbon Tetrachloride	10 UJ
Bromodichloromethane	10 U
1,2-Dichloropropane	10 U
cis-1,3-Dichloropropene	10 U
Trichloroethene	10 U
Dibromochloromethane	10 U
1,1,2-Trichloroethane	10 U
Benzene	10 U
trans-1,3-Dichloropropene	10 U
Bromoform	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-37
Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample
Location	Field Blank - Sediments
TtFW Sample I.D.	LV-FBSD-072898
Sampling Date	07/28/98
Units	ug/L
4-Methyl-2-pentanone	10 U
2-Hexanone	10 U
Tetrachloroethene	10 U
1,1,2,2-Tetrachloroethane	10 U
Toluene	10 U
Chlorobenzene	10 U
Ethylbenzene	10 U
Styrene	10 U
Xylenes (total)	10 U
Total Volatile TICs	--

TABLE D-38
Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LI-FB-091399	LI-FB-091499	LI-FB-091599	LI-FB-091999
Sampling Date	09/13/1999	09/14/1999	09/15/1999	09/16/1999
Matrix	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L
Dichlorodifluoromethane	10 U	10 U	10 U	10 U
Chloromethane	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U
Trichlorofluoromethane	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U
Trichlorotrifluoroethane	10 U	10 U	10 U	10 U
Acetone	10 U	8 J	7 J	9 J
Carbon Disulfide	10 U	10 U	10 U	10 U
Methyl Acetate	10 U	10 U	10 U	10 U
Methylene Chloride	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	10 U	10 U	10 U	10 U
tert-Butyl Methyl Ether	10 UJ	10 UJ	10 UJ	10 UJ
1,1-Dichloroethane	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U
Cyclohexane	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U
Methylcyclohexane	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-38
Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LI-FB-091399	LI-FB-091499	LI-FB-091599	LI-FB-091999
Sampling Date	09/13/1999	09/14/1999	09/15/1999	09/16/1999
Matrix	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L
1,2-Dichloropropane	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U
1,2-Dibromoethane	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U
Isopropylbenzene	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	10 UJ	10 UJ	10 UJ	10 UJ
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U
Total Volatile TICs	0	0	0	0

See Table D for abbreviations and data qualifiers.

TABLE D-38
Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	DI Water Blank
TtFW Sample I.D.	LI-FB-092099	LI-FB-092199	LI-FB-092299	LI-DI-091599
Sampling Date	09/20/1999	09/21/1999	09/22/1999	09/15/1999
Matrix	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L
Dichlorodifluoromethane	10 U	10 U	10 U	10 U
Chloromethane	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U
Trichlorofluoromethane	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U
Trichlorotrifluoroethane	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	12 UJ
Carbon Disulfide	10 U	10 U	10 U	10 U
Methyl Acetate	10 U	10 U	10 U	10 U
Methylene Chloride	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	10 U	10 U	10 U	10 U
tert-Butyl Methyl Ether	10 U	10 U	10 U	10 UJ
1,1-Dichloroethane	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U
Cyclohexane	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U
Methylcyclohexane	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-38
Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	DI Water Blank
TtFW Sample I.D.	LI-FB-092099	LI-FB-092199	LI-FB-092299	LI-DI-091599
Sampling Date	09/20/1999	09/21/1999	09/22/1999	09/15/1999
Matrix	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L
1,2-Dichloropropane	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U
1,2-Dibromoethane	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U
Isopropylbenzene	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 UJ
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U
Total Volatile TICs	0	0	0	0

See Table D-1 for abbreviations and data qualifiers.

TABLE D-39
Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-112700	LV-BIA-FB-112800	LV-BIA-FB-112900	LV-BIA-FB-113000	LV-BIA-FB-120400
Sampling Date	11/27/00	11/28/00	11/29/00	11/30/00	12/4/00
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U
Chloromethane	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 UJ
Trichlorofluoromethane	10 U	10 U	10 U	10 U	10 UJ
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U	8 J
Carbon Disulfide	10 U	10 U	10 U	10 U	3 J
Methyl Acetate	10 UJ	10 UJ	10 U	10 U	10 U
Methylene Chloride	2 J	10 U	10 U	10 U	3 J
trans-1,2-Dichloroethene	10 U	10 U	10 U	10 U	10 U
Methyl tert-Butyl Ether	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 UJ
Chloroform	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U	10 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 UJ

e Table D-1 for abbreviations and data qualifiers.

TABLE D-39
Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-112700	LV-BIA-FB-112800	LV-BIA-FB-112900	LV-BIA-FB-113000	LV-BIA-FB-120400
Sampling Date	11/27/00	11/28/00	11/29/00	11/30/00	12/4/00
Units	ug/L	ug/L	ug/L	ug/L	ug/L
2-Dichloropropane	10 U	10 U	10 U	10 U	10 UJ
romodichloromethane	10 U	10 U	10 U	10 U	10 U
s-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U
Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U
oluene	10 U	10 U	10 U	10 U	10 U
ans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U
1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U
etrachloroethene	10 U	10 U	10 U	10 U	10 U
-Hexanone	10 U	10 U	10 U	10 U	10 U
ibromochloromethane	10 U	10 U	10 U	10 U	10 U
2-Dibromoethane	10 U	10 U	10 U	10 U	10 U
hlorobenzene	10 U	10 U	10 U	10 U	10 U
thylbenzene	10 U	10 U	10 U	10 U	10 U
ylenes (total)	10 U	10 U	10 U	10 U	10 U
tyrene	10 U	10 U	10 U	10 U	10 U
romoform	10 U	10 U	10 U	10 U	10 U
opropylbenzene	10 U	10 U	10 U	10 U	10 U
,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U
,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U
,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U
,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 UJ
,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U
,2,4-Trichlorobenzene	10 UJ	10 UJ	10 U	10 U	10 U

Table D-1 fo[illegible]breviations and data qualifiers.

TABLE D-39
Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	DI Water Blank
TtFW Sample I.D.	LV-BIA-FB-120500	LV-BIA-FB-120600	LV-BIA-FB-121300	LV-BIA-DI-120600
Sampling Date	12/5/00	12/6/00	12/13/00	12/6/00
Units	ug/L	ug/L	ug/L	ug/L
Dichlorodifluoromethane	10 U	10 U	10 UJ	10 U
Chloromethane	10 U	10 U	10 UJ	6 J
Vinyl Chloride	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 UJ	10 U	10 UJ
Trichlorofluoromethane	10 U	10 UJ	10 U	10 UJ
1,1-Dichloroethene	10 U	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10 U	10 U	10 U
Acetone	5 J	8 J	6 J	10 U
Carbon Disulfide	6 J	10 U	10 U	10 U
Methyl Acetate	10 U	10 U	10 UJ	10 U
Methylene Chloride	3 J	3 J	5 J	10 U
trans-1,2-Dichloroethene	10 U	10 U	10 U	10 U
Methyl tert-Butyl Ether	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	10 U	10 U	10 U	10 U
2-Butanone	10 UJ	5 J	10 UJ	10 UJ
Chloroform	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U
Cyclohexane	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U
Trichloroethene	10 U	3 J	10 U	10 U
Methylcyclohexane	10 U	10 UJ	10 U	10 UJ

e Table D-1 for abbreviations and data qualifiers.

TABLE D-39
Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	DI Water Blank
TtFW Sample I.D.	LV-BIA-FB-120500	LV-BIA-FB-120600	LV-BIA-FB-121300	LV-BIA-DI-120600
Sampling Date	12/5/00	12/6/00	12/13/00	12/6/00
Units	ug/L	ug/L	ug/L	ug/L
1,2-Dichloropropane	10 U	10 UJ	10 UJ	10 UJ
Bromodichloromethane	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 UJ	10 U
Toluene	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U
2-Hexanone	10 UJ	10 U	10 R	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U
1,2-Dibromoethane	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U
Xylenes (total)	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 UJ	10 U
Isopropylbenzene	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 UJ	10 U	10 UJ
1,2-Dibromo-3-chloropropane	10 U	10 U	10 R	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U

TABLE D-40
Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SB-09080	LV-FB-SB-09090	LV-FB-SB-09100	LV-FB-SB-09110	LV-FB-SS-09160
Sampling Date	09/08/2003	09/09/2003	09/10/2003	09/11/2003	09/16/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U	10 U

ee Table D-1 for abbreviations and data qualifiers.

TABLE D-40
Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SB-09080	LV-FB-SB-09090	LV-FB-SB-09100	LV-FB-SB-09110	LV-FB-SS-09160
Sampling Date	09/08/2003	09/09/2003	09/10/2003	09/11/2003	09/16/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Chloroethane	10 U	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U	10 U
Chloromethane	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene	10 U	10 U	10 U	10 U	10 U
Methyl Acetate	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	10 U	10 U	10 U	10 U	10 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 U
Methylene chloride	10 U	5	10 U	10 U	19
Styrene	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	10 U	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U	10 U
Trichlorofluoromethane	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	10 U	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U	10 U

TABLE D-40
Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SS-09170	LV-FB-SB-09220	LV-FB-SB-09230	LV-FB-SB-09240	LV-FB-SB-09250
Sampling Date	09/17/03	09/22/2003	09/23/2003	09/24/2003	09/25/2003
Units	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U	10 U

e Table D-1 for abbreviations and data qualifiers.

TABLE D-40
Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SS-09170	LV-FB-SB-09220	LV-FB-SB-09230	LV-FB-SB-09240	LV-FB-SB-09250
Sampling Date	09/17/03.	09/22/2003	09/23/2003	09/24/2003	09/25/2003
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Chloroethane	10 U	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U	10 U
Chloromethane	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene	10 U	10 U	10 U	10 U	10 U
Methyl Acetate	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	10 U	10 U	10 U	10 U	10 U
Methylcyclohexane	10 U	10 U	10 U	10 U	10 U
Methylene chloride	16	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	10 U	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U
Trichloroethene	1	10 U	10 U	10 U	10 U
Trichlorofluoromethane	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	10 U	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U	10 U

TABLE D-40
Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SB-10060	LV-FB-SB-10070	LV-FB-SB-10080
Sampling Date	10/06/03	10/07/03	10/08/03
Units	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U
1,2-Dibromoethane	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U
Acetone	10 U	10 U	10 U
Benzene	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U
Carbon tetrachloride	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U

e Table D-1 for abbreviations and data qualifiers.

TABLE D-40
Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SB-10060	LV-FB-SB-10070	LV-FB-SB-10080
Sampling Date	10/06/03	10/07/03	10/08/03
Units	ug/L	ug/L	ug/L
Chloroethane	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U
Chloromethane	10 U	10 U	10 U
cis-1,2-Dichloroethene	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U
Cyclohexane	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U
Dichlorodifluoromethane	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U
Isopropylbenzene	10 U	10 U	10 U
Methyl Acetate	10 U	10 U	10 U
Methyl tert-butyl ether	10 U	10 U	10 U
Methylcyclohexane	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 U
Styrene	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U
Toluene	10 U	10 U	10 U
trans-1,2-Dichloroethene	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U
Trichlorofluoromethane	10 U	10 U	10 U
Vinyl chloride	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U

TABLE D-41
Semi-Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-112700	LV-BIA-FB-112800	LV-BIA-FB-112900	LV-BIA-FB-113000
Sampling Date	11/27/00	11/28/00	11/29/00	11/30/00
Units	ug/L	ug/L	ug/L	ug/L
Benzaldehyde	20 UJ	10 U	10 UJ	10 UJ
Phenol	20 U	10 U	10 U	10 U
bis-(2-Chloroethyl) ether	20 U	10 U	10 U	10 U
2-Chlorophenol	20 U	10 U	10 U	10 U
2-Methylphenol	20 U	10 U	10 U	10 U
2,2'-oxybis(1-Chloropropane)	20 U	10 U	10 U	10 U
Acetophenone	20 U	10 U	10 U	10 U
4-Methylphenol	20 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	20 U	10 U	10 U	10 U
Hexachloroethane	20 U	10 U	10 U	10 U
Nitrobenzene	20 U	10 U	10 U	10 U
Isophorone	20 U	10 U	10 U	10 U
2-Nitrophenol	20 U	10 U	10 U	10 U
2,4-Dimethylphenol	20 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane	20 U	10 U	10 U	10 U
2,4-Dichlorophenol	20 U	10 U	10 U	10 U
Naphthalene	20 U	10 U	10 U	10 U
4-Chloroaniline	20 U	10 U	10 UJ	10 U
Hexachlorobutadiene	20 U	10 U	10 U	10 U
Caprolactam	20 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	20 U	10 U	10 U	10 U
2-Methylnaphthalene	20 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	20 U	10 UJ	10 U	10 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-41
Semi-Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-112700	LV-BIA-FB-112800	LV-BIA-FB-112900	LV-BIA-FB-113000
Sampling Date	11/27/00	11/28/00	11/29/00	11/30/00
Units	ug/L	ug/L	ug/L	ug/L
2,4,6-Trichlorophenol	20 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	25 U	25 U	25 U
1,1'-Biphenyl	20 U	10 U	10 U	10 U
2-Chloronaphthalene	20 U	10 U	10 U	10 U
2-Nitroaniline	50 U	25 U	25 U	25 UJ
Dimethylphthalate	20 U	10 U	10 U	10 U
2,6-Dinitrotoluene	20 U	10 U	10 U	10 UJ
Acenaphthylene	20 U	10 U	10 U	10 U
3-Nitroaniline	50 U	25 U	25 U	25 UJ
Acenaphthene	20 U	10 U	10 U	10 U
2,4-Dinitrophenol	50 U	25 U	25 U	25 UJ
4-Nitrophenol	50 U	25 U	25 U	25 U
Dibenzofuran	20 U	10 U	10 U	10 U
2,4-Dinitrotoluene	20 U	10 U	10 U	10 UJ
Diethylphthalate	20 U	10 U	10 U	10 U
Fluorene	20 U	10 U	10 U	10 U
4-Chlorophenyl-phenyl ether	20 U	10 U	10 U	10 U
4-Nitroaniline	50 U	25 U	25 U	25 UJ
4,6-Dinitro-2-methylphenol	50 U	25 U	25 U	25 UJ
N-Nitrosodiphenylamine	20 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	20 U	10 U	10 U	10 U
Hexachlorobenzene	20 U	10 U	10 U	10 U
Atrazine	20 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-41
Semi-Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-112700	LV-BIA-FB-112800	LV-BIA-FB-112900	LV-BIA-FB-113000
Sampling Date	11/27/00	11/28/00	11/29/00	11/30/00
Units	ug/L	ug/L	ug/L	ug/L
Pentachlorophenol	50 U	25 U	25 U	25 U
Phenanthrene	20 U	10 U	10 U	10 U
Anthracene	20 U	10 U	10 U	10 U
Carbazole	20 U	10 U	10 U	10 U
Di-n-butylphthalate	2 J	10 U	10 U	10 U
Fluoranthene	20 U	10 U	10 U	10 U
Pyrene	20 U	10 U	10 U	10 U
Butylbenzylphthalate	20 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	20 UJ	10 U	10 U	10 UJ
Benzo(a)anthracene	20 U	10 U	10 U	10 U
Chrysene	20 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	4 J	1 J	9 J	1 J
Di-n-octylphthalate	20 U	10 U	10 U	10 UJ
Benzo(b)fluoranthene	20 U	10 U	10 U	10 U
Benzo(k)fluoranthene	20 U	10 U	10 U	10 U
Benzo(a)pyrene	20 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	20 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	20 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	20 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-41
Semi-Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-120400	LV-BIA-FB-120500	LV-BIA-FB-120600	LV-BIA-FB-121300
Sampling Date	12/4/00	12/5/00	12/6/00	12/13/00
Units	ug/L	ug/L	ug/L	ug/L
Benzaldehyde	10 U	10 U	10 UJ	10 UJ
Phenol	10 U	10 U	10 U	10 U
bis-(2-Chloroethyl) ether	10 U	10 UJ	10 UJ	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U
2,2'-oxybis(1-Chloropropane)	10 U	10 UJ	10 UJ	10 U
Acetophenone	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	10 U	10 UJ	10 UJ	10 U
Hexachloroethane	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U
Caprolactam	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-41
Semi-Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-120400	LV-BIA-FB-120500	LV-BIA-FB-120600	LV-BIA-FB-121300
Sampling Date	12/4/00	12/5/00	12/6/00	12/13/00
Units	ug/L	ug/L	ug/L	ug/L
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U	25 U
1,1'-Biphenyl	10 U	10 U	10 U	10 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U
2-Nitroaniline	25 U	25 UJ	25 UJ	25 U
Dimethylphthalate	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U
3-Nitroaniline	25 U	25 U	25 U	25 U
Acenaphthene	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	25 UJ	25 U	25 U	25 U
4-Nitrophenol	25 U	25 U	25 U	25 U
Dibenzofuran	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenyl ether	10 U	10 U	10 U	10 U
4-Nitroaniline	25 U	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U
Atrazine	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-41
Semi-Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-120400	LV-BIA-FB-120500	LV-BIA-FB-120600	LV-BIA-FB-121300
Sampling Date	12/4/00	12/5/00	12/6/00	12/13/00
Units	ug/L	ug/L	ug/L	ug/L
Pentachlorophenol	25 U	25 U	25 U	25 U
Phenanthrene	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10 UJ	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10 U	10 UJ	10 U	10 U
3,3'-Dichlorobenzidine	10 U	10 U	10 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	2 J	10 U	10 U	10 U
Di-n-octylphthalate	10 U	10 UJ	10 U	10 U
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-41
Semi-Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	
Location	DI Water Blank	
TtFW Sample I.D.	LV-BIA-DI-120600	
Sampling Date	12/6/00	
Units	ug/L	
Benzaldehyde	10	UJ
Phenol	10	U
bis-(2-Chloroethyl) ether	10	UJ
2-Chlorophenol	10	U
2-Methylphenol	10	U
2,2'-oxybis(1-Chloropropane)	10	UJ
Acetophenone	10	U
4-Methylphenol	10	U
N-Nitroso-di-n-propylamine	10	UJ
Hexachloroethane	10	U
Nitrobenzene	10	U
Isophorone	10	U
2-Nitrophenol	10	U
2,4-Dimethylphenol	10	U
bis(2-Chloroethoxy)methane	10	U
2,4-Dichlorophenol	10	U
Naphthalene	10	U
4-Chloroaniline	10	U
Hexachlorobutadiene	10	U
Caprolactam	10	U
4-Chloro-3-methylphenol	10	U
2-Methylnaphthalene	10	U
Hexachlorocyclopentadiene	10	U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-41
Semi-Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	
Location	DI Water Blank	
TtFW Sample I.D.	LV-BIA-DI-120600	
Sampling Date	12/6/00	
Units	ug/L	
2,4,6-Trichlorophenol	10	U
2,4,5-Trichlorophenol	25	U
1,1'-Biphenyl	10	U
2-Chloronaphthalene	10	U
2-Nitroaniline	25	UJ
Dimethylphthalate	10	U
2,6-Dinitrotoluene	10	U
Acenaphthylene	10	U
3-Nitroaniline	25	U
Acenaphthene	10	U
2,4-Dinitrophenol	25	U
4-Nitrophenol	25	U
Dibenzofuran	10	U
2,4-Dinitrotoluene	10	U
Diethylphthalate	10	U
Fluorene	10	U
4-Chlorophenyl-phenyl ether	10	U
4-Nitroaniline	25	U
4,6-Dinitro-2-methylphenol	25	U
N-Nitrosodiphenylamine	10	U
4-Bromophenyl-phenylether	10	U
Hexachlorobenzene	10	U
Atrazine	10	U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-41
Semi-Volatile Organic Compounds (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	
Location	DI Water Blank	
TtFW Sample I.D.	LV-BIA-DI-120600	
Sampling Date	12/6/00	
Units	ug/L	
Pentachlorophenol	25	U
Phenanthrene	10	U
Anthracene	10	U
Carbazole	10	U
Di-n-butylphthalate	10	U
Fluoranthene	10	U
Pyrene	10	U
Butylbenzylphthalate	10	U
3,3'-Dichlorobenzidine	10	U
Benzo(a)anthracene	10	U
Chrysene	10	U
bis(2-Ethylhexyl)phthalate	10	U
Di-n-octylphthalate	10	U
Benzo(b)fluoranthene	10	U
Benzo(k)fluoranthene	10	U
Benzo(a)pyrene	10	U
Indeno(1,2,3-cd)pyrene	10	U
Dibenzo(a,h)anthracene	10	U
Benzo(g,h,i)perylene	10	U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-42
Semi-Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SB-090803	LV-FB-SB-090903	LV-FB-SB-091003	LV-FB-SB-091103	LV-FB-SS-09160
Sampling Date	09/08/03	09/09/03	09/10/03	09/11/03	09/16/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L
1-Propanamine, N-nitroso-n-propyl-	10 U	10 U	10 U	4 U	10 U
2,4,5-Trichlorophenol	10 U	10 U	10 U	4 U	25 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	4 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	4 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	4 U	10 U
2,4-Dinitrophenol	10 U	10 U	10 U	11 U	25 U
2,4-Dinitrotoluene	10 U	10 U	10 U	4 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	4 U	10 U
2-Chloronaphthalene	10 U	10 U	10 U	4 U	10 U
2-Chlorophenol	10 U	10 U	10 U	4 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	4 U	10 U
2-Methylphenol	10 U	10 U	10 U	4 U	10 U
2-Nitroaniline	10 U	10 U	10 U	4 U	25 U
2-Nitrophenol	10 U	10 U	10 U	4 U	10 U
3,3'-Dichlorobenzidine	10 U	10 U	10 U	4 U	10 U
3-Nitroaniline	10 U	10 U	10 U	4 U	25 U
4,6-Dinitro-2-methylphenol	10 U	10 U	10 U	4 U	25 U
4-Bromophenyl phenyl ether	10 U	10 U	10 U	4 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	4 U	10 U
4-Chloroaniline	10 U	10 U	10 U	4 U	10 U
4-Chlorophenyl phenyl ether	10 U	10 U	10 U	4 U	10 U
4-Methylphenol	10 U	10 U	10 U	4 U	10 U
4-Nitroaniline	10 U	10 U	10 U	4 U	25 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-42
Semi-Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SB-090803	LV-FB-SB-090903	LV-FB-SB-091003	LV-FB-SB-091103	LV-FB-SS-09160
Sampling Date	09/08/03	09/09/03	09/10/03	09/11/03	09/16/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L
4-Nitrophenol	10 U	10 U	10 U	4 U	25 U
Acenaphthene	10 U	10 U	10 U	4 U	10 U
Acenaphthylene	10 U	10 U	10 U	4 U	10 U
Acetophenone	10 U	10 U	10 U	4 U	10 U
Anthracene	10 U	10 U	10 U	4 U	10 U
Atrazine	10 U	10 U	10 U	4 U	10 U
Bis(2-chloroethyl)ether	10 U	10 U	10 U	4 U	10 U
Benzaldehyde	10 U	10 U	10 U	4 U	10 U
Benzenamine, N-nitroso-N-phenyl	10 U	10 U	10 U	4 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U	4 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	4 U	10 U
Benzo(b)fluoranthene	10 U	10 U	10 U	4 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	4 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	4 U	10 U
Biphenyl	10 U	10 U	10 U	4 U	10 U
Bis(2-chloroethoxy)methane	10 U	10 U	10 U	4 U	10 U
Bis(2-chloroisopropyl)ether	10 U	10 U	10 U	4 U	10 U
Bis(2-ethylhexyl)phthalate	10 U	10 U	10 U	4 U	2
Butyl benzyl phthalate	10 U	10 U	10 U	4 U	10 U
Caprolactam	10 U	10 U	10 U	4 U	10 U
Carbazole	10 U	10 U	10 U	4 U	10 U
Chrysene	10 U	10 U	10 U	4 U	10 U
Dibenzo(a,h)anthracene	10 U	10 U	10 U	4 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-42
Semi-Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SB-090803	LV-FB-SB-090903	LV-FB-SB-091003	LV-FB-SB-091103	LV-FB-SS-09160
Sampling Date	09/08/03	09/09/03	09/10/03	09/11/03	09/16/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Dibenzofuran	10 U	10 U	10 U	4 U	10 U
Diethylphthalate	10 U	10 U	10 U	4 U	10 U
Dimethylphthalate	10 U	10 U	10 U	4 U	10 U
Di-n-butyl phthalate	10 U	10 U	10 U	4 U	10 U
Di-n-octyl phthalate	10 U	10 U	10 U	4 U	10 U
Fluoranthene	10 U	10 U	10 U	4 U	10 U
Fluorene	10 U	10 U	10 U	4 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	4 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	4 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	4 U	10 U
Hexachloroethane	10 U	10 U	10 U	4 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	4 U	10 U
Isophorone	10 U	10 U	10 U	4 U	10 U
Naphthalene	10 U	10 U	10 U	4 U	10 U
Nitrobenzene	10 U	10 U	10 U	4 U	10 U
Pentachlorophenol	10 U	10 U	10 U	4 U	25 U
Phenanthrene	10 U	10 U	10 U	4 U	10 U
Phenol	10 U	10 U	10 U	4 U	10 U
Pyrene	10 U	10 U	10 U	4 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-42
Semi-Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SS-09170	LV-FB-SB-092203	LV-FB-092303	LI-FB-SB-092403	LV-FB-SB-092503
Sampling Date	09/17/03	09/22/03	09/23/03	09/24/03	09/25/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L
1-Propanamine, N-nitroso-n-propyl-	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	25 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	25 U	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	25 U	10 U	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol	25 U	10 U	10 U	10 U	10 U
4-Bromophenyl phenyl ether	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	25 U	10 U	10 U	10 U	10 U

TABLE D-42
Semi-Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SS-09170	LV-FB-SB-092203	LV-FB-092303	LI-FB-SB-092403	LV-FB-SB-092503
Sampling Date	09/17/03	09/22/03	09/23/03	09/24/03	09/25/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L
4-Nitrophenol	25 U	10 U	10 U	10 U	10 U
Acenaphthene	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U	10 U
Acetophenone	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U
Atrazine	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl)ether	10 U	10 U	10 U	10 U	10 U
Benzaldehyde	10 U	10 U	10 U	10 U	10 U
Benzenamine, N-nitroso-N-phenyl	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U	10 U
Biphenyl	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethoxy)methane	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroisopropyl)ether	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	3	10 U	10 U	10 U	10 U
Butyl benzyl phthalate	10 U	10 U	10 U	10 U	10 U
Caprolactam	10 U	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	10 U	10 U	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-42
Semi-Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SS-09170	LV-FB-SB-092203	LV-FB-092303	LI-FB-SB-092403	LV-FB-SB-092503
Sampling Date	09/17/03	09/22/03	09/23/03	09/24/03	09/25/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Dibenzofuran	10 U	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U	10 U
Dimethylphthalate	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	10 U	10 U	10 U	10 U	10 U
Di-n-octyl phthalate	10 U	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	25 U	10 U	10 U	10 U	10 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U
Phenol	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U

TABLE D-42
Semi-Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SB-092903	LV-FB-SB-093003	LV-FB-SB-100103
Sampling Date	09/29/03	09/30/03	10/01/03
Units	ug/L	ug/L	ug/L
1-Propanamine, N-nitroso-n-propyl-	10 U	10 U	10 U
2,4,5-Trichlorophenol	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U
2,4-Dinitrophenol	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U
2-Chloronaphthalene	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U
2-Nitroaniline	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U
3,3'-Dichlorobenzidine	10 U	10 U	10 U
3-Nitroaniline	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol	10 U	10 U	10 U
4-Bromophenyl phenyl ether	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U
4-Nitroaniline	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-42
Semi-Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SB-092903	LV-FB-SB-093003	LV-FB-SB-100103
Sampling Date	09/29/03	09/30/03	10/01/03
Units	ug/L	ug/L	ug/L
4-Nitrophenol	10 U	10 U	10 U
Acenaphthene	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U
Acetophenone	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U
Atrazine	10 U	10 U	10 U
Bis(2-chloroethyl)ether	10 U	10 U	10 U
Benzaldehyde	10 U	10 U	10 U
Benzenamine, N-nitroso-N-phenyl	10 U	10 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U
Benzo(b)fluoranthene	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U
Biphenyl	10 U	10 U	10 U
Bis(2-chloroethoxy)methane	10 U	10 U	10 U
Bis(2-chloroisopropyl)ether	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	10 U	10 U	10 U
Butyl benzyl phthalate	10 U	10 U	10 U
Caprolactam	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U
Dibenzo(a,h)anthracene	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-42
Semi-Volatile Organic Compounds (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SB-092903	LV-FB-SB-093003	LV-FB-SB-100103
Sampling Date	09/29/03	09/30/03	10/01/03
Units	ug/L	ug/L	ug/L
Dibenzofuran	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U
Dimethylphthalate	10 U	10 U	10 U
Di-n-butyl phthalate	10 U	10 U	10 U
Di-n-octyl phthalate	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U
Pentachlorophenol	10 U	10 U	10 U
Phenanthrene	10 U	10 U	10 U
Phenol	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-43
Pesticides/PCBs (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-112700	LV-BIAFB-112800	LV-BIA-FB-112900	LV-BIA-FB-113000
Sampling Date	11/27/00	11/28/00	11/29/00	11/30/00
Units	ug/L	ug/L	ug/L	ug/L
alpha-BHC	0.050 U	0.050 U	0.050 U	0.050 U
beta-BHC	0.050 U	0.050 U	0.050 U	0.050 U
delta-BHC	0.050 U	0.050 U	0.050 U	0.050 U
gamma-BHC (Lindane)	0.050 UJ	0.050 UJ	0.050 UJ	0.050 UJ
Heptachlor	0.050 U	0.031 J	0.050 U	0.050 U
Aldrin	0.050 UJ	0.050 UJ	0.050 UJ	0.050 UJ
Heptachlor epoxide	0.050 U	0.050 U	0.050 U	0.050 U
Endosulfan I	0.050 U	0.050 U	0.050 U	0.050 U
Dieldrin	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDE	0.10 UJ	0.10 UJ	0.10 UJ	0.10 UJ
Endrin	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan II	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDD	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan sulfate	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	0.10 U	0.10 U	0.10 U	0.10 U
Methoxychlor	0.50 U	0.50 U	0.50 U	0.50 U
Endrin ketone	0.10 U	0.10 U	0.10 U	0.10 U
Endrin aldehyde	0.10 U	0.10 U	0.10 U	0.10 U
alpha-Chlordane	0.050 U	0.050 U	0.050 U	0.050 U
gamma-Chlordane	0.050 U	0.050 U	0.050 U	0.050 U
Toxaphene	5.0 U	5.0 U	5.0 U	5.0 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-43
Pesticides/PCBs (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-112700	LV-BIAFB-112800	LV-BIA-FB-112900	LV-BIA-FB-113000
Sampling Date	11/27/00	11/28/00	11/29/00	11/30/00
Units	ug/L	ug/L	ug/L	ug/L
Aroclor-1016	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1221	2.0 U	2.0 U	2.0 U	2.0 U
Aroclor-1232	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1242	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1248	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1254	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1260	1.0 U	1.0 U	1.0 U	1.0 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-43
Pesticides/PCBs (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-120400	LV-BIA-FB-120500	LV-BIA-FB-120600	LV-BIA-FB-121300
Sampling Date	12/4/00	12/5/00	12/6/00	12/13/00
Units	ug/L	ug/L	ug/L	ug/L
alpha-BHC	0.050 U	0.050 U	0.050 U	0.050 U
beta-BHC	0.050 U	0.050 U	0.050 U	0.050 U
delta-BHC	0.050 U	0.050 U	0.050 U	0.050 U
gamma-BHC (Lindane)	0.050 U	0.050 U	0.050 U	0.050 U
Heptachlor	0.050 U	0.050 U	0.050 U	0.050 U
Aldrin	0.050 U	0.050 U	0.050 U	0.050 U
Heptachlor epoxide	0.050 U	0.050 U	0.050 U	0.050 U
Endosulfan I	0.050 U	0.050 U	0.050 U	0.050 U
Dieldrin	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDE	0.10 U	0.10 U	0.10 U	0.10 U
Endrin	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan II	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDD	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan sulfate	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	0.10 U	0.10 U	0.10 U	0.10 U
Methoxychlor	0.50 U	0.50 U	0.50 U	0.50 U
Endrin ketone	0.10 U	0.10 U	0.10 U	0.10 U
Endrin aldehyde	0.10 U	0.10 U	0.10 U	0.10 U
alpha-Chlordane	0.050 U	0.050 U	0.050 U	0.050 U
gamma-Chlordane	0.050 U	0.050 U	0.050 U	0.050 U
Toxaphene	5.0 U	5.0 U	5.0 U	5.0 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-43
Pesticides/PCBs (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-120400	LV-BIA-FB-120500	LV-BIA-FB-120600	LV-BIA-FB-121300
Sampling Date	12/4/00	12/5/00	12/6/00	12/13/00
Units	ug/L	ug/L	ug/L	ug/L
Aroclor-1016	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1221	2.0 U	2.0 U	2.0 U	2.0 U
Aroclor-1232	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1242	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1248	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1254	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1260	1.0 U	1.0 U	1.0 U	1.0 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-43
Pesticides/PCBs (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	
Location	DI Water Blank	
TtFW Sample I.D.	LV-BIA-DI-120600	
Sampling Date	12/6/00	
Units	ug/L	
alpha-BHC	0.050	U
beta-BHC	0.050	U
delta-BHC	0.050	U
gamma-BHC (Lindane)	0.050	U
Heptachlor	0.050	U
Aldrin	0.050	U
Heptachlor epoxide	0.050	U
Endosulfan I	0.050	U
Dieldrin	0.10	U
4,4'-DDE	0.10	U
Endrin	0.10	U
Endosulfan II	0.10	U
4,4'-DDD	0.10	U
Endosulfan sulfate	0.10	U
4,4'-DDT	0.10	U
Methoxychlor	0.50	U
Endrin ketone	0.10	U
Endrin aldehyde	0.10	U
alpha-Chlordane	0.050	U
gamma-Chlordane	0.050	U
Toxaphene	5.0	U

TABLE D-43
Pesticides/PCBs (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample
Location	DI Water Blank
TtFW Sample I.D.	LV-BIA-DI-120600
Sampling Date	12/6/00
Units	ug/L
Aroclor-1016	1.0 U
Aroclor-1221	2.0 U
Aroclor-1232	1.0 U
Aroclor-1242	1.0 U
Aroclor-1248	1.0 U
Aroclor-1254	1.0 U
Aroclor-1260	1.0 U

See Table D- for abbreviations and data qualifiers.

TABLE D-44
Metals (Soils) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LI-FB-091399	LI-FB-091499	LI-FB-09ESS	LI-01-081599
Sampling Date	09/13/1999	09/14/1999	09/15/1999	09/15/1999
Matrix	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L
Aluminum	193 B	133 B	85.1 B	25.2 B
Antimony	5 U	5 U	5 U	5 U
Arsenic	6 U	6 U	6 U	6 U
Barium	4.3 B	4.2 B	3.9 B	1 U
Beryllium	1 U	1 U	2.3 BJ	1 U
Cadmium	1 U	1 U	1 U	1 U
Calcium	788 B	500 B	568 B	16 U
Chromium	4.2 B	1.5 B	1.8 B	1 U
Cobalt	1 U	1 U	1 U	1 U
Copper	3.5 B	1 U	1 U	1 U
Iron	1780	920	842	16 U
Lead	2 U	2 U	7.1 J	2 U
Magnesium	191 B	89.8 B	83.6 B	23 U
Manganese	33.8	34.5	29.3	1 U
Mercury	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	2 U	2 U	2 U	2 U
Potassium	107 B	59.8 B	39 U	39 U
Selenium	5 U	5 U	5 U	5 U
Silver	1 U	1 U	1 U	1 U
Sodium	373 B	360 B	836 B	23 U
Thallium	7 U	7 U	7 U	7 U
Vanadium	2 U	2 U	3.7 B	2 U
Zinc	11.5 B	2 U	31.3	2 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-44
Metals (Soils) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LI-FB-091699	LI-FB-092099	LI-FB-092199	LI-FB-092299
Sampling Date	09/16/1999	09/20/99	09/21/99	09/22/99
Matrix	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L
Aluminum	58.4 B	226	128 B	86.4 B
Antimony	5 U	5 U	5 U	5 U
Arsenic	6 U	6 U	6 U	6 U
Barium	1.1 B	3.6 B	2.2 B	1.4 B
Beryllium	1 U	1 U	1 U	1.1 B
Cadmium	1 U	1 U	1 U	1 U
Calcium	539 B	536 B	388 B	226 B
Chromium	1 U	1.4 U	1 U	1 U
Cobalt	1 U	1 U	1 U	1 U
Copper	1 U	1.7 U	1 U	1 U
Iron	223	1280	807	956
Lead	2 U	2 U	2 U	2 U
Magnesium	23 U	107 B	67.4 B	25.6 B
Manganese	7 B	16	13.4 B	15.9
Mercury	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	2 U	2 U	2 U	2 U
Potassium	39 U	70 B	56.8 B	39 U
Selenium	5 U	5 U	5 U	5 U
Silver	1 U	1 U	1.2 B	1 U
Sodium	101 B	68.2 B	77.7 B	35.9 B
Thallium	7 U	7 U	7 U	7 U
Vanadium	2 U	2 U	2 U	2 U
Zinc	4 B	6 B	3.3 B	3 B

See Table D-1 for abbreviations and data qualifiers.

TABLE D-45
Metals (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB-112700	LVBIAFB-112800	LV-BIA-FB-112900	LV-BIA-FB-113000
Sampling Date	11/27/00	11/28/00	11/29/00	11/30/00
Units	ug/L	ug/L	ug/L	ug/L
ALUMINUM	65.9 U	65.9 U	65.9 U	65.9 U
ANTIMONY	21.5 U	21.5 U	21.5 U	21.5 U
ARSENIC	1.6 U	1.6 U	1.6 U	1.6 U
BARIUM	3.9 U	3.9 U	3.9 U	3.9 U
BERYLLIUM	0.20 B	0.20 U	0.30 B	0.20 U
CADMIUM	0.40 U	0.40 U	0.40 U	0.40 U
CALCIUM	1770 U	1770 U	1770 U	1770 U
CHROMIUM	1.0 U	1.0 U	1.0 U	1.0 U
COBALT	2.0 U	2.0 U	2.0 U	2.0 U
COPPER	1.4 U	1.4 U	1.4 U	1.4 U
IRON	65.0 B	37.5 B	36.4 B	108
LEAD	1.9 U	1.9 U	1.9 U	1.9 U
MAGNESIUM	70.0 U	70.0 U	70.0 U	70.0 U
MANGANESE	5.3 U	5.3 U	5.3 U	5.3 U
MERCURY	0.10 U	0.10 U	0.10 U	0.10 U
NICKEL	3.6 B	1.9 U	1.9 U	1.9 U
POTASSIUM	42.8 B	35.1 B	59.0 B	44.6 B
SELENIUM	2.0 U	2.0 U	2.0 U	2.0 U
SILVER	1.4 U	1.4 U	1.4 U	1.4 U
SODIUM	956 U	956 U	956 U	956 U
THALLIUM	3.7 U	3.7 U	3.7 U	3.7 U
VANADIUM	1.7 U	1.7 U	1.7 U	1.7 U
ZINC	10.7 U	10.7 U	10.7 U	10.7 U

TABLE D-45
Metals (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	DI Water Blank
TtFW Sample I.D.	LV-BIA-FB-120400	LVBIA-FB-120500	LVBIA-FB-120600	LV-BIA-DI-120600
Sampling Date	12/4/00	12/5/00	12/6/00	12/6/00
Units	ug/L	ug/L	ug/L	ug/L
ALUMINUM	184 B	37.7 B	57.8 B	45.0 B
ANTIMONY	2.3 U	2.3 U	2.3 U	2.3 U
ARSENIC	3.4 U	3.4 U	3.4 U	3.4 U
BARIUM	0.51 B	0.10 B	0.15 B	0.31 B
BERYLLIUM	0.43 B	0.20 B	0.30 B	0.23 B
CADMIUM	0.30 U	0.30 U	0.30 U	0.30 U
CALCIUM	89.0 B	25.0 U	25.0 U	25.0 U
CHROMIUM	0.60 U	0.60 U	0.60 U	0.60 U
COBALT	0.74 B	0.60 U	0.60 U	0.60 U
COPPER	0.90 U	0.90 U	0.90 U	0.90 U
IRON	127	10.6 U	20.2 B	13.8 B
LEAD	2.1 U	2.1 U	2.1 U	2.1 U
MAGNESIUM	115 B	7.6 U	7.6 U	12.0 B
MANGANESE	3.6 B	0.50 B	0.56 B	0.50 B
MERCURY	0.10 U	0.10 U	0.10 U	0.10 U
NICKEL	0.84 B	0.80 U	1.6 B	1.7 B
POTASSIUM	23.0 U	23.0 U	23.0 U	23.0 U
SELENIUM	4.3 UJ	4.3 UJ	4.3 UJ	4.3 UJ
SILVER	0.40 U	0.40 U	0.45 B	0.40 U
SODIUM	139 U	139 U	139 U	139 U
THALLIUM	5.7 U	5.7 U	5.7 U	5.7 U
VANADIUM	0.70 U	0.70 U	0.70 U	0.70 U
ZINC	1.2 U	1.2 U	1.2 U	1.2 U

See Table D-1 for abbreviations and data qualifiers

TABLE D-45
Metals (Soils/Sediments) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample		QA/QC Sample		QA/QC Sample	
Location	Field Blank		Field Blank		Field Blank	
TtFW Sample I.D.	LV-FB-121800		LV-FB-121900		LV-FB-122000	
Sampling Date	12/18/00		12/19/00		12/20/00	
Units	ug/L		ug/L		ug/L	
ALUMINUM	69.2	B	117	B	95.6	B
ANTIMONY	20.0	U	20.0	U	21.5	U
ARSENIC	2.5	U	2.5	U	1.6	U
BARIUM	9.4	U	9.4	U	3.9	U
BERYLLIUM	0.20	B	0.20	U	0.20	U
CADMIUM	0.30	U	0.30	U	0.40	U
CALCIUM	1290	U	1290	U	1770	U
CHROMIUM	1.2	U	1.2	U	1.0	U
COBALT	2.0	U	2.0	U	2.0	U
COPPER	5.0	U	5.0	U	1.4	U
IRON	61.0	B	382		104	
LEAD	1.4	B	1.4	B	1.9	U
MAGNESIUM	52.9	U	52.9	U	70.0	U
MANGANESE	6.8	U	13.9	B	5.3	U
MERCURY	0.10	U	0.10	U	0.10	U
NICKEL	2.1	U	2.1	U	1.9	U
POTASSIUM	140	B	157	B	156	B
SELENIUM	2.3	U	2.3	U	2.0	U
SILVER	1.3	U	1.3	U	1.4	U
SODIUM	387	B	515	B	956	U
THALLIUM	4.1	U	4.1	U	3.7	U
VANADIUM	2.6	U	2.6	U	1.7	U
ZINC	14.9	U	14.9	U	10.7	U

See Table D-1 for abbreviations and data qualifiers

TABLE D-46
Metals (Soils) - Quality Assurance/Quality Control (2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-FB-SS-091603	LV-FB-SS-091703	LV-FB-SB-091003	LV-FB-SB-091103
Sampling Date	09/16/03	09/17/03	09/10/03	09/11/03
Units	ug/L	ug/L	ug/L	ug/L
Aluminum	200 U	200 U	200 U	200 U
Antimony	8.8	12.6	60 U	60 U
Arsenic	15 U	15 U	15 U	15 U
Barium	200 U	200 U	200 U	200 U
Beryllium	5 U	5 U	5 U	5 U
Cadmium	5 U	5 U	5 U	5 U
Calcium	684	122	5000 U	5000 U
Chromium	2.3	10 U	10 U	10 U
Cobalt	50 U	50 U	50 U	50 U
Copper	3.8	3	25 U	25 U
Iron	129	71.5	140	100 U
Lead	10 U	6.4	13	10 U
Magnesium	28.8	21.7	5000 U	15 U
Manganese	9.3	4.1	15 U	15 U
Mercury	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	40 U	16.4	40 U	40 U
Potassium	204	5000 U	5000 U	5000 U
Selenium	35 U	35 U	35 U	35 U
Silver	10 U	10 U	10 U	10 U
Sodium	354	160	5000 U	5000 U
Thallium	25 U	25 U	25 U	25 U
Vanadium	50 U	50 U	50 U	50 U
Zinc	122	60 U	210	60 U

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
	SimulProbe Groundwater	SimulProbe Groundwater	SimulProbe Groundwater
TtFW Sample I.D.	LV-FBSBGW-061998	LV-FBSBGW-062298	LV-FBSBGW-062498
Sampling Date	06/19/1998	06/22/98	06/24/98
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	0.9 J	1 U
Bromomethane	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene chloride	2 UJ	0.6 J	2 U
Acetone	16 JB	10 J	7 J
Carbon disulfide	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
2-Butanone	R	3 J	R
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	5	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
	SimulProbe Groundwater	SimulProbe Groundwater	SimulProbe Groundwater
TtFW Sample I.D.	LV-FBSBGW-061998	LV-FBSBGW-062298	LV-FBSBGW-062498
Sampling Date	06/19/1998	06/22/98	06/24/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	8	1 U	1 U
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	0.5 J	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	2	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	--	4 JN	3 JN

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
	SimulProbe Groundwater	SimulProbe Groundwater	SimulProbe Groundwater
TtFW Sample I.D.	LV-FBSBGW-062698	LV-FBSBGW-070198	LV-FBSBGW-070298
Sampling Date	06/26/98	07/01/98	07/01/98
Units	ug/L	ug/L	ug/L
Chloromethane	2	1 U	1 U
Bromomethane	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene chloride	2	2 U	2 U
Acetone	24 J	16 J	22 J
Carbon disulfide	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
2-Butanone	6 J	2 J	3 J
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
	SimulProbe Groundwater	SimulProbe Groundwater	SimulProbe Groundwater
TtFW Sample I.D.	LV-FBSBGW-062698	LV-FBSBGW-070198	LV-FBSBGW-070298
Sampling Date	06/26/98	07/01/98	07/01/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	2	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	10 JN	11 J	6 JN

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
	SimulProbe Groundwater	SimulProbe Groundwater	Groundwater
TtFW Sample I.D.	LV-FBSBGW-070698	LV-FBSBGW-070898	LV-FBGW-070998
Sampling Date	07/06/98	07/08/98	07/09/98
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 UJ
Bromomethane	1 U	1 U	1 UJ
Vinyl chloride	1 U	1 U	1 UJ
Chloroethane	1 U	1 U	1 UJ
Methylene chloride	2 U	2 U	2 UJ
Acetone	8 J	13 J	7 J
Carbon disulfide	1 U	1 U	1 UJ
1,1-Dichloroethene	1 U	1 U	1 UJ
1,1-Dichloroethane	1 U	1 U	1 UJ
cis-1,2-Dichloroethene	1 U	1 U	1 UJ
trans-1,2-Dichloroethene	1 U	1 U	1 UJ
Chloroform	1 U	1 U	1 UJ
1,2-Dichloroethane	1 U	1 U	1 UJ
2-Butanone	R	3 J	3 J
Bromochloromethane	1 U	1 U	1 UJ
1,1,1-Trichloroethane	1 U	1 U	1 UJ
Carbon tetrachloride	1 U	1 U	1 UJ
Bromodichloromethane	1 U	1 U	1 UJ
1,2-Dichloropropane	1 U	1 U	1 UJ
cis-1,3-Dichloropropene	1 U	1 U	1 UJ
Trichloroethene	1 U	1 U	1 UJ
Dibromochloromethane	1 U	1 U	1 UJ
1,1,2-Trichloroethane	1 U	1 U	1 UJ
Benzene	1 U	1 U	1 UJ
trans-1,3-Dichloropropene	1 U	1 U	1 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
	SimulProbe Groundwater	SimulProbe Groundwater	Groundwater
TtFW Sample I.D.	LV-FBSBGW-070698	LV-FBSBGW-070898	LV-FBGW-070998
Sampling Date	07/06/98	07/08/98	07/09/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 UJ
4-Methyl-2-pentanone	5 U	5 U	5 UJ
2-Hexanone	5 U	5 U	5 UJ
Tetrachloroethene	1 U	1 U	1 UJ
1,1,2,2-Tetrachloroethane	1 U	1 U	1 UJ
1,2-Dibromoethane	1 U	1 U	1 UJ
Toluene	1 U	1 U	1 UJ
Chlorobenzene	1 U	1 U	1 UJ
Ethylbenzene	1 U	1 U	1 UJ
Styrene	1 U	1 U	1 UJ
Xylenes (total)	1 U	1 U	1 UJ
1,3-Dichlorobenzene	1 U	1 U	1 UJ
1,4-Dichlorobenzene	1 U	1 U	1 UJ
1,2-Dichlorobenzene	1 U	1 U	1 UJ
1,2-Dibromo-3-chloropropane	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 UJ
Total Volatile TICs	--	--	2 JN

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
	Groundwater	Groundwater	Groundwater
TtFW Sample I.D.	LV-FBGW-071398	LV-FBGWBLR-071398	LV-FBGW-071498
Sampling Date	07/13/98	07/13/98	07/14/98
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	0.7 J	1 U
Bromomethane	1 U	1 U	1 U
Vinyl chloride	0.2 J	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene chloride	2 U	0.3 JB	0.2 JB
Acetone	7 J	8 J	21 J
Carbon disulfide	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	0.2 J
2-Butanone	R	2 J	4 J
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	0.2 J	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
	Groundwater	Groundwater	Groundwater
TtFW Sample I.D.	LV-FBGW-071398	LV-FBGWBLR-071398	LV-FBGW-071498
Sampling Date	07/13/98	07/13/98	07/14/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	--	--	--

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
	Groundwater	Groundwater	Groundwater
TtFW Sample I.D.	LV-FBGW-071598	LV-FBGW-071698	LV-FBGWAM-072898
Sampling Date	07/15/98	07/16/98	07/28/98
Units	ug/L	ug/L	ug/L
Chloromethane	2	0.6 J	1 U
Bromomethane	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene chloride	1 JB	0.6 JB	2 U
Acetone	19 J	9 J	R
Carbon disulfide	1 U	0.2 JB	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	0.3 J	1 U
2-Butanone	5 J	3 J	R
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	0.2 J	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
	Groundwater	Groundwater	Groundwater
TtFW Sample I.D.	LV-FBGW-071598	LV-FBGW-071698	LV-FBGWAM-072898
Sampling Date	07/15/98	07/16/98	07/28/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U
2-Hexanone	5 U	5 U	R
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	1 U	0.5 J	1 U
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	--	--	--

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
	Groundwater	Groundwater	Groundwater
TtFW Sample I.D.	LV-FBGWPM-072898	LV-FBGW-072998	LV-FBGW-073098
Sampling Date	07/28/98	07/29/98	07/29/98
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	1 J	2 J
Bromomethane	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene chloride	2 U	2 U	0.7 J
Acetone	R	R	22 J
Carbon disulfide	1 U	1 U	0.4 J
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
2-Butanone	R	R	R
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank
	Groundwater	Groundwater	Groundwater
TtFW Sample I.D.	LV-FBGWPM-072898	LV-FBGW-072998	LV-FBGW-073098
Sampling Date	07/28/98	07/29/98	07/29/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U
2-Hexanone	R	R	R
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	0.4 J	1 U	0.5 J
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	--	--	--

See Table D- for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Trip Blank
	Groundwater	Groundwater	
TtFW Sample I.D.	LV-FBGWBLR-072998	LV-FBGWBLR-073098	LV-TB-061798
Sampling Date	07/29/98	07/30/98	06/17/98
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	1 UJ	2
Bromomethane	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene chloride	2 U	1 J	0.8 JB
Acetone	R	R	6 JB
Carbon disulfide	1 U	1 UJ	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 UJ	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	0.8 J	1 U
1,2-Dichloroethane	1 U	1 U	1 U
2-Butanone	R	R	2 J
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Trip Blank
	Groundwater	Groundwater	
TtFW Sample I.D.	LV-FBGWBLR-072998	LV-FBGWBLR-073098	LV-TB-061798
Sampling Date	07/29/98	07/30/98	06/17/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 UJ	5 U
2-Hexanone	R	R	5 U
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	1 U	0.5 J	1 U
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	--	--	5 JN

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-061998	LV-TB-062298	LV-TB-062398
Sampling Date	06/19/98	06/22/98	06/23/98
Units	ug/L	ug/L	ug/L
Chloromethane	1	1 U	1 U
Bromomethane	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene chloride	1 JB	5 U	2 U
Acetone	10 JB	6 J	8 J
Carbon disulfide	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
2-Butanone	3 J	R	R
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area Location	QA/QC Sample Trip Blank	QA/QC Sample Trip Blank	QA/QC Sample Trip Blank
TtFW Sample I.D.	LV-TB-061998	LV-TB-062298	LV-TB-062398
Sampling Date	06/19/98	06/22/98	06/23/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	3 JN	--	--

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-062498	LV-TB-062598	LV-TB-062698
Sampling Date	06/24/98	06/25/98	06/26/98
Units	ug/L	ug/L	ug/L
Chloromethane	1	1 U	1 U
Bromomethane	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene chloride	0.6 JB	2 U	2 U
Acetone	11 J	6 J	11 J
Carbon disulfide	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
2-Butanone	2 J	5 J	3 J
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area Location	QA/QC Sample Trip Blank	QA/QC Sample Trip Blank	QA/QC Sample Trip Blank
TtFW Sample I.D.	LV-TB-062498	LV-TB-062598	LV-TB-062698
Sampling Date	06/24/98	06/25/98	06/26/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	9 JN	4 JN	4 JN

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area Location	QA/QC Sample Trip Blank	QA/QC Sample Trip Blank	QA/QC Sample Trip Blank
TtFW Sample I.D.	LV-TB-062998	LV-TB-070198	LV-TB-070298
Sampling Date	06/29/98	07/01/98	07/02/98
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	2	3
Bromomethane	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene chloride	2 U	0.6 J	0.6 J
Acetone	10 J	6 J	8 J
Carbon disulfide	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
2-Butanone	4 J	R	2 J
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-062998	LV-TB-070198	LV-TB-070298
Sampling Date	06/29/98	07/01/98	07/02/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	2 JN	5 JN	5 JN

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-070698	LV-TB-070898	LV-TB-070998
Sampling Date	07/06/98	07/08/98	07/09/98
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 UJ
Bromomethane	1 U	1 U	1 UJ
Vinyl chloride	1 U	1 U	1 UJ
Chloroethane	1 U	1 U	1 UJ
Methylene chloride	2 U	2 U	2 UJ
Acetone	10 J	8 J	8 J
Carbon disulfide	1 U	1 U	1 UJ
1,1-Dichloroethene	1 U	1 U	1 UJ
1,1-Dichloroethane	1 U	1 U	1 UJ
cis-1,2-Dichloroethene	1 U	1 U	1 UJ
trans-1,2-Dichloroethene	1 U	1 U	1 UJ
Chloroform	1 U	1 U	1 UJ
1,2-Dichloroethane	1 U	1 U	1 UJ
2-Butanone	3 J	R	R
Bromochloromethane	1 U	1 U	1 UJ
1,1,1-Trichloroethane	1 U	1 U	1 UJ
Carbon tetrachloride	1 U	1 U	1 UJ
Bromodichloromethane	1 U	1 U	1 UJ
1,2-Dichloropropane	1 U	1 U	1 UJ
cis-1,3-Dichloropropene	1 U	1 U	1 UJ
Trichloroethene	1 U	1 U	1 UJ
Dibromochloromethane	1 U	1 U	1 UJ
1,1,2-Trichloroethane	1 U	1 U	1 UJ
Benzene	1 U	1 U	1 UJ
trans-1,3-Dichloropropene	1 U	1 U	1 UJ

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-070698	LV-TB-070898	LV-TB-070998
Sampling Date	07/06/98	07/08/98	07/09/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 UJ
4-Methyl-2-pentanone	5 U	5 U	5 UJ
2-Hexanone	5 U	5 U	5 UJ
Tetrachloroethene	1 U	1 U	1 UJ
1,1,2,2-Tetrachloroethane	1 U	1 U	1 UJ
1,2-Dibromoethane	1 U	1 U	1 UJ
Toluene	1 U	1 U	1 UJ
Chlorobenzene	1 U	1 U	1 UJ
Ethylbenzene	1 U	1 U	1 UJ
Styrene	1 U	1 U	1 UJ
Xylenes (total)	1 U	1 U	1 UJ
1,3-Dichlorobenzene	1 U	1 U	1 UJ
1,4-Dichlorobenzene	1 U	1 U	1 UJ
1,2-Dichlorobenzene	1 U	1 U	1 UJ
1,2-Dibromo-3-chloropropane	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 UJ
Total Volatile TICs	4 JN	4 JN	3 JN

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-071398	LV-TB-071498	LV-TB-071598
Sampling Date	07/13/98	07/14/98	07/15/98
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	37 D	3
Bromomethane	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U
Chloroethane	1 U	2	1 U
Methylene chloride	2 U	5	2 U
Acetone	8 J	19 J	13 J
Carbon disulfide	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	0.8 J	1 U
2-Butanone	R	5 J	5 J
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	1 U	0.2 J	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-071398	LV-TB-071498	LV-TB-071598
Sampling Date	07/13/98	07/14/98	07/15/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	1 U	1 U	0.5 J
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	--	--	--

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-071698	LV-TB-072798	LV-TB-072898
Sampling Date	07/16/98	07/27/98	07/28/98
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U
Acetone	R	R	R
Carbon disulfide	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
2-Butanone	2 J	R	R
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-071698	LV-TB-072798	LV-TB-072898
Sampling Date	07/16/98	07/27/98	07/28/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U
2-Hexanone	5 U	R	R
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	1 U	0.4 J	0.4 J
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	--	--	--

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Deionized Water Blank
TtFW Sample I.D.	LV-TBBLR-072998	LV-TB-073098	LV-DI-070198
Sampling Date	07/29/98	07/30/98	07/01/98
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	2 J	6
Bromomethane	1 U	1 U	1 U
Vinyl chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene chloride	2 U	2	2 U
Acetone	R	R	10 UJ
Carbon disulfide	1 U	1 UJ	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 UJ	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
2-Butanone	R	R	3 J
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area Location	QA/QC Sample Trip Blank	QA/QC Sample Trip Blank	QA/QC Sample Deionized Water Blank
TtFW Sample I.D.	LV-TBBLR-072998	LV-TB-073098	LV-DI-070198
Sampling Date	07/29/98	07/30/98	07/01/98
Units	ug/L	ug/L	ug/L
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 UJ	5 U
2-Hexanone	R	R	5 U
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	0.4 J	0.4 J	1 U
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U
Total Volatile TICs	--	--	R

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area Location	QA/QC Sample Deionized Water Blank	
TtFW Sample I.D.	LV-DIGW-073098	
Sampling Date	07/30/98	
Units	ug/L	
Chloromethane	2	J
Bromomethane	1	U
Vinyl chloride	1	U
Chloroethane	1	U
Methylene chloride	0.7	J
Acetone	21	J
Carbon disulfide	1	U
1,1-Dichloroethene	1	U
1,1-Dichloroethane	1	U
cis-1,2-Dichloroethene	1	U
trans-1,2-Dichloroethene	1	U
Chloroform	1	U
1,2-Dichloroethane	1	U
2-Butanone		R
Bromochloromethane	1	U
1,1,1-Trichloroethane	1	U
Carbon tetrachloride	1	U
Bromodichloromethane	1	U
1,2-Dichloropropane	1	U
cis-1,3-Dichloropropene	1	U
Trichloroethene	1	U
Dibromochloromethane	1	U
1,1,2-Trichloroethane	1	U
Benzene	1	U
trans-1,3-Dichloropropene	1	U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-47
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

	Area	QA/QC Sample	
	Location	Deionized Water Blank	
	TtFW Sample I.D.	LV-DIGW-073098	
	Sampling Date	07/30/98	
	Units	ug/L	
Bromoform		1	U
4-Methyl-2-pentanone		5	U
2-Hexanone			R
Tetrachloroethene		1	U
1,1,2,2-Tetrachloroethane		1	U
1,2-Dibromoethane		1	U
Toluene		0.7	J
Chlorobenzene		1	U
Ethylbenzene		1	U
Styrene		1	U
Xylenes (total)		1	U
1,3-Dichlorobenzene		1	U
1,4-Dichlorobenzene		1	U
1,2-Dichlorobenzene		1	U
1,2-Dibromo-3-chloropropane		1	U
1,2,4-Trichlorobenzene		1	U
Total Volatile TICs		--	

TABLE D-48
Low Concentration Volatile Organic Compounds (Groundwater) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	DI Water Blank	Field Blank	Field Blank	Field Blank (for CCA2 only)
TtFW Sample I.D.	LI-DI-101499	LI-FB-101299	LI-FB-101399	LI-FB-101499
Sampling Date		10/12/1999	10/13/1999	10/14/1999
Matrix	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U	2 U
Acetone	8 J	9 J	5 R	7 J
Carbon Disulfide	1 U	1 U	1	8
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	5 R	5 R	5 R	5 R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-48
Low Concentration Volatile Organic Compounds (Groundwater) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	DI Water Blank	Field Blank	Field Blank	Field Blank (for CCA2 only)
TtFW Sample I.D.	LI-DI-101499	LI-FB-101299	LI-FB-101399	LI-FB-101499
Sampling Date		10/12/1999	10/13/1999	10/14/1999
Matrix	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 R	5 U
Tetrachloroethene	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	1 UJ	0.3 J	1 U	1 UJ
Chlorobenzene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 R	1 R	1 R	1 R
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
Total Volatile TICs	0	0	0	0

See Table D[illegible] abbreviations and data qualifiers.

TABLE D-48
Low Concentration Volatile Organic Compounds (Groundwater) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank (Pump)	Field Blank (Bailer; CCA2 only)	Trip Blank
TtFW Sample I.D.	LI-FB-102699	LI-FB-102799	LI-FB-102799	LI-TB-101299
Sampling Date	10/26/1999	10/27/1999	10/27/1999	10/12/1999
Matrix	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U	2 U
Acetone	6 J	5 R	5 R	5 R
Carbon Disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	5 R	5 R	5 R	5 R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-48
Low Concentration Volatile Organic Compounds (Groundwater) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank (Pump)	Field Blank (Bailer; CCA2 only)	Trip Blank
TtFW Sample I.D.	LI-FB-102699	LI-FB-102799	LI-FB-102799	LI-TB-101299
Sampling Date	10/26/1999	10/27/1999	10/27/1999	10/12/1999
Matrix	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 UJ	1 UJ	1 U
Bromoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 R	5 R	5 U
2-Hexanone	5 R	5 R	5 R	5 U
Tetrachloroethene	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	2	1 U	1 U	0.3 J
Chlorobenzene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 UJ	1 UJ	1 UJ	1 R
1,2,4-Trichlorobenzene	1 U	1 UJ	1 UJ	1 U
Total Volatile TICs	2 JN	0	0	0

See Table D-1 for abbreviations and data qualifiers.

TABLE D-48
Low Concentration Volatile Organic Compounds (Groundwater) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LI-TB-101399	LI-TB-102699	LI-TB-102799
Sampling Date	10/13/1999	10/26/1999	10/27/1999
Matrix	Water	Water	Water
Units	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U
Acetone	5 R	5 R	9 J
Carbon Disulfide	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
2-Butanone	5 R	5 R	5 R
Bromochloromethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
Benzene	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-48
Low Concentration Volatile Organic Compounds (Groundwater) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LI-TB-101399	LI-TB-102699	LI-TB-102799
Sampling Date	10/13/1999	10/26/1999	10/27/1999
Matrix	Water	Water	Water
Units	ug/L	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 U	1 UJ
Bromoform	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 R
2-Hexanone	5 U	5 R	5 R
Tetrachloroethene	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U
Toluene	0.5 J	1	1 U
Chlorobenzene	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 R	1 UJ	1 UJ
1,2,4-Trichlorobenzene	1 U	1 U	1 UJ
Total Volatile TICs	0	0	0

See Table D-1[illegible] abbreviations and data qualifiers.

Table D-49
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-BIA-FB010401	LV-BIA-TB010401	LV-BIA-FB010801	LV-BIA-TB010801
Sampling Date	1/4/01	1/4/01	1/8/01	1/8/01
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U	2 U
Acetone	R	R	R	R
Carbon Disulfide	1 U	1 U	3	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	0.9 J	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	R	R	R	R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

Table D-49
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-BIA-FB010401	LV-BIA-TB010401	LV-BIA-FB010801	LV-BIA-TB010801
Sampling Date	1/4/01	1/4/01	1/8/01	1/8/01
Units	ug/L	ug/L	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
2-Hexanone	R	R	R	R
Tetrachloroethene	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	0.9 J	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
Total Volatile TICs	2 J	--	--	--

Table D-49
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-BIA-FB010901	LV-BIA-TB010901	LV-BIA-FB011001	LV-BIA-TB011001
Sampling Date	1/9/01	1/9/01	1/10/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U	2 U
Acetone	R	R	R	R
Carbon Disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	R	R	R	R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

Table D-49
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-BIA-FB010901	LV-BIA-TB010901	LV-BIA-FB011001	LV-BIA-TB011001
Sampling Date	1/9/01	1/9/01	1/10/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
2-Hexanone	R	R	R	R
Tetrachloroethene	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
Total Volatile TICs	3 J	4 J	3 J	4 J

Table D-49
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-BIA-FB011101	LV-BIA-TB011101	LV-BIA-FB011201	LV-BIA-TB011201
Sampling Date	1/11/01	1/11/01	1/12/01	1/12/01
Units	ug/L	ug/L	ug/L	ug/L
Chloromethane	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U	2 U
Acetone	R	R	R	R
Carbon Disulfide	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
2-Butanone	R	R	R	R
Bromochloromethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

Table D-49
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-BIA-FB011101	LV-BIA-TB011101	LV-BIA-FB011201	LV-BIA-TB011201
Sampling Date	1/11/01	1/11/01	1/12/01	1/12/01
Units	ug/L	ug/L	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
2-Hexanone	R	R	R	R
Tetrachloroethene	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Xylenes (total)	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	R	R	R	R
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U
Total Volatile TICs	3 J	5 J	3 J	4 J

Table D-49
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample
Location	DI Water Blank	Trip Blank
TtFW Sample I.D.	LV-BIA-DI010501	LV-BIA-TB121100
Sampling Date	1/5/01	12/11/00
Units	ug/L	ug/L
Chloromethane	1 U	1 U
Bromomethane	1 U	1 U
Vinyl Chloride	1 U	1 U
Chloroethane	1 U	1 U
Methylene Chloride	2 U	2 U
Acetone	R	R
Carbon Disulfide	1 U	1 U
1,1-Dichloroethene	1 U	1 U
1,1-Dichloroethane	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U
Chloroform	1 U	1 U
1,2-Dichloroethane	1 U	1 U
2-Butanone	R	R
Bromochloromethane	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U
Carbon Tetrachloride	1 U	1 U
Bromodichloromethane	1 U	1 U
1,2-Dichloropropane	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U
Trichloroethene	1 U	1 U
Dibromochloromethane	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U
Benzene	1 U	1 U

See Table D-1 for abbreviations and data qualifiers.

Table D-49
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample
Location	DI Water Blank	Trip Blank
TtFW Sample I.D.	LV-BIA-DI010501	LV-BIA-TB121100
Sampling Date	1/5/01	12/11/00
Units	ug/L	ug/L
trans-1,3-Dichloropropene	1 U	1 U
Bromoform	1 U	1 U
4-Methyl-2-pentanone	5 U	5 UJ
2-Hexanone	R	R
Tetrachloroethene	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U
1,2-Dibromoethane	1 U	1 U
Toluene	1 U	1 U
Chlorobenzene	1 U	1 U
Ethylbenzene	1 U	1 U
Styrene	1 U	1 U
Xylenes (total)	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U
1,2-Dibromo-3-chloropropane	R	1 U
1,2,4-Trichlorobenzene	1 U	1 U
Total Volatile TICs	R	--

See Table D- for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	DI Water Blank	Trip Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-DI-043002	LV-TB-GW-043002	LV-FB-GW-043002	LV-TB-GW-090803	LV-TB-GW-090903	LV-TB-GW-091003
Sampling Date	04/30/02	04/30/02	04/30/02	09/08/03	09/09/03	09/10/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA
2-Butanone	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
2-Chlorotoluene	NA	NA	NA	NA	NA	NA

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	DI Water Blank	Trip Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-DI-043002	LV-TB-GW-043002	LV-FB-GW-043002	LV-TB-GW-090803	LV-TB-GW-090903	LV-TB-GW-091003
Sampling Date	04/30/02	04/30/02	04/30/02	09/08/03	09/09/03	09/10/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2-HexanoneEXANONE	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
4-Chlorotoluene	0.5 U	0.5 UJ	0.5 UJ	NA	NA	NA
4-Methyl-2-pentanone	NA	NA	NA	0.5 U	0.5 U	0.5 U
Acetone	5 U	5 U	5 U	2.5 U	2.5 U	2.5 U
Benzene	5 U	3.7 J	4.5 J	0.5 U	0.5 U	0.5 U
Benzene, dimethyl-	0.5 U	0.5 U	0.5 U	NA	NA	NA
Bromobenzene	NA	NA	NA	NA	NA	NA
Bromochloromethane	NA	NA	NA	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	NA	NA	NA
Bromoform	NA	NA	NA	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.3 J	0.24 J	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	0.5 U	0.5 U	0.5 U	NA	NA	NA
Dichlorodifluoromethane	NA	NA	NA	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U

See Table D- for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	DI Water Blank	Trip Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-DI-043002	LV-TB-GW-043002	LV-FB-GW-043002	LV-TB-GW-090803	LV-TB-GW-090903	LV-TB-GW-091003
Sampling Date	04/30/02	04/30/02	04/30/02	09/08/03	09/09/03	09/10/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Hexachlorobutadiene	0.5 U	0.5 U	0.5 U	NA	NA	NA
Isopropanol	NA	NA	NA	NA	NA	NA
Isopropylbenzene	NA	NA	NA	0.5 U	0.5 U	0.5 U
m/p-xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.5 U	0.5 U	0.5 U	0.5 U	1.2	1.3
Naphthalene	0.5 U	0.5 U	0.5 U	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA	NA	NA
o-Xylene	NA	NA	NA	0.5 U	0.5 U	0.5 U
p-Isopropyl toluene	0.5 U	0.5 U	0.5 U	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	0.5 U	0.5 U	0.5 U	NA	NA	NA
Tetrachloroethene	NA	NA	NA	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	--	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-FB-GW-09150	LV-TB-091503	LV-TB-091703	LV-FB-GW-09180	LV-TB-091803	LV-TB-091903
Sampling Date	09/15/03	09/15/03	09/17/03	09/18/03	09/18/03	09/19/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA
2-Butanone	5 U	5 U	0.5 U	5 U	5 U	0.5 U
2-Chlorotoluene	NA	NA	NA	NA	NA	NA

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-FB-GW-09150	LV-TB-091503	LV-TB-091703	LV-FB-GW-09180	LV-TB-091803	LV-TB-091903
Sampling Date	09/15/03	09/15/03	09/17/03	09/18/03	09/18/03	09/19/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2-HexanoneEXANONE	5 U	5 U	0.5 U	5 U	5 U	0.5 U
4-Chlorotoluene	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	5 U	5 U	0.5 U	5 U	5 U	0.5 U
Acetone	5.1	5 U	2.5 U	5 U	5 U	2.5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, dimethyl-	0.5 U	0.5 U	NA	0.5 U	0.5 U	NA
Bromobenzene	NA	NA	NA	NA	NA	NA
Bromochloromethane	0.5 U	0.5 U	NA	0.5 U	0.5 U	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.17	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-FB-GW-09150	LV-TB-091503	LV-TB-091703	LV-FB-GW-09180	LV-TB-091803	LV-TB-091903
Sampling Date	09/15/03	09/15/03	09/17/03	09/18/03	09/18/03	09/19/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA
Isopropanol	NA	NA	NA	NA	NA	NA
Isopropylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m/p-xylene	NA	NA	0.5 U	NA	NA	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.23	0.5 U	0.87	0.5 U	0.5 U	0.69
Naphthalene	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA	NA	NA
o-Xylene	NA	NA	0.5 U	NA	NA	0.5 U
p-Isopropyl toluene	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA	NA	NA
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.18	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.22	0.23	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	--	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank
TtFW Sample I.D.	LV-TB-CT-092203	LV-FB-CLP-GW-0	LV-TB-CLP-0922	LV-FB-GW-09230	LV-TB-092303	LV-FB-GW-CLP-0
Sampling Date	09/22/03	09/22/03	09/22/03	09/23/03	09/23/03	09/24/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA
2-Butanone	2.5 U	5 U	5 U	5 U	5 U	5 U
2-Chlorotoluene	NA	NA	NA	NA	NA	NA

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank
TtFW Sample I.D.	LV-TB-CT-092203	LV-FB-CLP-GW-0	LV-TB-CLP-0922	LV-FB-GW-09230	LV-TB-092303	LV-FB-GW-CLP-0
Sampling Date	09/22/03	09/22/03	09/22/03	09/23/03	09/23/03	09/24/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2-HexanoneEXANONE	2.5 U	5 U	5 U	5 U	5 U	5 U
4-Chlorotoluene	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	2.5 U	5 U	5 U	5 U	5 U	5 U
Acetone	15	5 U	5 U	5 U	5 U	5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, dimethyl-	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA	NA	NA
Bromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table [illegible] for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank
TtFW Sample I.D.	LV-TB-CT-092203	LV-FB-CLP-GW-0	LV-TB-CLP-0922	LV-FB-GW-09230	LV-TB-092303	LV-FB-GW-CLP-0
Sampling Date	09/22/03	09/22/03	09/22/03	09/23/03	09/23/03	09/24/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA
Isopropanol	NA	NA	NA	NA	NA	NA
Isopropylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m/p-xylene	0.5 U	NA	NA	NA	NA	NA
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA	NA	NA
o-Xylene	0.5 U	NA	NA	NA	NA	NA
p-Isopropyl toluene	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA	NA	NA
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	--	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-CLP-0924	LV-TB-CT-092403	LV-TB-092503	LV-FB-GW-CLP-0	LV-TB-CLP-0926	LV-TB-CT-092603
Sampling Date	09/24/03	09/24/03	09/25/03	09/26/03	09/26/03	09/26/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA
2-Butanone	5 U	2.5 U	2.5 U	5 U	5 U	2.5 U
2-Chlorotoluene	NA	NA	NA	NA	NA	NA

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-CLP-0924	LV-TB-CT-092403	LV-TB-092503	LV-FB-GW-CLP-0	LV-TB-CLP-0926	LV-TB-CT-092603
Sampling Date	09/24/03	09/24/03	09/25/03	09/26/03	09/26/03	09/26/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2-HexanoneEXANONE	5 U	2.5 U	2.5 U	5 U	5 U	2.5 U
4-Chlorotoluene	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	5 U	2.5 U	2.5 U	5 U	5 U	2.5 U
Acetone	5 U	2.5 U	2.5 U	5 U	5 U	2.5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, dimethyl-	0.5 U	NA	NA	0.5 U	0.5 U	NA
Bromobenzene	NA	NA	NA	NA	NA	NA
Bromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-CLP-0924	LV-TB-CT-092403	LV-TB-092503	LV-FB-GW-CLP-0	LV-TB-CLP-0926	LV-TB-CT-092603
Sampling Date	09/24/03	09/24/03	09/25/03	09/26/03	09/26/03	09/26/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA
Isopropanol	NA	NA	NA	NA	NA	NA
Isopropylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m/p-xylene	NA	0.5 U	0.5 U	NA	NA	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.5 U	1	0.7	0.5 U	0.5 U	1
Naphthalene	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA	NA	NA
o-Xylene	NA	0.5 U	0.5 U	NA	NA	0.5 U
p-Isopropyl toluene	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA	NA	NA
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	--	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank	Field Blank
TtFW Sample I.D.	LV-FB-GW-CLP-09	LV-TB-CLP-09290	LV-TB-CT-093003	LV-FB-GW-CLP-09	LV-TB-CLP-09300	LV-FB-GW-CLP-10
Sampling Date	09/29/03	09/29/03	09/30/03	09/30/03	09/30/03	10/01/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA
2-Butanone	5 U	5 U	2.5 U	5 U	5 U	5 U
2-Chlorotoluene	NA	NA	NA	NA	NA	NA

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank	Field Blank
TtFW Sample I.D.	LV-FB-GW-CLP-09	LV-TB-CLP-09290	LV-TB-CT-093003	LV-FB-GW-CLP-09	LV-TB-CLP-09300	LV-FB-GW-CLP-10
Sampling Date	09/29/03	09/29/03	09/30/03	09/30/03	09/30/03	10/01/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2-HexanoneEXANONE	5 U	5 U	2.5 U	5 U	5 U	5 U
4-Chlorotoluene	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	5 U	5 U	2.5 U	5 U	5 U	5 U
Acetone	5 U	5 U	2.5 U	5 U	5 U	5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, dimethyl-	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA	NA	NA
Bromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.21	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank	Field Blank
TtFW Sample I.D.	LV-FB-GW-CLP-09	LV-TB-CLP-09290	LV-TB-CT-093003	LV-FB-GW-CLP-09	LV-TB-CLP-09300	LV-FB-GW-CLP-10
Sampling Date	09/29/03	09/29/03	09/30/03	09/30/03	09/30/03	10/01/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA
Isopropanol	NA	NA	NA	NA	NA	NA
Isopropylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m/p-xylene	NA	NA	0.5 U	NA	NA	NA
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.67	0.98	0.5 U	0.74	0.69	0.45
Naphthalene	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA	NA	NA
o-Xylene	NA	NA	0.5 U	NA	NA	NA
p-Isopropyl toluene	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA	NA	NA
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	--	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank	Field Blank
TtFW Sample I.D.	LV-TB-CLP-10010	LV-TB-CT-100103	LV-TB-CT-100203	LV-FB-GW-CLP-10	LV-TB-CLP-10020	LV-FB-GW-CLP-10
Sampling Date	10/01/03	10/01/03	10/02/03	10/02/03	10/02/03	10/06/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA
2-Butanone	5 U	2.5 U	2.5 U	5 U	5 U	5 U
2-Chlorotoluene	NA	NA	NA	NA	NA	NA

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank	Field Blank
TtFW Sample I.D.	LV-TB-CLP-10010	LV-TB-CT-100103	LV-TB-CT-100203	LV-FB-GW-CLP-10	LV-TB-CLP-10020	LV-FB-GW-CLP-10
Sampling Date	10/01/03	10/01/03	10/02/03	10/02/03	10/02/03	10/06/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2-HexanoneEXANONE	5 U	2.5 U	2.5 U	5 U	5 U	5 U
4-Chlorotoluene	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	5 U	2.5 U	2.5 U	5 U	5 U	5 U
Acetone	5 U	2.5 U	2.5 U	5 U	5 U	5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, dimethyl-	0.5 U	NA	NA	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA	NA	NA
Bromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank	Field Blank
TtFW Sample I.D.	LV-TB-CLP-10010	LV-TB-CT-100103	LV-TB-CT-100203	LV-FB-GW-CLP-10	LV-TB-CLP-10020	LV-FB-GW-CLP-10
Sampling Date	10/01/03	10/01/03	10/02/03	10/02/03	10/02/03	10/06/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA
Isopropanol	NA	NA	NA	NA	NA	NA
Isopropylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m/p-xylene	NA	0.5 U	0.5 U	NA	NA	NA
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.38	1.8	1.3	0.47	0.29	0.5 U
Naphthalene	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA	NA	NA
o-Xylene	NA	0.5 U	0.5 U	NA	NA	NA
p-Isopropyl toluene	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA	NA	NA
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	--	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-CLP-10060	LV-TB-CT-100603	LV-FB-GW-CLP-10	LV-TB-CLP-10070	LV-TB-CT-100703	LV-TB-CT-100803
Sampling Date	10/06/03	10/06/03	10/07/03	10/07/03	10/07/03	10/08/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA
2-Butanone	5 U	2.5 U	5 U	5 U	2.5 U	2.5 U
2-Chlorotoluene	NA	NA	NA	NA	NA	NA

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-CLP-10060	LV-TB-CT-100603	LV-FB-GW-CLP-10	LV-TB-CLP-10070	LV-TB-CT-100703	LV-TB-CT-100803
Sampling Date	10/06/03	10/06/03	10/07/03	10/07/03	10/07/03	10/08/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2-HexanoneEXANONE	5 U	2.5 U	5 U	5 U	2.5 U	2.5 U
4-Chlorotoluene	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	5 U	2.5 U	5 U	5 U	2.5 U	2.5 U
Acetone	5 U	2.5 U	5 U	5 U	2.5 U	2.5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, dimethyl-	0.5 U	NA	0.5 U	0.5 U	NA	NA
Bromobenzene	NA	NA	NA	NA	NA	NA
Bromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table [illegible] for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Trip Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank
TtFW Sample I.D.	LV-TB-CLP-10060	LV-TB-CT-100603	LV-FB-GW-CLP-10	LV-TB-CLP-10070	LV-TB-CT-100703	LV-TB-CT-100803
Sampling Date	10/06/03	10/06/03	10/07/03	10/07/03	10/07/03	10/08/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA
Isopropanol	NA	NA	NA	NA	NA	NA
Isopropylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m/p-xylene	NA	0.5 U	NA	NA	0.5 U	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.5 U	1.1	0.5 U	0.5 U	1.3	1.5
Naphthalene	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA	NA	NA
o-Xylene	NA	0.5 U	NA	NA	0.5 U	0.5 U
p-Isopropyl toluene	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA	NA	NA
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	--	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Field Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-TB-SW-100903	LV-FB-GW-CLP-10	LV-TB-CLP-10080	LV-TB-SW-100803	LV-FB-111203	LV-TB-111203
Sampling Date	10/09/03	10/09/03	10/09/03	10/09/03	11/12/03	11/12/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	0.5 U	0.5 U
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA	0.5 U	0.5 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA	0.5 U	0.5 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	NA	NA	NA	NA	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	NA	NA	NA	NA	0.5 U	0.5 U
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA	0.5 U	0.5 U
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	NA	NA	NA	NA	0.5 U	0.5 U
2-Butanone	5 U	5 U	5 U	5 U	1 U	1 U
2-Chlorotoluene	NA	NA	NA	NA	0.5 U	0.5 U

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area / Location	QA/QC Sample Trip Blank	QA/QC Sample Field Blank	QA/QC Sample Trip Blank	QA/QC Sample Trip Blank	QA/QC Sample Field Blank	QA/QC Sample Trip Blank
TtFW Sample I.D.	LV-TB-SW-100903	LV-FB-GW-CLP-10	LV-TB-CLP-10080	LV-TB-SW-100803	LV-FB-111203	LV-TB-111203
Sampling Date	10/09/03	10/09/03	10/09/03	10/09/03	11/12/03	11/12/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2-HexanoneEXANONE	5 U	5 U	5 U	5 U	1 U	1 U
4-Chlorotoluene	NA	NA	NA	NA	0.5 U	0.5 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	1 U	1 U
Acetone	5 U	5	5 U	5	1.6	1.9
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, dimethyl-	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA
Bromobenzene	NA	NA	NA	NA	0.5 U	0.5 U
Bromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.37	0.33	0.25	0.27	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	NA	NA	NA	NA	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Trip Blank	Field Blank	Trip Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-TB-SW-100903	LV-FB-GW-CLP-10	LV-TB-CLP-10080	LV-TB-SW-100803	LV-FB-111203	LV-TB-111203
Sampling Date	10/09/03	10/09/03	10/09/03	10/09/03	11/12/03	11/12/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Hexachlorobutadiene	NA	NA	NA	NA	0.5 U	0.5 U
Isopropanol	NA	NA	NA	NA	NA	NA
Isopropylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m/p-xylene	NA	NA	NA	NA	0.5 U	0.5 U
Methyl Acetate	0.5 U	0.5	0.5 U	0.5	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	NA	NA	NA	NA	0.5 U	0.5 U
n-Butylbenzene	NA	NA	NA	NA	0.5 U	0.5 U
n-Propylbenzene	NA	NA	NA	NA	0.5 U	0.5 U
o-Xylene	NA	NA	NA	NA	0.5 U	0.5 U
p-Isopropyl toluene	NA	NA	NA	NA	0.5 U	0.5 U
sec-Butylbenzene	NA	NA	NA	NA	0.5 U	0.5 U
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA	0.5 U	0.5 U
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	--	0.56	0.5	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-FB-111803	LV-TB-111803	LV-FB-111903	LV-TB-111903	LV-FB-112003	LV-TB-112003
Sampling Date	11/18/03	11/18/03	11/19/03	11/19/03	11/20/03	11/20/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Butanone	1 U	1 U	1 U	1 U	1 U	1 U
2-Chlorotoluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-FB-111803	LV-TB-111803	LV-FB-111903	LV-TB-111903	LV-FB-112003	LV-TB-112003
Sampling Date	11/18/03	11/18/03	11/19/03	11/19/03	11/20/03	11/20/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2-HexanoneEXANONE	1 U	1 U	1 U	1 U	1 U	1 U
4-Chlorotoluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methyl-2-pentanone	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	5 U	5 U	1 U	1.1	1.2	1 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, dimethyl-	NA	NA	NA	NA	NA	NA
Bromobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-FB-111803	LV-TB-111803	LV-FB-111903	LV-TB-111903	LV-FB-112003	LV-TB-112003
Sampling Date	11/18/03	11/18/03	11/19/03	11/19/03	11/20/03	11/20/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Hexachlorobutadiene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropanol	19	NA	NA	NA	NA	NA
Isopropylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m/p-xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.5 U	0.5 U	9 U	9 U	9 U	9 U
Naphthalene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Butylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Propylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Isopropyl toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	--	0.9	--	--	1

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-FB-120103	LV-TB-120103	LV-FB-120203	LV-TB-120203	LV-FB-120303	LV-TB-120303
Sampling Date	12/01/03	12/01/03	12/02/03	12/02/03	12/03/03	12/03/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA
2-Butanone	5 U	5 U	5 U	5 U	5 U	5 U
2-Chlorotoluene	NA	NA	NA	NA	NA	NA

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-FB-120103	LV-TB-120103	LV-FB-120203	LV-TB-120203	LV-FB-120303	LV-TB-120303
Sampling Date	12/01/03	12/01/03	12/02/03	12/02/03	12/03/03	12/03/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2-HexanoneEXANONE	5 U	5 U	5 U	5 U	5 U	5 U
4-Chlorotoluene	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, dimethyl-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA	NA	NA
Bromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.2	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-FB-120103	LV-TB-120103	LV-FB-120203	LV-TB-120203	LV-FB-120303	LV-TB-120303
Sampling Date	12/01/03	12/01/03	12/02/03	12/02/03	12/03/03	12/03/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA
Isopropanol	NA	NA	NA	NA	NA	NA
Isopropylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m/p-xylene	NA	NA	NA	NA	NA	NA
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA	NA	NA
o-Xylene	NA	NA	NA	NA	NA	NA
p-Isopropyl toluene	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA	NA	NA
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.2	0.17	0.19	0.2	0.5 U	0.18
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	1.19	--	--	1.81	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-FB-120403	LV-TB-120403	LV-FB-120803	LV-TB-120803	LV-FB-120903	LV-TB-120903
Sampling Date	12/04/03	12/04/03	12/08/03	12/08/03	12/09/03	12/09/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA
2-Butanone	5 U	5 U	5 U	5 U	5 U	5 U
2-Chlorotoluene	NA	NA	NA	NA	NA	NA

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-FB-120403	LV-TB-120403	LV-FB-120803	LV-TB-120803	LV-FB-120903	LV-TB-120903
Sampling Date	12/04/03	12/04/03	12/08/03	12/08/03	12/09/03	12/09/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2-HexanoneEXANONE	5 U	5 U	5 U	5 U	5 U	5 U
4-Chlorotoluene	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, dimethyl-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA	NA	NA
Bromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-FB-120403	LV-TB-120403	LV-FB-120803	LV-TB-120803	LV-FB-120903	LV-TB-120903
Sampling Date	12/04/03	12/04/03	12/08/03	12/08/03	12/09/03	12/09/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA
Isopropanol	NA	NA	NA	NA	NA	NA
Isopropylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m/p-xylene	NA	NA	NA	NA	NA	NA
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA	NA	NA
o-Xylene	NA	NA	NA	NA	NA	NA
p-Isopropyl toluene	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA	NA	NA
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	--	2.51	--	0.64	7	--

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-FB-121003	LV-TB-121003	LV-FB-121103	LV-TB-121103
Sampling Date	12/10/03	12/10/03	12/11/03	12/11/03
Units	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB)	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	NA	NA	NA	NA
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	NA	NA	NA	NA
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloropropane	NA	NA	NA	NA
2-Butanone	5 U	5 U	5 U	5 U
2-Chlorotoluene	NA	NA	NA	NA

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Trip Blank	Field Blank	Trip Blank
TtFW Sample I.D.	LV-FB-121003	LV-TB-121003	LV-FB-121103	LV-TB-121103
Sampling Date	12/10/03	12/10/03	12/11/03	12/11/03
Units	ug/L	ug/L	ug/L	ug/L
2-HexanoneEXANONE	5 U	5 U	5 U	5 U
4-Chlorotoluene	NA	NA	NA	NA
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
Acetone	5 U	5 U	5 U	5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Benzene, dimethyl-	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	NA	NA	NA	NA
Bromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	NA	NA	NA	NA
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-50
Low Concentration Volatile Organic Compounds (Groundwater/Surface Water) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area / Location	QA/QC Sample Field Blank	QA/QC Sample Trip Blank	QA/QC Sample Field Blank	QA/QC Sample Trip Blank
TtFW Sample I.D.	LV-FB-121003	LV-TB-121003	LV-FB-121103	LV-TB-121103
Sampling Date	12/10/03	12/10/03	12/11/03	12/11/03
Units	ug/L	ug/L	ug/L	ug/L
Hexachlorobutadiene	NA	NA	NA	NA
Isopropanol	NA	NA	NA	NA
Isopropylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
m/p-xylene	NA	NA	NA	NA
Methyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA
o-Xylene	NA	NA	NA	NA
p-Isopropyl toluene	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.15	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U
Total Volatile TICs	7.2	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-51
Low Concentration Semi-Volatile Organic Compounds (Groundwater) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB010401	LV-BIA-FB010801	LV-BIA-FB010901	LV-BIA-FB011001
Sampling Date	1/4/01	1/8/01	1/9/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L
Phenol	5 U	5 U	5 U	5 U
bis-(2-Chloroethyl) ether	5 U	5 U	5 U	5 U
2-Chlorophenol	5 U	5 U	5 U	5 U
2-Methylphenol	5 U	5 U	5 U	5 U
2,2'-oxybis(1-Chloropropane)	5 U	5 U	5 U	5 U
4-Methylphenol	5 U	5 U	5 U	5 U
N-Nitroso-di-n-propylamine	5 U	5 U	5 U	5 U
Hexachloroethane	5 U	5 U	5 U	5 U
Nitrobenzene	5 U	5 U	5 U	5 U
Isophorone	5 U	5 U	5 U	5 U
2-Nitrophenol	5 U	5 U	5 U	5 U
2,4-Dimethylphenol	5 U	5 U	5 U	5 U
bis(2-Chloroethoxy)methane	5 U	5 U	5 U	5 U
2,4-Dichlorophenol	5 U	5 U	5 U	5 U
Naphthalene	5 U	5 U	5 U	5 U
4-Chloroaniline	5 UJ	5 UJ	5 UJ	5 UJ
Hexachlorobutadiene	5 UJ	5 UJ	5 UJ	5 U
4-Chloro-3-methylphenol	5 U	5 U	5 U	5 U
2-Methylnaphthalene	5 U	5 U	5 U	5 U
Hexachlorocyclopentadiene	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	5 U	5 U	5 U	5 U
2,4,5-Trichlorophenol	20 U	20 U	20 U	20 U
2-Chloronaphthalene	5 U	5 U	5 U	5 U
2-Nitroaniline	20 U	20 U	20 U	20 U

See Table D-1 for abbreviations and data qualifiers.

Table D-51
Low Concentration Semi-Volatile Organic Compounds (Groundwater) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB010401	LV-BIA-FB010801	LV-BIA-FB010901	LV-BIA-FB011001
Sampling Date	1/4/01	1/8/01	1/9/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L
Dimethylphthalate	5 U	5 U	5 U	5 U
Acenaphthylene	5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	5 U	5 U	5 U	5 U
3-Nitroaniline	R	R	R	R
Acenaphthene	5 U	5 U	5 U	5 U
2,4-Dinitrophenol	20 UJ	20 UJ	20 UJ	20 U
4-Nitrophenol	20 U	20 U	20 U	20 U
Dibenzofuran	5 U	5 U	5 U	5 U
2,4-Dinitrotoluene	5 U	5 U	5 U	5 U
Diethylphthalate	5 U	5 U	5 U	5 U
4-Chlorophenyl-phenyl ether	5 U	5 U	5 U	5 U
Fluorene	5 U	5 U	5 U	5 U
4-Nitroaniline	20 U	20 U	20 U	20 UJ
4,6-Dinitro-2-methylphenol	20 U	20 U	20 U	20 U
N-Nitrosodiphenylamine	5 U	5 U	5 U	5 UJ
4-Bromophenyl-phenylether	5 U	5 U	5 U	5 U
Hexachlorobenzene	5 U	5 U	5 U	5 U
Pentachlorophenol	20 U	20 U	20 U	20 U
Phenanthrene	5 U	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U	5 U
Di-n-butylphthalate	5 U	5 U	5 U	5 U
Fluoranthene	5 U	5 U	5 U	5 U
Pyrene	5 U	5 U	5 U	5 U
Butylbenzylphthalate	5 U	5 U	5 U	5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-51
Low Concentration Semi-Volatile Organic Compounds (Groundwater) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB010401	LV-BIA-FB010801	LV-BIA-FB010901	LV-BIA-FB011001
Sampling Date	1/4/01	1/8/01	1/9/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L
3,3'-Dichlorobenzidine	5 U	5 U	5 U	5 U
Benzo(a)anthracene	5 U	5 U	5 U	5 U
Chrysene	5 U	5 U	5 U	5 U
bis(2-Ethylhexyl)phthalate	2 J	1 JB	2 JB	5 U
Di-n-octylphthalate	5 U	5 U	5 U	5 U
Benzo(b)fluoranthene	5 U	5 U	5 U	5 U
Benzo(k)fluoranthene	5 U	5 U	5 U	5 U
Benzo(a)pyrene	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	5 U	5 U	5 U	5 U
Dibenzo(a,h)anthracene	5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene	5 U	5 U	5 U	5 U
Total Semi-Volatile TICs	--	--	--	--

See Table D-1 for abbreviations and data qualifiers.

Table D-51
Low Concentration Semi-Volatile Organic Compounds (Groundwater) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	DI Water Blank
TtFW Sample I.D.	LV-BIA-FB011101	LV-BIA-FB011201	LV-BIA-DI010501
Sampling Date	1/11/01	1/12/01	1/5/01
Units	ug/L	ug/L	ug/L
Phenol	5 U	5 U	5 U
bis-(2-Chloroethyl) ether	5 U	5 U	5 U
2-Chlorophenol	5 U	5 U	5 U
2-Methylphenol	5 U	5 U	5 U
2,2'-oxybis(1-Chloropropane)	5 U	5 U	5 U
4-Methylphenol	5 U	5 U	5 U
N-Nitroso-di-n-propylamine	5 U	5 U	5 U
Hexachloroethane	5 U	5 U	5 U
Nitrobenzene	5 U	5 U	5 U
Isophorone	5 U	5 U	5 U
2-Nitrophenol	5 U	5 U	5 U
2,4-Dimethylphenol	5 U	5 U	5 U
bis(2-Chloroethoxy)methane	5 U	5 U	5 U
2,4-Dichlorophenol	5 U	5 U	5 U
Naphthalene	5 U	5 U	5 U
4-Chloroaniline	5 UJ	5 UJ	5 UJ
Hexachlorobutadiene	5 U	5 U	5 UJ
4-Chloro-3-methylphenol	5 U	5 U	5 U
2-Methylnaphthalene	5 U	5 U	5 U
Hexachlorocyclopentadiene	5 U	5 U	5 U
2,4,6-Trichlorophenol	5 U	5 U	5 U
2,4,5-Trichlorophenol	20 U	20 U	20 U
2-Chloronaphthalene	5 U	5 U	5 U
2-Nitroaniline	20 U	20 U	20 U

See Table D-1 for abbreviations and data qualifiers.

Table D-51
Low Concentration Semi-Volatile Organic Compounds (Groundwater) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	DI Water Blank
TtFW Sample I.D.	LV-BIA-FB011101	LV-BIA-FB011201	LV-BIA-DI010501
Sampling Date	1/11/01	1/12/01	1/5/01
Units	ug/L	ug/L	ug/L
Dimethylphthalate	5 U	5 U	5 U
Acenaphthylene	5 U	5 U	5 U
2,6-Dinitrotoluene	5 U	5 U	5 U
3-Nitroaniline	R	R	R
Acenaphthene	5 U	5 U	5 U
2,4-Dinitrophenol	20 U	20 U	20 UJ
4-Nitrophenol	20 U	20 U	20 U
Dibenzofuran	5 U	5 U	5 U
2,4-Dinitrotoluene	5 U	5 U	5 U
Diethylphthalate	5 U	5 U	5 U
4-Chlorophenyl-phenyl ether	5 U	5 U	5 U
Fluorene	5 U	5 U	5 U
4-Nitroaniline	20 UJ	20 UJ	20 U
4,6-Dinitro-2-methylphenol	20 U	20 U	20 U
N-Nitrosodiphenylamine	5 UJ	5 UJ	5 U
4-Bromophenyl-phenylether	5 U	5 U	5 U
Hexachlorobenzene	5 U	5 U	5 U
Pentachlorophenol	20 U	20 U	20 U
Phenanthrene	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U
Di-n-butylphthalate	5 U	5 U	5 U
Fluoranthene	5 U	5 U	5 U
Pyrene	5 U	5 U	5 U
Butylbenzylphthalate	5 U	5 U	5 U

See Table D-1 for abbreviations and data qualifiers.

Table D-51
Low Concentration Semi-Volatile Organic Compounds (Groundwater) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	DI Water Blank
TtFW Sample I.D.	LV-BIA-FB011101	LV-BIA-FB011201	LV-BIA-DI010501
Sampling Date	1/11/01	1/12/01	1/5/01
Units	ug/L	ug/L	ug/L
3,3'-Dichlorobenzidine	5 U	5 U	5 U
Benzo(a)anthracene	5 U	5 U	5 U
Chrysene	5 U	5 U	5 U
bis(2-Ethylhexyl)phthalate	5 U	5 U	5 U
Di-n-octylphthalate	5 U	5 U	5 U
Benzo(b)fluoranthene	5 U	5 U	5 U
Benzo(k)fluoranthene	5 U	5 U	5 U
Benzo(a)pyrene	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	5 U	5 U	5 U
Dibenzo(a,h)anthracene	5 U	5 U	5 U
Benzo(g,h,i)perylene	5 U	5 U	5 U
Total Semi-Volatile TICs	15 J	2 J	--

See Table [illegible] for abbreviations and data qualifiers.

Table D-52
Low Concentration Pesticides/PCBs (Groundwater) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB010401	LV-BIA-FB010801	LV-BIA-FB010901	LV-BIA-FB011001	LV-BIA-FB011101
Sampling Date	1/4/01	1/8/01	1/9/01	1/10/01	1/11/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
alpha-BHC	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
beta-BHC	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
delta-BHC	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
gamma-BHC (Lindane)	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Heptachlor	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aldrin	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Heptachlor epoxide	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Endosulfan I	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Dieldrin	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
4,4'-DDE	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endrin	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endosulfan II	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
4,4'-DDD	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endosulfan sulfate	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
4,4'-DDT	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Methoxychlor	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endrin ketone	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endrin aldehyde	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
alpha-Chlordane	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
gamma-Chlordane	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Toxaphene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

See Table D-1 for abbreviations and data qualifiers.

Table D-52
Low Concentration Pesticides/PCBs (Groundwater) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB010401	LV-BIA-FB010801	LV-BIA-FB010901	LV-BIA-FB011001	LV-BIA-FB011101
Sampling Date	1/4/01	1/8/01	1/9/01	1/10/01	1/11/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Aroclor-1016	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Aroclor-1232	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

ee Table D-1 for abbreviations and data qualifiers.

Table D-52
Low Concentration Pesticides/PCBs (Groundwater) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample
Location	Field Blank	DI Water Blank
TtFW Sample I.D.	LV-BIA-FB011201	LV-BIA-DI010501
Sampling Date	1/12/01	1/5/01
Units	ug/L	ug/L
alpha-BHC	0.010 U	0.010 U
beta-BHC	0.010 U	0.010 U
delta-BHC	0.010 U	0.010 U
gamma-BHC (Lindane)	0.010 U	0.010 U
Heptachlor	0.010 U	0.010 U
Aldrin	0.010 U	0.010 U
Heptachlor epoxide	0.010 U	0.010 U
Endosulfan I	0.010 U	0.010 U
Dieldrin	0.020 U	0.020 U
4,4'-DDE	0.020 U	0.020 U
Endrin	0.020 U	0.020 U
Endosulfan II	0.020 U	0.020 U
4,4'-DDD	0.020 U	0.020 U
Endosulfan sulfate	0.020 U	0.020 U
4,4'-DDT	0.020 U	0.020 U
Methoxychlor	0.10 U	0.10 U
Endrin ketone	0.020 U	0.020 U
Endrin aldehyde	0.020 U	0.020 U
alpha-Chlordane	0.010 U	0.010 U
gamma-Chlordane	0.010 U	0.010 U
Toxaphene	1.0 U	1.0 U

See Table D-1 for abbreviations and data qualifiers.

Table D-52
Low Concentration Pesticides/PCBs (Groundwater) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area Location	QA/QC Sample Field Blank	QA/QC Sample DI Water Blank
TtFW Sample I.D.	LV-BIA-FB011201	LV-BIA-DI010501
Sampling Date	1/12/01	1/5/01
Units	ug/L	ug/L
Aroclor-1016	0.20 U	0.20 U
Aroclor-1221	0.40 U	0.40 U
Aroclor-1232	0.20 U	0.20 U
Aroclor-1242	0.20 U	0.20 U
Aroclor-1248	0.20 U	0.20 U
Aroclor-1254	0.20 U	0.20 U
Aroclor-1260	0.20 U	0.20 U

ee Table D- abbreviations and data qualifiers.

TABLE D-53
Metals and Cyanide (Groundwater) - Quality Assurance/Quality Control (1998)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Deionized Water Blank
	Groundwater	Groundwater	Groundwater	
TtFW Sample I.D.	LV-FBGW-071698	LV-FBGW-072998	LV-FBGW-073098	LV-DIGW-073098
Sampling Date	07/16/1998	07/29/1998	07/29/1998	07/30/1998
Units	ug/L	ug/L	ug/L	ug/L
Aluminum	43 U	19 U	19 U	19 U
Antimony	3.3 UJ	5 U	5 U	5 U
Arsenic	3.9 B	5 U	5 U	5 U
Barium	1.9 U	1 U	1 U	1 U
Beryllium	0.3 U	1 U	1 U	1 U
Cadmium	0.3 U	1 U	1 U	1 U
Calcium	608 B	62.3 B	70 B	39 U
Chromium	4.5 B	1 U	2 B	1 U
Cobalt	27.3 B	2 U	2 U	2 U
Copper	3 B	2.3 B	3.3 B	2 U
Iron	78.7 B	18 U	47.5 B	18 U
Lead	3.7	1.6 B	1 U	1 U
Magnesium	102 B	16.8 B	44.6 B	15 U
Manganese	2.7 B	1 U	1.1 B	1 U
Mercury	0.1 U	0.2 U	0.2 U	0.2 U
Nickel	9.8 B	2 U	2 U	2 U
Potassium	67.5 B	79 U	79 U	79 U
Selenium	2.8 B	5 U	5 U	5 U
Silver	0.77 B	2 U	2 U	2 U
Sodium	152 B	227 B	178 B	169 B
Thallium	3.4 U	4 U	4 U	4 U
Vanadium	2.4 U	2 U	2 U	2 U
Zinc	7.3 B	6.6 B	13.4 B	5 U
Cyanide	1.8 U	2 U	2 U	2 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-54
Metals (Groundwater) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank (CCA2 only)	Field Blank
TtFW Sample I.D.	LI-FB-101299	LI-FB-101399	LI-GW-FB-101499	LI-FB-102699
Sampling Date	10/12/1999	10/13/1999	10/14/1999	10/26/1999
Matrix	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L
Aluminum	85.8 B	34.9 U	34.9 U	994 J
Antimony	2.1 UJ	2.1 UJ	2.1 UJ	5 U
Arsenic	2.2 U	2.2 U	2.3 B	6 U
Barium	2.5 B	2.4 B	0.8 B	174 B
Beryllium	0.1 U	0.1 U	0.1 U	1 U
Cadmium	0.3 U	0.3 U	0.3 U	1 U
Calcium	2590 U	2590 U	2590 U	47500 J
Chromium	2.2 B	1.9 B	0.6 B	13.3 J
Cobalt	1.2 B	0.6 U	0.6 U	1 U
Copper	9 B	1.2 B	1 B	45 J
Iron	72 B	34.4 B	23 B	2620 J
Lead	1.4 B	1.1 U	1.1 U	2.5 B
Magnesium	38.8 U	38.8 U	38.8 U	7260 J
Manganese	10.6 B	2.4 U	2.4 U	121 J
Mercury	0.1 UJ	0.1 UJ	0.1 UJ	0.2 U
Nickel	2.3 B	1.3 U	1.3 U	10.7 B
Potassium	276 B	91.3 B	57.2 B	2580 B
Selenium	1.8 U	1.8 U	1.8 U	5 U
Silver	0.8 B	0.4 U	0.4 B	3.1 B
Sodium	192 B	155 U	308 B	6080 J
Thallium	2.1 U	2.1 U	2.1 U	7 U
Vanadium	0.5 U	0.5 U	0.5 U	2 U
Zinc	20.9	20.6	12.9 U	61.4 J

See Table D-1 for abbreviations and data qualifiers.

TABLE D-54
Metals (Groundwater) - Quality Assurance/Quality Control (1999)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank (Pump)	Field Blank (CCA2 only)	DI Water Blank
TtFW Sample I.D.	LI-FB-102799PMP	LI-FB-102799BLR	LI-DI-101499
Sampling Date	10/27/1999	10/27/1999	10/14/1999
Matrix	Water	Water	Water
Units	ug/L	ug/L	ug/L
Aluminum	45.6 B	30.3 B	34.9 U
Antimony	5 U	5 U	2.1 UJ
Arsenic	6 U	6 U	2.2 U
Barium	8.2 B	1 U	0.8 U
Beryllium	1 U	1 U	0.1 U
Cadmium	1 U	1 U	0.3 U
Calcium	6060 J	102 B	2590 U
Chromium	1 U	1 U	0.6 B
Cobalt	1 U	1 U	0.6 U
Copper	6.7 B	5.6 B	3.6 B
Iron	16 U	16 U	20.4 B
Lead	2 U	2 U	1.1 U
Magnesium	1690 B	25 B	38.8 U
Manganese	1 U	1 U	2.4 U
Mercury	0.2 U	0.2 U	0.1 UJ
Nickel	2 U	2 U	1.3 U
Potassium	239 B	39 U	59.9 B
Selenium	5 U	5 U	1.8 U
Silver	1.1 B	1.6 B	0.4 B
Sodium	2360 B	359 B	236 B
Thallium	7 U	7 U	2.1 U
Vanadium	2 U	2 U	0.5 U
Zinc	14.4 B	18.7 B	12.9 U

ee Table D-[illegible] abbreviations and data qualifiers.

TABLE D-55
Metals (Groundwater) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-BIA-FB010401	LV-BIA-DI010501	LVBIAFB010801	LVBIAFB010901	LVBIAFB011001
Sampling Date	1/4/01	1/5/01	1/8/01	1/9/01	1/10/01
Units	ug/L	ug/L	ug/L	ug/L	ug/L
ALUMINUM	65.9 U	65.9 U	38.5 B	70.4 B	42.2 B
ANTIMONY	21.5 U	21.5 U	2.5 U	2.5 U	2.5 U
ARSENIC	1.6 U	2.4 B	4.2 U	4.2 U	4.2 U
BARIUM	3.9 U	3.9 U	0.50 B	0.61 B	0.27 B
BERYLLIUM	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U
CADMIUM	0.40 U	0.40 U	0.60 U	0.60 U	0.60 U
CALCIUM	1770 U	1770 U	17.6 U	22.3 B	17.6 U
CHROMIUM	1.0 U	1.0 U	0.54 B	18.6	0.50 U
COBALT	11.3 B	2.0 U	0.77 B	15.3 B	0.70 U
COPPER	1.4 U	1.4 U	0.70 U	0.70 U	0.70 U
IRON	31.7 U	31.7 U	20.8 B	170	14.2 U
LEAD	1.9 U	1.9 U	1.7 U	1.7 U	1.7 U
MAGNESIUM	70.0 U	70.0 U	12.0 B	38.0 B	8.9 B
MANGANESE	5.3 U	5.3 U	1.0 B	4.2 B	0.47 B
MERCURY	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
NICKEL	1.9 U	1.9 U	1.3 U	22.6 B	1.3 U
POTASSIUM	124 B	133 B	41.6 U	41.6 U	41.6 U
SELENIUM	2.0 U	2.0 U	4.8 U	4.8 U	4.8 U
SILVER	1.4 U	1.4 U	0.50 U	0.50 U	0.50 U
SODIUM	956 U	956 U	152 U	152 U	152 U
THALLIUM	3.7 U	3.7 U	6.2 U	6.2 U	6.2 U
VANADIUM	1.7 U	1.7 U	0.70 U	0.70 U	0.70 U
ZINC	10.7 U	10.7 U	1.1 U	1.1 U	1.1 U

See Table D-1 for abbreviations and data qualifiers.

TABLE D-55
Metals (Groundwater) - Quality Assurance/Quality Control (2000/2001)
Little Valley Superfund Site

Area	QA/QC Sample		QA/QC Sample		QA/QC Sample	
Location	Field Blank		Field Blank		Field Blank	
TtFW Sample I.D.	LVFB011101		LVBIAFB011201		LVBIAFB121300	
Sampling Date	1/11/01		1/11/01		12/13/00	
Units	ug/L		ug/L		ug/L	
ALUMINUM	47.3	B	53.3	B	114	B
ANTIMONY	2.5	U	2.5	U	21.5	U
ARSENIC	4.2	U	4.2	U	1.6	U
BARIUM	0.39	B	0.84	B	3.9	U
BERYLLIUM	0.10	U	0.10	U	0.20	U
CADMIUM	0.60	U	0.60	U	0.40	U
CALCIUM	1560	B	1470	B	1770	U
CHROMIUM	0.50	U	0.50	U	1.0	U
COBALT	0.70	U	0.70	U	2.0	U
COPPER	0.70	U	0.70	U	1.4	U
IRON	14.2	U	15.7	B	51.0	B
LEAD	1.7	U	1.7	U	2.7	BJ
MAGNESIUM	28.1	B	32.1	B	70.0	U
MANGANESE	0.69	B	1.4	B	5.3	U
MERCURY	0.10	U	0.10	U	0.10	U
NICKEL	1.3	U	1.3	U	1.9	U
POTASSIUM	41.6	U	41.6	U	120	B
SELENIUM	4.8	U	4.8	U	2.0	U
SILVER	0.50	U	0.50	U	1.4	U
SODIUM	152	U	152	U	956	U
THALLIUM	6.2	U	6.2	U	3.7	U
VANADIUM	0.70	U	0.70	U	1.7	U
ZINC	1.3	B	1.1	U	10.7	U

TABLE D-56
Metals and Cyanide (Groundwater) - Quality Assurance/Quality Control (2002/2003)
Little Valley Superfund Site

Area	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample	QA/QC Sample
Location	DI Water Blank	Field Blank	Field Blank	Field Blank	Field Blank
TtFW Sample I.D.	LV-DI-043002	LV-FB-GW-043002	LV-FB-111203	LV-FB-111803	LV-FB-112003
Sampling Date	04/30/02	04/30/02	11/12/03	11/18/03	11/20/03
Units	ug/L	ug/L	ug/L	ug/L	ug/L
Aluminum	7.3 U	7.3	200 U	200 U	910
Antimony	4.7 U	4.7 U	60 U	60 U	60 U
Arsenic	2.8 U	2.8 U	15 U	15 U	15 U
Barium	0.8 U	1.1	200 U	200 U	200 U
Beryllium	0.1 U	0.1 U	5 U	5.0 U	5.0 U
Cadmium	0.4 U	0.4 U	5 U	5.0 U	5.0 U
Calcium	17.8 B	56.8 B	5000 U	5000 U	12000
Chromium	0.6 U	0.6 U	10 U	10 U	25
Cobalt	0.6 U	0.6 U	50 U	50 U	50 U
Copper	0.9 U	1.3 B	25 U	62	25 U
Cyanide	3.5 U	3.5 U	10 U	10 U	10 U
Iron	18.3 B	17.3 U	100 U	100 U	1900
Lead	2.1 U	2.1 U	10 U	10 U	10 U
Magnesium	9.5 U	9.5 U	5000 U	5000 U	5000 U
Manganese	0.3 B	0.83 B	15 U	15 U	290
Mercury	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U
Nickel	1.8 U	1.8 U	40 U	40 U	40 U
Potassium	30.1 B	23.1 B	5000 U	5000 U	5000 U
Selenium	3.8 B	3 U	35 U	35 U	35 U
Silver	1 U	1 U	10 U	10 U	10 U
Sodium	354 U	354 U	5000 U	5000 U	5000 U
Thallium	5.4 U	5.4 U	25 U	25 U	25 U
Vanadium	0.8 U	0.8 U	50 U	50 U	50 U
Zinc	12.7 B	18 B	60 U	190	60 U

ɜe Table D-1 for abbreviations and data qualifiers.

APPENDIX E

RAGS PART D TABLES

APPENDIX E

LIST OF TABLES*

*For ease of reference, all tables in Appendix E appear in numerical sequence. However, for presentation in this list of tables, RAGS D Tables appear before Non-RAGS Tables

NON-RAGS D TABLES

TABLE 1

SELECTION OF EXPOSURE PATHWAYS

Little Valley Superfund Site

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	On-Site/ Off-Site	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current	Groundwater	Groundwater (Shallow Aquifer)	Tap Water	Other	Adult/Child	Ingestion	On-Site	None	"Other" receptors include adults or children who may utilize the shallow groundwater in commerical, industrial, or residential settings. All existing impacted private wells have been fitted with point-of-use treatment systems based on previous risk assessments for unrestricted use of groundwater. An existing Record of Decision requires point-of-use treatment for all new wells that may be installed in the future.
						Dermal Absorption	On-Site	None	
						Inhalation of Volatiles	On-Site	None	
Current/Future	Soil	Soil	BIA Surface Soil	Commercial Worker	Adult	Incidental Ingestion	On-Site	Quant	Possible exposure based on current and projected future site use in the Bush Industries Area (BIA). Exposure to soil deeper than 2 feet bgs is unlikely. People making deliveries and pick-ups at the BIA area would not be exposed to the soil as much as the BIA worker and, consequently, was not assessed separately.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	
				Trespasser	Adolescent (12-18 yrs)	Incidental Ingestion	On-Site	Quant	Possible exposure based on at least partial site accessibility at the Bush Industries Area (BIA). Exposure to soil deeper than 2 feet bgs is unlikely.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	
			RRAA Surface Soil	Resident	Adult	Incidental Ingestion	On-Site	Quant	Possible exposure based on current and projected future residential activities in the Railroad Avenue Area (RRAA). Exposure to soil deeper than 2 feet bgs is unlikely. Adult visitors to the RRAA residence would not be exposed to the soil as much as the adult residents themselves and, consequently, were not assessed
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	
					Child (0 - 6 years)	Incidental Ingestion	On-Site	Quant	Possible exposure based on current and projected future residential activities in the Railroad Avenue Area (RRAA). Exposure to soil deeper than 2 feet bgs is unlikely. Child visitors to the RRAA residence would not be exposed to the soil as much as the child residents themselves and, consequently, were not assessed separately.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	
			CCA Surface Soil	Trespasser	Adolescent (12-18 yrs)	Incidental Ingestion	On-Site	Quant	Possible exposure based on at least partial site accessibility at the Cattaraugus Cutlery Area (CCA). Exposure to soil deeper than 2 feet bgs is unlikely.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	

TABLE 1

SELECTION OF EXPOSURE PATHWAYS

Little Valley Superfund Site

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	On-Site/ Off-Site	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current/Future	Soil	Soil	CCA Surface Soil	Commercial Worker	Adult	Incidental Ingestion	On-Site	Quant	Possible exposure based on current and projected future site use in the Cattaraugus Cutlery Area (CCA). Exposure to soil deeper than 2 feet bgs is unlikely. People making deliveries and pick-ups at the CCA area would not be exposed to the soil as much as the CCA worker and, consequently, was not assessed separately.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	
	Surface Water	Surface Water	Little Valley Creek and Tributaries	Shoreline Resident	Adult	Incidental Ingestion	On-Site	Quant	Possible exposure to an adult while fishing, wading or partaking in other recreational activities in and along the Little Valley Creek and its tributaries. Volatiles were present at relatively low dissolved concentrations. Any release of volatile or semivolatile organics from the surface water into the open air will be highly diluted by mixing and dispersion in the wind.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Qual	
					Child (0 - 6 years)	Incidental Ingestion	On-Site	Quant	Possible exposure to a child while fishing, wading or partaking in other recreational activities in and along the Little Valley Creek and its tributaries. Volatiles were present at relatively low dissolved concentrations. Any release of volatile or semivolatile organics from the surface water into the open air will be highly diluted by mixing and dispersion in the wind.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Qual	
	Sediment	Sediment	Little Valley Creek and Tributaries	Shoreline Resident	Adult	Incidental Ingestion	On-Site	Quant	Possible exposure to an adult while fishing, wading or partaking in other recreational activities in and along the Little Valley Creek and its tributaries. No volatiles were present at levels justifying selection as a chemical of potential concern. In addition, any releases of volatile or semivolatile organics from the sediment into the open air will be highly diluted by mixing and dispersion in the wind.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Volatiles	On-Site	None	
					Child (0 - 6 years)	Incidental Ingestion	On-Site	Quant	Possible exposure to a child while fishing, wading or partaking in other recreational activities in and along the Little Valley Creek and its tributaries. No volatiles were present at levels justifying selection as a chemical of potential concern. In addition, any releases of volatile or semivolatile organics from the sediment into the open air will be highly diluted by mixing and dispersion in the wind.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Volatiles	On-Site	None	
	Groundwater	Groundwater (Shallow Aquifer)	Indoor Air	Various	Adult/Child	Inhalation of Volatiles	On-Site	Qual	Possible exposure while engaged in indoor activities in the Cattaraugus Cutlery Area, Bush Industries Area, or Railroad Avenue Area. (Screening evaluation of groundwater water quality relative to potential future indoor inhalation exposure)
Future	Soil	Soil	CCA Surface Soil	Resident	Adult	Incidental Ingestion	On-Site	Quant	Although possible future residential exposure in the Cattaraugus Cutlery Area (CCA) is unlikely, this pathway was considered for comparison purposes. Exposure to soil deeper than 2 feet bgs is unlikely.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	

TABLE 1

SELECTION OF EXPOSURE PATHWAYS

Little Valley Superfund Site

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	On-Site/ Off-Site	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Future	Soil	Soil	CCA Surface Soil	Resident	Child (0 - 6 years)	Incidental Ingestion	On-Site	Quant	Although possible future residential exposure in the Cattaraugus Cutlery Area (CCA) is unlikely, this pathway was considered for comparison purposes. Exposure to soil deeper than 2 feet bgs is unlikely.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	
			BIA Surface Soil	Resident	Adult	Incidental Ingestion	On-Site	Quant	Although possible future residential exposure in the Bush Industries Area (BIA) is unlikely, this pathway was considered for comparison purposes. Exposure to soil deeper than 2 feet bgs is unlikely.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	
					Child (0 - 6 years)	Incidental Ingestion	On-Site	Quant	Although possible future residential exposure in the Bush Industries Area (BIA) is unlikely, this pathway was considered for comparison purposes. Exposure to soil deeper than 2 feet bgs is unlikely.
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	
			CCA All Soil (Surface and Subsurface)	Construction Worker	Adult	Incidental Ingestion	On-Site	Quant	Possible exposure based on future renovation or redevelopment in the Cattaraugus Cutlery Area (CCA). Due to the relatively deep depth to groundwater in areas where construction is feasible, direct contact of the Construction Worker with the groundwater is unlikely. Construction Worker judged to have greater potential exposure than other workers that may disturb the ground, such as a Utility Maintenance Worker. As such, these other workers were not assessed .
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	
			BIA All Soil (Surface and Subsurface)	Construction Worker	Adult	Incidental Ingestion	On-Site	Quant	Possible exposure based on future renovation or redevelopment in the Bush Industries Area (BIA). Due to the relatively deep depth to groundwater in areas where construction is feasible, direct contact of the Construction Worker with the groundwater is unlikely. Construction Worker judged to have greater potential exposure than other workers that may disturb the ground, such as a Utility Maintenance Worker. As such, these other workers were not assessed .
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	
			RRAA All Soil (Surface and Subsurface)	Construction Worker	Adult	Incidental Ingestion	On-Site	Quant	Possible exposure based on future renovation or redevelopment in the Railroad Avenue Area (RRAA). Due to the relatively deep depth to groundwater in areas where construction is feasible, direct contact of the Construction Worker with the groundwater is unlikely. Construction Worker judged to have greater potential exposure than other workers that may disturb the ground, such as a Utility Maintenance Worker. As such, these other workers were not assessed .
						Dermal Absorption	On-Site	Quant	
						Inhalation of Particulates	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	

TABLE 1

SELECTION OF EXPOSURE PATHWAYS

Little Valley Superfund Site

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	On-Site/ Off-Site	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Future	Groundwater	Groundwater (Shallow Aquifer)	Tap Water	Other	Adult/Child	Ingestion	On-Site	None	"Other" receptors include adults or children who may utilize the shallow groundwater in commerical, industrial, and residential settings. All existing impacted private wells have been fitted with point-of-use treatment systems based on previous risk assessments or unrestricted use of groundwater. An existing Record of Decision requires point-of-use treatment for all new wells that may be installed in the future.
						Dermal Absorption	On-Site	None	
						Inhalation of Volatiles	On-Site	None	
			Process Water	Commercial Worker (Washdown Scenario)	Adult	Incidental Ingestion	On-Site	Quant	Possible exposure associated with relatively limited non-consumptive use of the groundwater for commercial facility washdown activities. (Indoor air concentrations created by active non-consumptive water use in a future building are assumed to be much greater than would be caused by volatiles release from groundwater and migration up through the soil into indoor air)
						Dermal Absorption	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	
				Commercial Worker (Car Wash Scenario)	Adult	Incidental Ingestion	On-Site	Quant	Possible exposure associated with more extensive non-consumptive use of the groundwater for intensive spray washing or cooling. (Indoor air concentrations created by active non-consumptive water use in a future building are assumed to be much greater than would be caused by volatiles release from groundwater and migration up through the soil into indoor air)
						Dermal Absorption	On-Site	Quant	
						Inhalation of Volatiles	On-Site	Quant	

TABLE 2.1

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
Surface Water	75-00-3	Chloroethane	0.5(J)	0.5(J)	ug/l	LV-SWCCA1-01	1/7	1	0.5	-	4.6	-	-	N	BSL
	107-06-2	1,2-Dichloroethane	0.5(J)	0.5(J)	ug/l	LV-SWCCA1N-01	1/7	1	0.50	-	0.12	-	-	Y	ASL
	156-59-2	cis-1,2-Dichloroethylene	12	12	ug/l	LV-BIA-SW03-01	1/3	1	12	-	6.1	-	-	Y	ASL
	74-87-3	Methyl chloride (chloromethane)	0.31(J)	12	ug/l	LV-SWCCA1-01	4/17	0.5-4	12	-	1.5	-	-	Y	ASL
	75-09-2	Methylene chloride	0.7(J)	0.7(J)	ug/l	LV-SWCCA1N-02	1/7	2	0.70	-	4.3	200	(6)	N	BSL
	79-01-6	Trichloroethylene	0.31(J)	18.5	ug/l	LV-BIA-SW03-01	3/15	0.5-1	18.5	-	0.028	40	(6)	Y	ASL
	117-81-7	Bis(2-ethylhexyl)phthalate (BEHP)	5.5(J)	5.5(J)	ug/l	LV-BIA-SW03-01	1/3	5	5.5	-	4.8	0.60	(6)	Y	ASL
	7421-93-4	Endrin aldehyde	0.0165(J)	0.0165(J)	ug/l	LV-BIA-SW03-01	1/3	0.02	0.017	-	1.1	-	-	N	BSL
	7429-90-5	Aluminum	152(B)	1,407	ug/l	LV-BIA-SW03-01	3/3	-	1,407	112	3,600	100	(6)	N	BSL
	7440-39-3	Barium	39.6(B)	84.4B	ug/l	LV-BIA-SW03-01	3/3	-	84	40	260		-	N	BSL
	7440-43-9	Cadmium	0.3(B)	0.3(B)	ug/l	LV-BIA-SW03-01	1/3	0.4	0.30	-	1.8	-	-	N	BSL
	7440-70-2	Calcium	12,600	21,000	ug/l	LV-BIA-SW03-01	3/3	-	21,000	13,200	NA	-	-	N	NUT
	7440-47-3	Chromium	2.75(B)	2.75(B)	ug/l	LV-BIA-SW03-01	1/3	1	2.75	-	11	-	-	N	BSL
	7440-48-4	Cobalt	1.5(B)	1.5(B)	ug/l	LV-BIA-SW03-01	1/3	2	1.50	-	73	5.00	(6)	N	BSL
	7440-50-8	Copper	2.4(B)	10.1(B)	ug/l	LV-BIA-SW03-01	3/3	-	10.1	-	150	-	-	N	BSL
	7439-89-6	Iron	225	2,655	ug/l	LV-BIA-SW03-01	3/3	-	2,655	123	1,100	300	(6)	Y	ASL
	7439-92-1	Lead	2.4(BJ)	15(J)	ug/l	LV-BIA-SW03-01	2/3	1.9	15	-	15	-	-	Y	ASL
	7439-95-4	Magnesium	2130(B)	3710(B)	ug/l	LV-BIA-SW03-01	3/3	-	3,710	2,210	NA	-	-	N	NUT
	7439-96-5	Manganese	41.6	241	ug/l	LV-BIA-SW03-01	3/3	-	241	34.2	88	-	-	Y	ASL
	7440-02-0	Nickel	3.45(B)	3.45(B)	ug/l	LV-BIA-SW03-01	1/3	1.9	3.45	-	73	-	-	N	BSL
	7440-09-7	Potassium	905(B)	1495(B)	ug/l	LV-BIA-SW03-01	3/3	-	1,495	974	NA	-	-	N	NUT
	7782-49-2	Selenium	1.8(BJ)	1.8(BJ)	ug/l	LV-BIA-SW03-01	1/3	2	1.80	2.2	18	4.60	(6)	N	BSL
	7440-23-5	Sodium	9450	9760	ug/l	LV-BIA-SW02-01	3/3	-	9,760	10,700	NA	-	-	N	NUT
	7440-62-2	Vanadium	1.925(B)	1.925(B)	ug/l	LV-BIA-SW03-01	1/3	1.7	1.93	-	26	14	(6)	N	BSL
	7440-66-6	Zinc	62.4	62.4	ug/l	LV-BIA-SW03-01	1/3	10.7	62	-	1,100	-	-	N	BSL

Footnotes:

NA = Not available

- = Not applicable

(1) Qualifier Definitions: J - Estimated value

B - Value is less than the detection limit but greater than the instrument detection limit

(2) The maximum detected concentration is the concentration used for screening.

(3) The background values listed are the values detected from the background locations (LV-BIA-SW01-01, LV-SWCCA2-01, and LV-SWCCA2-02). Shown for discussion purposes only, not for screening of chemicals.

TABLE 2.1

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Surface Water
Exposure Medium: Surface Water

(4) The Screening Toxicity values are the Region IX PRGs for tap water. Table updated 10/1/02.

(5) Rationale Codes:

Selection Reason:	Above Screening Levels (ASL)
	No Screening Value (NV)
Deletion Reason:	Essential Nutrient (NUT)
	Below Screening Level (BSL)

(6) New York State Department of Environmental Conservation - Part 703 - Surface Water Quality Standards. Statutory authority: Environmental Conservation Law, §§ 3-0301[2][m], 15-0313, 17-0301, 17-0809. www.dec.state.ny.us/website/regs/703.htm. Web page last updated 1/25/00.

TABLE 2.2

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
Sediment	75-15-0	Carbon disulfide	0.002(J)	0.028	mg/kg	LVBIA-SD03B-01	8/16	0.015 - 0.026	0.028	-	36	-	-	N	BSL
	156-59-2	cis-1,2-Dichloroethylene	0.006(J)	0.019(J)	mg/kg	LVBIA-SD03B-01	3/9	0.013 - 0.019	0.019	-	4.3	-	-	N	BSL
	78-93-3	Methyl ethylketone	0.014(J)	0.027(J)	mg/kg	LV-SDCCA1-01	2/16	0.013 - 0.029	0.027	-	730	-	-	N	BSL
	108-10-1	Methyl isobutyl ketone (MIBK)	0.005(J)	0.005(J)	mg/kg	LVBIA-SD04B-01	1/9	0.013 - 0.029	0.005	-	79	-	-	N	BSL
	108-88-3	Toluene	0.004(J)	0.035(J)	mg/kg	LV-SDCCA3-02	3/7	0.015 - 0.019	0.035	-	66	-	-	N	BSL
	120-12-7	Anthracene	0.057(J)	0.057(J)	mg/kg	LVBIA-SD04B-01	1/9	0.45 - 7.60	0.057	-	2,200	-	-	N	BSL
	56-55-3	Benzo(a)anthracene	0.06(J)	1.8(J)	mg/kg	LVBIA-SD03B-01	8/9	0.45	1.80	-	0.62	-	-	Y	ASL
	50-32-8	Benzo(a)pyrene	0.049(J)	2(J)	mg/kg	LVBIA-SD03B-01	8/9	0.45	2.00	-	0.062	-	-	Y	ASL
	205-99-2	Benzo(b)fluoranthene	0.051(J)	1.7(J)	mg/kg	LVBIA-SD03B-01	8/9	0.45	1.70	-	0.62	-	-	Y	ASL
	191-24-2	Benzo(ghi)perylene	0.055(J)	0.9(J)	mg/kg	LVBIA-SD05B-01	3/9	0.45 - 6.10	0.90	-	NA	-	-	Y	NV
	207-08-9	Benzo(k)fluoranthene	0.048(J)	2.5(J)	mg/kg	LVBIA-SD03B-01	8/9	0.45	2.50	-	6.2	-	-	N	BSL
	117-81-7	Bis(2-ethylhexyl)phthalate (BEHP)	0.14(J)	40	mg/kg	LVBIA-SD04B-01	9/9	-	40	-	35	-	-	Y	ASL
	85-68-7	Butyl benzyl phthalate	0.066(J)	0.077(J)	mg/kg	LVBIA-SD04A-01	2/9	0.45 - 7.60	0.077	-	1,200	-	-	N	BSL
	218-01-9	Chrysene	0.069(J)	2.5(J)	mg/kg	LVBIA-SD03B-01	8/9	0.45	2.50	-	62	-	-	N	BSL
	117-84-0	Di-n-octyl phthalate	0.82	4.4(J)	mg/kg	LVBIA-SD03A-01, LVBIA-SD04A-01	5/9	0.45 - 0.54	4.40	-	240	-	-	N	BSL
	206-44-0	Fluoranthene	0.12(J)	5.3(J)	mg/kg	LVBIA-SD03B-01	8/9	0.45	5.30	-	230	-	-	N	BSL
	193-39-5	Indeno(1,2,3-cd)pyrene	0.089(J)	1.2(J)	mg/kg	LVBIA-SD03B-01	4/9	0.45 - 6.10	1.20	-	0.62	-	-	Y	ASL
	85-01-8	Phenanthrene	0.054(J)	1.8(J)	mg/kg	LVBIA-SD03B-01	8/9	0.45	1.80	-	NA	-	-	Y	NV
	129-00-0	Pyrene	0.099(J)	3.9(J)	mg/kg	LVBIA-SD03B-01	8/9	0.45	3.90	-	230	-	-	N	BSL
	7429-90-5	Aluminum	6,770	11,300	mg/kg	LVBIA-SD04A-01	9/9	-	11,300	7,690	7,600	-	-	Y	ASL
	7440-38-2	Arsenic	4.0	9.1	mg/kg	LVBIA-SD04A-01	9/9	-	9.10	9.00	0.39	-	-	Y	ASL, CAC
	7440-39-3	Barium	85	161	mg/kg	LVBIA-SD02A-01	9/9	-	161	100	540	-	-	N	BSL
	7440-41-7	Beryllium	0.07(B)	0.2(B)	mg/kg	LVBIA-SD02A-01	8/9	0.09	0.20	0.20	15	-	-	N	BSL
	7440-43-9	Cadmium	0.13(B)	0.755(BJ)	mg/kg	LVBIA-SD03A-01	9/9	-	0.76	0.25	3.7	-	-	N	BSL
	7440-70-2	Calcium	1140(B)	4140(J)	mg/kg	LVBIA-SD03A-01	9/9	-	4,140	1,180	NA	-	-	N	NUT
	7440-47-3	Chromium	9.60	24.1(J)	mg/kg	LVBIA-SD04A-01	9/9	-	24	9.60	30	-	-	N	BSL
	7440-48-4	Cobalt	6.4(B)	9.8(B)	mg/kg	LVBIA-SD03A-01	9/9	-	9.80	8.60	900	-	-	N	BSL
	7440-50-8	Copper	11.3(J)	39(J)	mg/kg	LVBIA-SD03A-01	9/9	-	39	11.8	310	-	-	N	BSL
	7439-89-6	Iron	13,100	21,900	mg/kg	LVBIA-SD04A-01	9/9	-	21,900	22,100	2,300	-	-	Y	ASL
	7439-92-1	Lead	14.8	90.7(J)	mg/kg	LVBIA-SD03A-01	9/9	-	91	12.3	400	-	-	N	BSL
	7439-95-4	Magnesium	1,940	3620(J)	mg/kg	LVBIA-SD04A-01	9/9	-	3,620	2,410	NA	-	-	N	NUT
	7439-96-5	Manganese	99	417	mg/kg	LVBIA-SD04A-01	9/9	-	417	504	180	-	-	Y	ASL
	7440-02-0	Nickel	14.3	22.5(J)	mg/kg	LVBIA-SD03B-01	9/9	-	23	17.5	160	-	-	N	BSL
	7440-09-7	Potassium	902(B)	1460(BJ)	mg/kg	LVBIA-SD02A-01	9/9	-	1,460	648	NA	-	-	N	NUT
	7782-49-2	Selenium	0.8(BJ)	2.15(BJ)	mg/kg	LVBIA-SD03A-01	9/9	-	2.15	1.10	39	-	-	N	BSL
	7440-22-4	Silver	0.48	0.85	mg/kg	LVBIA-SD02B-01	9/9	-	0.85	0.74	39	-	-	N	BSL
	7440-62-2	Vanadium	10.1	16.25(BJ)	mg/kg	LVBIA-SD03A-01	9/9	-	16.3	10.2	55	-	-	N	BSL
	7440-66-6	Zinc	55	281(J)	mg/kg	LVBIA-SD03A-01	9/9	-	281	59	2,300	-	-	N	BSL

TABLE 2.2

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Sediment
Exposure Medium: Sediment

Footnotes:

NA = Not available

- = Not applicable

(1) Qualifier Definitions: J - Estimated value

B - Value is less than the detection limit but greater than the instrument detection limit

(2) The maximum detected concentration is the concentration used for screening.

(3) The background values listed are the values detected from the background locations (LVBIA-SD01A-01, LV-SDCCA2-01, and LV-SDCCA2-02). Shown for discussion purposes only, not for screening of chemicals.

(4) The Screening Toxicity values are the Region IX PRGs for residential soil. Table updated 10/1/02.

(5) Rationale Codes:

Selection Reason: Above Screening Levels (ASL)

Class A Carcinogen (CAC)

No Screening Value (NV)

Deletion Reason: Essential Nutrient (NUT)

Below Screening Level (BSL)

TABLE 2.3

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
BIA Surface Soil	67-64-1	Acetone	0.023(J)	0.023(J)	mg/kg	LV-BIA-SB104-00	1/15	0.010 - 0.056	0.023	-	160	0.20	(6)	N	BSL
	75-15-0	Carbon disulfide	0.007(J)	0.007(J)	mg/kg	LV-BIA-SB104-00	1/15	0.010 - 0.015	0.007	-	36	2.70	(6)	N	BSL
	75-09-2	Methylene chloride	0.003(J)	0.0035(J)	mg/kg	LV-SBBIA4-00	2/15	0.010 - 0.015	0.0035	-	9.10	0.10	(6)	N	BSL
	127-18-4	Tetrachloroethylene	0.003(J)	0.003(J)	mg/kg	LV-BIA-SBMW8-00	1/15	0.010 - 0.015	0.003	-	1.50	-	-	N	BSL
	108-88-3	Toluene	0.002(J)	0.002(J)	mg/kg	LV-BIA-SB106-00	1/15	0.010 - 0.015	0.002	-	66	1.50	(6)	N	BSL
	75-69-4	Trichlorofluoromethane	0.002(J)	0.003(J)	mg/kg	LV-BIA-SB105-00, LV-BIA-SB108-00	3/10	0.010 - 0.015	0.003	-	39	-	-	N	BSL
	100-52-7	Benzaldehyde	0.054(J)	0.054(J)	mg/kg	LV-BIA-SB105-00	1/10	0.36 - 0.43	0.054	-	610	-	-	N	BSL
	56-55-3	Benzo(a)anthracene	0.021(J)	0.068(J)	mg/kg	LV-BIA-SB104-00	3/10	0.35 - 0.42	0.068	-	0.62	0.22	(6)	N	BSL
	50-32-8	Benzo(a)pyrene	0.039(J)	0.049(J)	mg/kg	LV-BIA-SB104-00	2/10	0.35 - 0.42	0.049	-	0.062	0.061	(6)	N	BSL
	205-99-2	Benzo(b)fluoranthene	0.022(J)	0.075(J)	mg/kg	LV-BIA-SB104-00	3/10	0.35 - 0.42	0.075	-	0.62	1.10	(6)	N	BSL
	191-24-2	Benzo(ghi)perylene	0.03(J)	0.06(J)	mg/kg	LV-BIA-SB103-00	2/10	0.35 - 0.42	0.06	-	NA	50	(6)	Y	NV
	207-08-9	Benzo(k)fluoranthene	0.029(J)	0.044(J)	mg/kg	LV-BIA-SB104-00	2/10	0.35 - 0.42	0.044	-	6.20	1.10	(6)	N	BSL
	117-81-7	Bis(2-ethylhexyl)phthalate (BEHP)	0.054(J)	8.4(D)	mg/kg	LV-BIA-SB104-00	6/10	0.35 - 0.42	8.40	-	35	50	(6)	N	BSL
	85-68-7	Butyl benzyl phthalate	0.023(J)	0.11(J)	mg/kg	LV-BIA-SB103-00	4/10	0.35 - 0.42	0.11	-	1,200	50	(6)	N	BSL
	218-01-9	Chrysene	0.02(J)	0.063(J)	mg/kg	LV-BIA-SB104-00	4/10	0.35 - 0.42	0.063	-	62	0.40	(6)	N	BSL
	84-66-2	Diethyl phthalate	0.022(J)	0.022(J)	mg/kg	LV-BIA-SB104-00	1/10	0.35 - 0.42	0.022	-	4,900	7.10	(6)	N	BSL
	84-74-2	Di-n-butyl phthalate	0.027(J)	0.049(J)	mg/kg	LV-BIA-SB103-00	2/10	0.35 - 0.42	0.049	-	610	8.10	(6)	N	BSL
	117-84-0	Di-n-octyl phthalate	0.031(J)	0.4(J)	mg/kg	LV-BIA-SB104-00	4/10	0.35 - 0.42	0.40	-	240	50	(6)	N	BSL
	206-44-0	Fluoranthene	0.034(J)	0.15(J)	mg/kg	LV-BIA-SB104-00	4/10	0.35 - 0.42	0.15	-	230	50	(6)	N	BSL
	193-39-5	Indeno(1,2,3-cd)pyrene	0.036(J)	0.036(J)	mg/kg	LV-BIA-SB103-00	1/10	0.35 - 0.43	0.036	-	0.62	3.20	(6)	N	BSL
	85-01-8	Phenanthrene	0.024(J)	0.065(J)	mg/kg	LV-BIA-SB104-00	4/10	0.35 - 0.42	0.065	-	NA	50	(6)	Y	NV
	129-00-0	Pyrene	0.028(J)	0.11(J)	mg/kg	LV-BIA-SB104-00	4/10	0.35 - 0.42	0.11	-	230	50	(6)	N	BSL
	72-55-9	4,4'-DDE	0.00089(J)	0.00094(J)	mg/kg	LV-BIA-SB102-00	2/10	0.0034 - 0.0048	0.00094	-	1.70	2.10	(6)	N	BSL
	50-29-3	4,4'-DDT	0.0055(J)	0.0055(J)	mg/kg	LV-BIA-SB109-00	1/10	0.0034 - 0.0048	0.0055	-	1.70	2.10	(6)	N	BSL
	60-57-1	Dieldrin	0.0016(J)	0.0016(J)	mg/kg	LV-BIA-SB102-00	1/10	0.0021 - 0.0048	0.0016	-	0.03	0.044	(6)	N	BSL
	7429-90-5	Aluminum	7,190	19,200	mg/kg	LV-BIA-SB101-00	10/10	-	19,200	8,180 - 12,000	7,600	10,493	(7)	Y	ASL
	7440-36-0	Antimony	0.75(BJ)	0.75(BJ)	mg/kg	LV-BIA-SB109-00	1/10	0.48 - 5.90	0.75	-	3.1	NV	-	N	BSL
	7440-38-2	Arsenic	5.4(J)	11.4(J)	mg/kg	LV-BIA-SB101-00	9/9	-	11.4	7.60 - 10.7	0.39	8.90	(7)	Y	ASL, CAC
	7440-39-3	Barium	55	168	mg/kg	LV-BIA-SB104-00	10/10	-	168	85.5 - 89.1	540	88	(7)	N	BSL
	7440-41-7	Beryllium	0.15(B)	0.48(B)	mg/kg	LV-BIA-SBMW8-00	5/10	0.040 - 0.050	0.48	0.27 - 0.33	15	0.30	(7)	N	BSL
	7440-43-9	Cadmium	0.09(B)	0.72(B)	mg/kg	LV-BIA-SBMW8-00	7/10	0.060 - 0.090	0.72	0.47 - 0.64	3.70	0.57	(7)	N	BSL
	7440-70-2	Calcium	847(B)	42,000	mg/kg	LV-BIA-SB107-00	10/10	-	42,000	3,800 - 20,700	NA	11,336	(7)	N	NUT
	7440-47-3	Chromium	7.7	27.4	mg/kg	LV-BIA-SB109-00	10/10	-	27	10.7 - 12.7	30	12	(7)	Y	CAC
	7440-48-4	Cobalt	5.7(B)	11(B)	mg/kg	LV-BIA-SB104-00	10/10	-	11	5.00 - 6.60	900	5.73	(7)	N	BSL
	7440-50-8	Copper	12.3(J)	70	mg/kg	LV-BIA-SB109-00	10/10	-	70	15.9 - 22.5	310	19	(7)	N	BSL
	7439-89-6	Iron	15,100	25,500	mg/kg	LV-BIA-SB101-00	10/10	-	25,500	16,000 - 19,100	2,300	17,933	(7)	Y	ASL
	7439-92-1	Lead	16.4	157(J)	mg/kg	LV-BIA-SB109-00	6/6	-	157	21 - 76	400	50	(7)	N	BSL

TABLE 2.3

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
BIA Surface Soil	7439-95-4	Magnesium	2,800	6240(J)	mg/kg	LV-BIA-SB107-00	10/10	-	6,240	1,830 - 3,680	NA	2,693	(7)	N	NUT
	7439-96-5	Manganese	336	776	mg/kg	LV-BIA-SB106-00	10/10	-	776	693 - 1,290	180	935	(7)	Y	ASL
	7439-97-6	Mercury	0.09(B)	0.09(B)	mg/kg	LV-BIA-SBMW8-00	1/10	0.050 - 0.070	0.09	0.10 - 0.12	2.30	0.10	(6)	N	BSL
	7440-02-0	Nickel	12	23	mg/kg	LV-BIA-SB104-00	10/10	-	23	10.6 - 14.5	160	12.9	(7)	N	BSL
	7440-09-7	Potassium	616(B)	1330(B)	mg/kg	LV-BIA-SB104-00	10/10	-	1,330	763 - 949	NA	878	(7)	N	NUT
	7782-49-2	Selenium	0.43(B)	1.5(J)	mg/kg	LV-BIA-SB101-00	8/10	0.45 - 0.89	1.50	0.65 - 1.20	39	0.94	(7)	N	BSL
	7440-22-4	Silver	0.45(B)	0.63(B)	mg/kg	LV-BIA-SB103-00	3/10	0.080 - 0.38	0.63	0.60 - 0.83	39	0.74	(7)	N	BSL
	7440-23-5	Sodium	200(B)	971(B)	mg/kg	LV-BIA-SB101-00	4/10	206 - 262	971	175 - 1,290	NA	550	(7)	N	NUT
	7440-28-0	Thallium	1.1(B)	17.6	mg/kg	LV-BIA-SBMW8-00	5/10	0.80 - 1.00	17.6	-	0.52	NV	-	Y	ASL
	7440-62-2	Vanadium	9.3(B)	28.7	mg/kg	LV-BIA-SBMW8-00	10/10	-	29	13.4 - 20.5	55	17	(7)	N	BSL
	7440-66-6	Zinc	48.2	127	mg/kg	LV-BIA-SBMW8-00	10/10	-	127	68.8 - 126	2,300	94	(7)	N	BSL

Footnotes:

NA = Not available

- = Not applicable

NV = No Value

(1) Qualifier Definitions:

J - Estimated value

B - Value is less than the detection limit but greater than the instrument detection limit

D - Value obtained from dilution of the sample

(2) The maximum detected concentration is the concentration used for screening.

(3) The background values listed are the range of values detected from the background locations (LV-BSB1-00, LV-BSB2-00, and LV-BSB3-00). Shown for discussion purposes only, not for screening of chemicals.

(4) The Screening Toxicity values are the Region IX PRGs for residential soil. Table updated 10/1/02.

(5) Rationale Codes:

Selection Reason:

Above Screening Levels (ASL)

Class A Carcinogen (CAC)

No Screening Value (NV)

Deletion Reason:

Essential Nutrient (NUT)

Below Screening Level (BSL)

(6) Potential ARAR/TBC values are from the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046. Value is the recommended soil cleanup objective, as per NYSDEC TAGM #4046.

(7) Potential ARAR/TBC values are from the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046. Value is the average of site background data.

TABLE 2.4

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
BIA All Soil	67-64-1	Acetone	0.004(J)	0.023(J)	mg/kg	LV-BIA-SB104-00	5/34	0.010 - 0.056	0.023	-	160	0.20	(6)	N	BSL
	71-43-2	Benzene	0.004(J)	0.004(J)	mg/kg	LV-BIA-SB106-04	1/34	0.010 - 0.015	0.004	-	0.60	0.06	(6)	Y	CAC
	98-82-8	Benzene,1-methylethyl- (cumene)	0.003(J)	0.003(J)	mg/kg	LV-BIA-SB103-04	1/27	0.010 - 0.015	0.003	-	57	-	-	N	BSL
	75-15-0	Carbon disulfide	0.001(J)	0.007(J)	mg/kg	LV-BIA-SB102-00, LV-BIA-SB104-04	4/34	0.010 - 0.015	0.007	-	36	2.70	(6)	N	BSL
	156-59-2	cis-1,2-Dichloroethylene	0.002(J)	0.008(J)	mg/kg	LV-BIA-SB104-04	5/27	0.010 - 0.015	0.008	-	4.3	0.30	(6, 8)	N	BSL
	100-41-4	Ethylbenzene	0.022	0.022	mg/kg	LV-BIA-SB106-04	1/34	0.010 - 0.015	0.022	-	8.9	5.50	(6)	N	BSL
	591-78-6	2-Hexanone	0.002(J)	0.00375(J)	mg/kg	LV-SBBIA3-08	1/34	0.010 - 0.015	0.004	-	NA	-	-	N	IFD
	78-93-3	Methyl ethylketone	0.004(J)	0.00525(J)	mg/kg	LV-SBBIA3-08	2/34	0.010 - 0.015	0.005	-	730	0.30	(6)	N	BSL
	75-09-2	Methylene chloride	0.003(J)	0.0035(J)	mg/kg	LV-SBBIA4-00	2/34	0.010 - 0.025	0.004	-	9.10	0.10	(6)	N	BSL
	127-18-4	Tetrachloroethylene	0.003(J)	0.004(J)	mg/kg	LV-BIA-SBMW8-04	3/34	0.010 - 0.015	0.004	-	1.50	-	-	N	BSL
	108-88-3	Toluene	0.001(J)	0.002(J)	mg/kg	LV-BIA-SB103-04, LV-BIA-SB106-00	3/34	0.010 - 0.015	0.002	-	66	1.50	(6)	N	BSL
	79-01-6	Trichloroethylene	0.015	0.056	mg/kg	LV-BIA-SB105-08	4/34	0.010 - 0.015	0.056	-	0.05	0.70	(6)	Y	ASL
	75-69-4	Trichlorofluoromethane	0.002(J)	0.004(J)	mg/kg	LV-BIA-SB108-04	6/27	0.010 - 0.015	0.004	-	39	-	-	N	BSL
	1303	Xylenes (total)	0.0015(J)	0.047	mg/kg	LV-BIA-SB106-04	4/34	0.010 - 0.015	0.047	-	27	1.20	(6)	N	BSL
	98-86-2	Acetophenone	0.019(J)	0.019(J)	mg/kg	LV-BIA-SB102-08	1/27	0.33 - 0.48	0.019	-	NA	-	-	N	IFD
	100-52-7	Benzaldehyde	0.045(J)	0.054(J)	mg/kg	LV-BIA-SB105-00	2/27	0.33 - 0.48	0.054	-	610	-	-	N	BSL
	56-55-3	Benzo(a)anthracene	0.021J	0.129(J)	mg/kg	LV-BIA-SB104-08	4/27	0.33 - 0.48	0.13	-	0.62	0.22	(6)	N	BSL
	50-32-8	Benzo(a)pyrene	0.019(J)	0.1195(J)	mg/kg	LV-BIA-SB104-08	4/27	0.33 - 0.48	0.12	-	0.062	0.061	(6)	Y	ASL
	205-99-2	Benzo(b)fluoranthene	0.022(J)	0.1375(J)	mg/kg	LV-BIA-SB104-08	5/27	0.33 - 0.48	0.14	-	0.62	1.10	(6)	N	BSL
	191-24-2	Benzo(ghi)perylene	0.03(J)	0.06(J)	mg/kg	LV-BIA-SB103-00	3/27	0.33 - 0.48	0.06	-	NA	50	(6)	Y	NV
	207-08-9	Benzo(k)fluoranthene	0.029(J)	0.117(J)	mg/kg	LV-BIA-SB104-08	3/27	0.33 - 0.48	0.12	-	6.20	1.10	(6)	N	BSL
	117-81-7	Bis(2-ethylhexyl)phthalate (BEHP)	0.048(J)	8.4(D)	mg/kg	LV-BIA-SB104-00	19/27	0.33 - 0.42	8.40	-	35	50	(6)	N	BSL
	85-68-7	Butyl benzyl phthalate	0.023(J)	0.11(J)	mg/kg	LV-BIA-SB103-00	7/27	0.33 - 0.48	0.11	-	1,200	50	(6)	N	BSL
	218-01-9	Chrysene	0.02(J)	0.1265(J)	mg/kg	LV-BIA-SB104-08	6/27	0.33 - 0.48	0.13	-	62	0.40	(6)	N	BSL
	84-66-2	Diethyl phthalate	0.021(J)	0.106(J)	mg/kg	LV-BIA-SB104-08	3/27	0.34 - 0.48	0.106	-	4,900	7.10	(6)	N	BSL
	84-74-2	Di-n-butyl phthalate	0.02(J)	0.049(J)	mg/kg	LV-BIA-SB103-00	7/27	0.35 - 0.48	0.049	-	610	8.10	(6)	N	BSL
	117-84-0	Di-n-octyl phthalate	0.031(J)	0.4(J)	mg/kg	LV-BIA-SB104-00	6/27	0.33 - 0.48	0.40	-	240	50	(6)	N	BSL
	206-44-0	Fluoranthene	0.022(J)	0.17(J)	mg/kg	LV-BIA-SB104-08	6/27	0.33 - 0.48	0.17	-	230	50	(6)	N	BSL
	193-39-5	Indeno(1,2,3-cd)pyrene	0.036(J)	0.036(J)	mg/kg	LV-BIA-SB103-00	1/27	0.33 - 0.48	0.036	-	0.62	3.20	(6)	N	BSL
	85-01-8	Phenanthrene	0.024(J)	0.1275(J)	mg/kg	LV-BIA-SB104-08	5/27	0.33 - 0.48	0.13	-	NA	50	(6)	Y	NV
	129-00-0	Pyrene	0.028(J)	0.150(J)	mg/kg	LV-BIA-SB104-08	5/27	0.33 - 0.48	0.15	-	230	50	(6)	N	BSL
	72-54-8	4,4'-DDD	0.003(J)	0.015(J)	mg/kg	LV-BIA-SB106-04	2/27	0.0034 - 0.0048	0.015	-	2.4	2.90	(6)	N	BSL
	72-55-9	4,4'-DDE	0.00089(J)	0.0082(J)	mg/kg	LV-BIA-SB106-04	4/27	0.0034 - 0.0048	0.0082	-	1.70	2.10	(6)	N	BSL
	50-29-3	4,4'-DDT	0.0013(J)	0.0055(J)	mg/kg	LV-BIA-SB109-00	2/27	0.0034 - 0.0048	0.0055	-	1.70	2.10	(6)	N	BSL
	319-86-8	delta-BHC	0.00022(J)	0.00022(J)	mg/kg	LV-BIA-SB103-04	1/27	0.0017 - 0.0025	0.00022	-	NA	0.30	(6)	N	IFD
	60-57-1	Dieldrin	0.0016(J)	0.0016(J)	mg/kg	LV-BIA-SB102-00	1/27	0.0021 - 0.0048	0.0016	-	0.03	0.044	(6)	N	BSL
	1024-57-3	Heptachlor epoxide	0.00092(J)	0.00092(J)	mg/kg	LV-BIA-SB102-08	1/27	0.0017 - 0.0025	0.00092	-	0.053	0.02	(6)	N	BSL
	11097-69-1	Aroclor 1254	0.016(J)	0.016(J)	mg/kg	LV-BIA-SB101-04	1/27	0.034 - 0.048	0.016	-	0.22	10	(6, 9)	N	BSL
	7429-90-5	Aluminum	7,190	19,200	mg/kg	LV-BIA-SB101-00	27/27	-	19,200	8,180 - 14,300	7600	11,213	(7)	Y	ASL

TABLE 2.4

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
BIA All Soil	7440-36-0	Antimony	0.49(BJ)	0.75(BJ)	mg/kg	LV-BIA-SB109-00	2/27	0.48 - 5.9	0.75	-	31	NV	-	N	BSL
	7440-38-2	Arsenic	5.4(J)	27.8(J)	mg/kg	LV-BIA-SB106-08	24/24	-	27.8	7.60 - 13.8	0.39	10.3	(7)	Y	ASL, CAC
	7440-39-3	Barium	48	737	mg/kg	LV-BIA-SB107-04	27/27	-	737	85.5 - 246	540	131	(7)	Y	ASL
	7440-41-7	Beryllium	0.05(B)	0.54(B)	mg/kg	LV-BIA-SB109-04	21/27	0.04 - 0.05	0.54	0.27 - 0.64	15	0.39	(7)	N	BSL
	7440-43-9	Cadmium	0.09(B)	0.72(B)	mg/kg	LV-BIA-SBMW8-00	17/27	0.06 - 0.09	0.72	0.44 - 0.64	3.7	0.54	(7)	N	BSL
	7440-70-2	Calcium	443(B)	42,000	mg/kg	LV-BIA-SB107-00	27/27	-	42,000	449 - 20,700	NA	6,258	(7)	N	NUT
	7440-47-3	Chromium	7.70	64.8	mg/kg	LV-BIA-SB106-04	27/27	-	65	10.7 - 16.3	30	12.73	(7)	Y	ASL, CAC
	7440-48-4	Cobalt	5.7(B)	11.95	mg/kg	LV-BIA-SB104-08	27/27	-	11.95	5.00 - 9.90	900	7.18	(7)	N	BSL
	7440-50-8	Copper	12.1	150(J)	mg/kg	LV-BIA-SB106-04	27/27	-	150	15.9 - 25	310	20	(7)	N	BSL
	7439-89-6	Iron	15,100	28,100	mg/kg	LV-BIA-SB105-04	27/27	-	28,100	16,000 - 26,400	2,300	20,717	(7)	Y	ASL
	7439-92-1	Lead	9.4(J)	157(J)	mg/kg	LV-BIA-SB109-00	15/15	-	157	9.60 - 76	400	32	(7)	N	BSL
	7439-95-4	Magnesium	2150(J)	6240(J)	mg/kg	LV-BIA-SB107-00	27/27	-	6,240	1,830 - 3,680	NA	2,957	(7)	N	NUT
	7439-96-5	Manganese	177	1,080	mg/kg	LV-BIA-SB106-08	27/27	-	1,080	693 - 1,290	180	917	(7)	Y	ASL
	7439-97-6	Mercury	0.05(B)	0.11(B)	mg/kg	LV-BIA-SB106-04	3/27	0.04 - 0.07	0.11	0.10 - 0.12	2.30	0.10	(6)	N	BSL
	7440-02-0	Nickel	12.4	25	mg/kg	LV-BIA-SB107-04	27/27	-	24.9	10.6 - 19.9	160	15.9	(7)	N	BSL
	7440-09-7	Potassium	587(B)	1,440	mg/kg	LV-BIA-SB105-08	27/27	-	1,440	763 - 1,330	NA	1,039	(7)	N	NUT
	7782-49-2	Selenium	0.43(BJ)	1.8(J)	mg/kg	LV-BIA-SB109-04	21/27	0.45 - 0.94	1.80	0.43 - 1.20	39	0.63	(7)	N	BSL
	7440-22-4	Silver	0.35(B)	0.67(B)	mg/kg	LV-BIA-SB106-04	14/27	0.08 - 0.38	0.67	0.60 - 0.98	39	0.79	(7)	N	BSL
	7440-23-5	Sodium	180(B)	971(B)	mg/kg	LV-BIA-SB101-00	9/27	206 - 262	971	121 - 1,290	NA	399	(7)	N	NUT
	7440-28-0	Thallium	1(B)	17.6	mg/kg	LV-BIA-SBMW8-00	16/27	0.80 - 1.00	17.6	-	0.52	NV	-	Y	ASL
	7440-62-2	Vanadium	9.3(B)	30	mg/kg	LV-BIA-SB106-04	27/27	-	29.8	12.9 - 25.85	55	17	(7)	N	BSL
	7440-66-6	Zinc	48	207	mg/kg	LV-BIA-SB106-04	27/27	-	207	68.8 - 126	2,300	89	(7)	N	BSL

Footnotes:

NA = Not available

- = Not applicable

NV = No Value

(1) Qualifier Definitions:

J - Estimated value

B - Value is less than the detection limit but greater than the instrument detection limit

D - Value obtained from dilution of the sample

(2) The maximum detected concentration is the concentration used for screening.

(3) The background values listed are the range of values detected from the background locations (LV-BSB1-00, LV-BSB1-04, LV-BSB2-00, LV-BSB2-08, LV-BSB3-00, and LV-BSB3-04). Shown for discussion purposes only, not for screening of chemicals.

(4) The Screening Toxicity values are the Region IX PRGs for residential soil. Table updated 10/1/02.

(5) Rationale Codes:

Selection Reason:

Above Screening Levels (ASL)

Class A Carcinogen (CAC)

No Screening Value (NV)

Deletion Reason:

Infrequent Detection (IFD)

Essential Nutrient (NUT)

Below Screening Level (BSL)

TABLE 2.4

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)

(6) Potential ARAR/TBC values are from the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046. Value is the recommended soil cleanup objective, as per NYSDEC TAGM #4046.

(7) Potential ARAR/TBC values are from the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046. Value is the average of site background data.

(8) Used trans-1,2-Dichloroethene value.

(9) Used the subsurface value for PCBs.

TABLE 2.5

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4, 6)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
CCA Surface Soil	67-64-1	Acetone	0.005(J)	0.005(J)	mg/kg	LV-SS-CCA-GEO1-0-1	1/15	0.010 - 1.40	0.005	-	160	0.20	(7)	N	BSL
	156-59-2	cis-1,2-Dichloroethene	0.83(J)	0.83(J)	mg/kg	LV-SB-CCA-GEO6-1-2	1/12	0.010 - 0.06	0.83	-	4.30	0.3	(7, 9)	N	BSL
	108-87-2	Methylcyclohexane	1.3(J)	1.3(J)	mg/kg	LV-SB-CCA-GEO6-1-2	1/12	0.010 - 0.06	1.30	-	260	-	-	N	BSL
	75-09-2	MethyleneChloride	0.008(J)	0.008(J)	mg/kg	LI-CCA-05-1.5-2.0	1/15	0.010 - 1.40	0.008	-	9.10	0.10	(7)	N	BSL
	127-18-4	Tetrachloroethene	0.002(J)	0.002(J)	mg/kg	LV-SS-CCA-GEO2-0-1	1/15	0.010 - 1.40	0.002	-	1.50	-	-	N	BSL
	108-88-3	Toluene	0.00305(J)	0.00305(J)	mg/kg	LV-SS-CCA-GEO5-0-1	1/15	0.010 - 1.40	0.0031	-	66	1.50	(7)	N	BSL
	79-01-6	Trichloroethene	0.003(J)	72(D)	mg/kg	LI-CCA-05-1.5-2.0	10/15	0.010 - 0.016	72	-	0.05	0.7	(7)	Y	ASL
	83-32-9	Acenaphthene	3.30	3.30	mg/kg	LV-SB-CCA-GEO6-1-2	1/7	0.40 - 9.70	3.30	-	370	50	(7)	N	BSL
	208-96-8	Acenaphthylene	1.90	1.90	mg/kg	LV-SB-CCA-GEO6-1-2	1/7	0.40 - 9.70	1.90	-	NA	41	(7)	Y	NV
	120-12-7	Anthracene	7.30	7.30	mg/kg	LV-SB-CCA-GEO6-1-2	1/7	0.40 - 9.70	7.30	-	2,200	50	(7)	N	BSL
	56-55-3	Benzo(a)anthracene	0.43	29	mg/kg	LV-SB-CCA-GEO6-1-2	3/7	0.43 - 9.70	29	-	0.62	0.22	(7)	Y	ASL
	50-32-8	Benzo(a)pyrene	0.31	29	mg/kg	LV-SB-CCA-GEO6-1-2	3/7	0.43 - 9.70	29	-	0.062	0.061	(7)	Y	ASL
	205-99-2	Benzo(b)fluoranthene	0.51	44	mg/kg	LV-SB-CCA-GEO6-1-2	4/7	2.00 - 9.70	44	-	0.62	1.10	(7)	Y	ASL
	191-24-2	Benzo(g,h,i)perylene	8.30	8.30	mg/kg	LV-SB-CCA-GEO6-1-2	1/7	0.40 - 9.70	8.30	-	NA	50	(7)	Y	NV
	207-08-9	Benzo(k)fluoranthene	0.48	18	mg/kg	LV-SB-CCA-GEO6-1-2	2/7	0.40 - 9.70	18	-	6.20	1.10	(7)	Y	ASL
	92-52-4	Biphenyl	0.86	0.86	mg/kg	LV-SB-CCA-GEO6-1-2	1/7	0.40 - 9.70	0.86	-	300	-	-	N	BSL
	117-81-7	Bis(2-ethylhexyl)phthalate	0.32	11	mg/kg	LV-SS-CCA-GEO4-0-1	2/7	0.40 - 9.70	11	-	35	50	(7)	N	BSL
	86-74-8	Carbazole	1.90	1.90	mg/kg	LV-SB-CCA-GEO6-1-2	1/7	0.40 - 9.70	1.90	-	24	-	-	N	BSL
	218-01-9	Chrysene	0.50	40	mg/kg	LV-SB-CCA-GEO6-1-2	4/7	2.00 - 9.70	40	-	62	0.40	(7)	N	BSL
	53-70-3	Dibenzo(a,h)anthracene	0.94	0.94	mg/kg	LV-SB-CCA-GEO6-1-2	1/7	0.40 - 9.70	0.94	-	0.062	0.014	(7)	Y	ASL
	132-64-9	Dibenzofuran	2.70	2.70	mg/kg	LV-SB-CCA-GEO6-1-2	1/7	0.40 - 9.70	2.70	-	29	6.2	(7)	N	BSL
	206-44-0	Fluoranthene	0.51	45	mg/kg	LV-SB-CCA-GEO6-1-2	5/7	2.30 - 9.70	45	-	230	50	(7)	N	BSL
	86-73-7	Fluorene	3.00	3.00	mg/kg	LV-SB-CCA-GEO6-1-2	1/7	0.40 - 9.70	3.00	-	270	50	(7)	N	BSL
	193-39-5	Indeno(1,2,3-cd)pyrene	10	10	mg/kg	LV-SB-CCA-GEO6-1-2	1/7	0.40 - 9.70	10	-	0.62	3.20	(7)	Y	ASL
	91-57-6	2-Methylnaphthalene	0.67	4.00	mg/kg	LV-SB-CCA-GEO6-1-2	2/7	0.40 - 9.70	4.00	-	31	36.4	(7)	N	BSL
	91-20-3	Naphthalene	8.50	8.50	mg/kg	LV-SB-CCA-GEO6-1-2	1/7	0.40 - 9.70	8.50	-	5.6	13	(7)	Y	ASL
	85-01-8	Phenanthrene	0.66	20	mg/kg	LV-SB-CCA-GEO6-1-2	4/7	2.00 - 9.70	20	-	NA	50	(7)	Y	NV
	129-00-0	Pyrene	0.49	43	mg/kg	LV-SB-CCA-GEO6-1-2	6/7	9.70	43	-	230	50	(7)	N	BSL
	7429-90-5	Aluminum	3,780	14,000	mg/kg	LV-SS-CCA-GEO3-0-1	11/11	-	14,000	8,180 - 12,000	7,600	10,493	(8)	Y	ASL
	7440-36-0	Antimony	1.3(B)	50	mg/kg	LI-CCA-05-SS	6/11	6.80 - 8.10	50	-	3.1	NV	-	Y	ASL
	7440-38-2	Arsenic	4.60	40	mg/kg	LI-CCA-05-SS	11/11	-	40	7.60 - 10.7	0.39	8.90	(8)	Y	ASL, CAC
	7440-39-3	Barium	60.1	460	mg/kg	LV-SS-CCA-GEO4-0-1	11/11	-	460	85.5 - 89.1	540	88	(8)	N	BSL
	7440-41-7	Beryllium	0.32(BJ)	2.3	mg/kg	LV-SS-CCA-GEO3-0-1	10/11	0.67	1.60	0.27 - 0.33	15	0.30	(8)	N	BSL
	7440-43-9	Cadmium	0.31(B)	41.00	mg/kg	LV-SS-CCA-GEO4-0-1	11/11	-	41.00	0.47 - 0.64	3.70	0.57	(8)	Y	ASL
	7440-70-2	Calcium	4,600	46000(L)	mg/kg	LV-SS-CCA-GEO3-0-1	11/11	-	46,000	3,800 - 20,700	NA	11,336	(8)	N	NUT
	7440-47-3	Chromium	16	1,510	mg/kg	LI-CCA-05-SS	11/11	-	1,510	10.7 - 12.7	30	12	(8)	Y	ASL, CAC
	7440-48-4	Cobalt	4(B)	15	mg/kg	LV-SS-CCA-GEO4-0-1	11/11	-	8.60	5.00 - 6.60	900	5.73	(8)	N	BSL
	7440-50-8	Copper	59	1,780	mg/kg	LI-CCA-05-1.5-2.0	11/11	-	1,780	15.9 - 22.5	310	19	(8)	Y	ASL

TABLE 2.5

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4, 6)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
CCA Surface Soil	7439-89-6	Iron	16,600	69,000	mg/kg	LV-SS-CCA-GEO2-0-1	11/11	-	69,000	16,000 - 19,100	2,300	17,933	(8)	Y	ASL
	7439-92-1	Lead	84	2,100	mg/kg	LV-SS-CCA-GEO2-0-1	11/11	-	2,100	21 - 76	400	50	(8)	Y	ASL
	7439-95-4	Magnesium	1,200	9,600	mg/kg	LV-SS-CCA-GEO3-0-1	11/11	-	9,600	1,830 - 3,680	NA	2,693	(8)	N	NUT
	7439-96-5	Manganese	226	1,800	mg/kg	LV-SS-CCA-GEO3-0-1	11/11	-	1800	693 - 1,290	180	935	(8)	Y	ASL
	7439-97-6	Mercury	0.08	2.90	mg/kg	LV-SS-CCA-GEO4-0-1	7/11	0.050 - 0.12	2.90	0.10 - 0.12	2.30	0.10	(7)	Y	ASL
	7440-02-0	Nickel	15.80	1,300	mg/kg	LV-SS-CCA-GEO4-0-1	11/11	-	1300	10.8 - 14.5	160	12.9	(8)	Y	ASL
	7440-09-7	Potassium	358(B)	1,200	mg/kg	LV-SS-CCA-GEO3-0-1	9/11	600 - 670	612	763 - 949	NA	878	(8)	N	NUT
	7782-49-2	Selenium	1.90	7.30	mg/kg	LV-SS-CCA-GEO2-0-1	4/11	1.10 - 4.70	7.30	0.65 - 1.20	39	0.94	(8)	N	BSL
	7440-22-4	Silver	0.25(B)	13	mg/kg	LV-SS-CCA-GEO4-0-1	6/11	0.22 - 1.10	0.74	0.60 - 0.63	39	0.74	(8)	N	BSL
	7440-23-5	Sodium	165(B)	348(B)	mg/kg	LI-CCA-05-SS	5/11	540 - 670	348	175 - 1,290	NA	550	(8)	N	NUT
	7440-28-0	Thallium	3.5	3.6	mg/kg	LV-SS-CCA-GEO3-0-1	2/11	1.50 - 3.40	3.60	-	0.52	NV	-	Y	ASL
	7440-62-2	Vanadium	9.3(B)	72	mg/kg	LV-SS-CCA-GEO2-0-1	11/11	-	72	13.4 - 20.5	55	17	(8)	Y	ASL
	7440-66-6	Zinc	214	2,000	mg/kg	LV-SS-CCA-GEO4-0-1	11/11	-	2,000	68.8 - 126	2,300	94	(8)	N	BSL

Footnotes:

NA = Not available

- = Not applicable

NV = No Value

(1) Qualifier Definitions:

J - Estimated value

B - Value is less than the detection limit but greater than the instrument detection limit

D - Value obtained from dilution of the sample

L - Value may be biased low

(2) The maximum detected concentration is the concentration used for screening.

(3) The background values listed are the range of values detected from the background locations (LV-BSB1-00, LV-BSB2-00, and LV-BSB3-00). Shown for discussion purposes only, not for screening of chemicals.

(4) The Screening Toxicity values are the Region IX PRGs for residential soil. Table updated 10/1/02.

(5) Rationale Codes:

Selection Reason:

Above Screening Levels (ASL)

Class A Carcinogen (CAC)

No Screening Value (NV)

Deletion Reason:

Essential Nutrient (NUT)

Below Screening Level (BSL)

(6) The Screening Toxicity value for 2-Methylnaphthalene is the Region III RBC for residential soil. Table updated 10/8/04.

(7) Potential ARAR/TBC values are from the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046. Value is the recommended soil cleanup objective, as per NYSDEC TAGM #4046.

(8) Potential ARAR/TBC values are from the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046. Value is the average of site background data.

(9) Used trans-1,2-Dichloroethene value.

TABLE 2.6
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN
Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4, 6)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
CCA All Soil	67-64-1	Acetone	0.005(J)	0.005(J)	mg/kg	LV-SS-CCA-GEO1-0-1	1/29	0.010 - 1.40	0.005	-	160	0.20	(7)	N	BSL, IFD
	71-43-2	Benzene	0.001(J)	0.001(J)	mg/kg	LV-SB-CCA-GEO5-2-4	1/29	0.010 - 1.40	0.001	-	0.60	0.06	(7)	Y	CAC
	74-87-3	Chloromethane	1.7(J)	1.7(J)	mg/kg	LV-SB-CCA-GEO5-2-4	1/29	0.010 - 1.40	1.70	-	1.20	-	-	N	IFD
	156-59-2	cis-1,2-Dichloroethene	0.0005(J)	0.83	mg/kg	LV-SB-CCA-GEO6-1-2	2/22	0.010 - 0.06	0.83	-	4.30	0.30	(7, 9)	N	BSL
	100-41-4	Ethylbenzene	0.003(J)	0.003(J)	mg/kg	LV-SB-CCA-GEO4-8-10	1/29	0.010 - 1.40	0.003	-	8.90	5.50	(7)	N	IFD
	108-87-2	Methylcyclohexane	0.0008(J)	1.3(J)	mg/kg	LV-SB-CCA-GEO6-1-2	2/22	0.010 - 0.06	1.30	-	NA	-	-	Y	NV
	75-09-2	MethyleneChloride	0.008(J)	0.008(J)	mg/kg	LI-CCA-05-1.5-2.0	1/29	0.010 - 1.40	0.008	-	9.10	0.10	(7)	N	BSL, IFD
	127-18-4	Tetrachloroethene	0.002(J)	0.002(J)	mg/kg	LV-SS-CCA-GEO2-0-1	1/29	0.010 - 1.40	0.002	-	1.50	-	-	N	BSL, IFD
	108-88-3	Toluene	0.00305(J)	0.005	mg/kg	LV-SB-CCA-GEO5-2-4	2/29	0.010 - 1.40	0.005	-	66	1.50	(7)	N	BSL
	79-01-6	Trichloroethene	0.001(J)	72(D)	mg/kg	LI-CCA-05-1.5-2.0	18/29	0.010 - 0.016	72	-	0.053	1.50	(7)	Y	ASL
	1330-20-7	Xylene (total)	0.07	0.07	mg/kg	LV-SB-CCA-GEO4-8-10	1/29	0.010 - 1.40	0.07	-	27	1.20	(7)	N	BSL, IFD
	83-32-9	Acenaphthene	0.66	3.30	mg/kg	LV-SB-CCA-GEO6-1-2	2/13	0.38 - 9.70	3.30	-	370	50	(7)	N	BSL
	208-96-8	Acenaphthylene	1.90	1.90	mg/kg	LV-SB-CCA-GEO6-1-2	1/13	0.38 - 9.70	1.90	-	NA	41	(7)	Y	NV
	120-12-7	Anthracene	2.80	7.30	mg/kg	LV-SB-CCA-GEO6-1-2	2/13	0.38 - 9.70	7.30	-	2,200	50	(7)	N	BSL
	56-55-3	Benzo(a)anthracene	0.43	29	mg/kg	LV-SB-CCA-GEO6-1-2	4/13	0.38 - 9.70	29	-	0.62	0.22	(7)	Y	ASL
	50-32-8	Benzo(a)pyrene	0.31	29	mg/kg	LV-SB-CCA-GEO6-1-2	4/13	0.38 - 9.70	29	-	0.062	0.061	(7)	Y	ASL
	205-99-2	Benzo(b)fluoranthene	0.51	44	mg/kg	LV-SB-CCA-GEO6-1-2	5/13	0.38 - 9.70	44	-	0.62	1.10	(7)	Y	ASL
	191-24-2	Benzo(g,h,i)perylene	1.70	8.30	mg/kg	LV-SB-CCA-GEO6-1-2	2/13	0.38 - 9.70	8.30	-	NA	50	(7)	Y	NV
	207-08-9	Benzo(k)fluoranthene	0.48	18	mg/kg	LV-SB-CCA-GEO6-1-2	3/13	0.38 - 9.70	18	-	6.20	1.10	(7)	Y	ASL
	92-52-4	Biphenyl	0.86	0.86	mg/kg	LV-SB-CCA-GEO6-1-2	1/13	0.38 - 9.70	0.86	-	300	-	-	N	BSL
	117-81-7	Bis(2-ethylhexyl)phthalate	0.32	11	mg/kg	LV-SS-CCA-GEO4-0-1	2/13	0.38 - 9.70	11	-	35	50	(7)	N	BSL
	86-74-8	Carbazole	1.90	2.20	mg/kg	LV-SB-CCA-GEO5-2-4	2/13	0.38 - 9.70	2.20	-	24	-	-	N	BSL
	218-01-9	Chrysene	0.50	40	mg/kg	LV-SB-CCA-GEO6-1-2	5/13	0.38 - 9.70	40	-	62	0.40	(7)	N	BSL
	53-70-3	Dibenzo(a,h)anthracene	0.94	0.94	mg/kg	LV-SB-CCA-GEO6-1-2	1/13	0.38 - 9.70	0.94	-	0.062	0.014	(7)	Y	ASL
	132-64-9	Dibenzofuran	0.86	3	mg/kg	LV-SB-CCA-GEO6-1-2	2/13	0.38 - 9.70	3	-	29	6.2	(7)	N	BSL
	206-44-0	Fluoranthene	0.51	45	mg/kg	LV-SB-CCA-GEO6-1-2	6/13	0.38 - 9.70	45.00	-	230	50	(7)	N	BSL
	86-73-7	Fluorene	1.50	3	mg/kg	LV-SB-CCA-GEO6-1-2	2/13	0.38 - 9.70	3	-	270	50	(7)	N	BSL
	193-39-5	Indeno(1,2,3-cd)pyrene	2	10	mg/kg	LV-SB-CCA-GEO6-1-2	2/13	0.38 - 9.70	10	-	0.62	3.20	(7)	Y	ASL
	91-57-6	2-Methylnaphthalene	0.67	4.00	mg/kg	LV-SB-CCA-GEO6-1-2	3/13	0.38 - 9.70	4.00	-	31	36.4	(7)	N	BSL
	91-20-3	Naphthalene	1.10	8.50	mg/kg	LV-SB-CCA-GEO6-1-2	2/13	0.38 - 9.70	8.50	-	5.6	13	(7)	Y	ASL
	85-01-8	Phenanthrene	0.66	20	mg/kg	LV-SB-CCA-GEO6-1-2	5/13	0.38 - 9.70	20	-	NA	50	(7)	Y	NV
	129-00-0	Pyrene	0.49	43	mg/kg	LV-SB-CCA-GEO6-1-2	7/13	0.38 - 9.70	43	-	230	50	(7)	N	BSL
	7429-90-5	Aluminum	3,760	14,000	mg/kg	LV-SS-CCA-GEO3-0-1	15/15	-	14,000	8,180 - 14,300	7,600	11,213	(8)	Y	ASL
	7440-36-0	Antimony	1.2(B)	50	mg/kg	LI-CCA-05-SS	8/15	1.10 - 8.10	50	-	3.1	NV	-	Y	ASL
	7440-38-2	Arsenic	4.60	40	mg/kg	LI-CCA-05-SS	15/15	-	40	7.60 - 13.8	0.39	10.3	(8)	Y	ASL, CAC
	7440-39-3	Barium	60.1	460	mg/kg	LV-SS-CCA-GEO4-0-1	15/15	-	460	85.5 - 246	540	131	(8)	N	BSL
	7440-41-7	Beryllium	0.32(BJ)	2.30	mg/kg	LV-SS-CCA-GEO3-0-1	14/15	0.67	2.30	0.27 - 0.64	15	0.39	(8)	N	BSL

TABLE 2.6

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4, 6)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
CCA All Soil	7440-43-9	Cadmium	0.31(B)	41	mg/kg	LV-SS-CCA-GEO4-0-1	11/15	0.21 - 0.23	41	0.44 - 0.64	3.70	0.54	(8)	Y	ASL
	7440-70-2	Calcium	1090(B)	46,000	mg/kg	LV-SS-CCA-GEO3-0-1	15/15	-	46,000	449 - 20,700	NA	6,258	(8)	N	NUT
	7440-47-3	Chromium	10.2	1,510	mg/kg	LI-CCA-05-SS	15/15	-	1,510	10.7 - 16.3	30	12.73	(8)	Y	ASL, CAC
	7440-48-4	Cobalt	4(B)	15	mg/kg	LV-SS-CCA-GEO4-0-1	15/15	-	15	5.00 - 9.90	900	7.18	(8)	N	BSL
	7440-50-8	Copper	30	1,780	mg/kg	LI-CCA-05-1.5-2.0	15/15	-	1,780	15.9 - 25	310	20	(8)	Y	ASL
	7439-89-6	Iron	16,600	69,000	mg/kg	LV-SS-CCA-GEO2-0-1	15/15	-	69,000	16,000 - 26,400	2,300	20,717	(8)	Y	ASL
	7439-92-1	Lead	15.70	2,100	mg/kg	LV-SS-CCA-GEO2-0-1	15/15	-	2,100	9.60 - 76	400	32	(8)	Y	ASL
	7439-95-4	Magnesium	1,200	9,600	mg/kg	LV-SS-CCA-GEO3-0-1	15/15	-	9,600	1,830 - 3,680	NA	2,957	(8)	N	NUT
	7439-96-5	Manganese	226	2,480	mg/kg	LI-CCA-06-05-07	15/15	-	2,480	693 - 1,290	180	917	(8)	Y	ASL
	7439-97-6	Mercury	0.08	2.90	mg/kg	LV-SS-CCA-GEO4-0-1	7/15	0.050 - 0.12	2.90	0.10 - 0.12	2.30	0.10	(7)	Y	ASL
	7440-02-0	Nickel	14.8	1,300	mg/kg	LV-SS-CCA-GEO4-0-1	15/15	-	1,300	10.6 - 19.9	160	15.9	(8)	Y	ASL
	7440-09-7	Potassium	358(B)	1,200	mg/kg	LV-SS-CCA-GEO3-0-1	13/15	600 - 670	1,200	763 - 1,330	NA	1,039	(8)	N	NUT
	7782-49-2	Selenium	1.90	7.30	mg/kg	LV-SS-CCA-GEO2-0-1	4/15	1.10 - 4.70	7.30	0.43 - 1.20	39	0.63	(8)	N	BSL
	7440-22-4	Silver	0.25(B)	13	mg/kg	LV-SS-CCA-GEO4-0-1	8/15	0.21 - 1.10	13	0.60 - 0.98	39	0.79	(8)	N	BSL
	7440-23-5	Sodium	114(B)	348(B)	mg/kg	LI-CCA-05-SS	9/15	540 - 670	348	121 - 1,290	NA	399	(8)	N	NUT
	7440-28-0	Thallium	3.50	3.60	mg/kg	LV-SS-CCA-GEO3-0-1	2/15	1.50 - 3.40	3.60	-	0.52	NV	-	Y	ASL
	7440-62-2	Vanadium	9.3(B)	72	mg/kg	LV-SS-CCA-GEO2-0-1	15/15	-	72	12.9 - 25.85	55	17	(8)	Y	ASL
	7440-66-6	Zinc	74.3	2,000	mg/kg	LV-SS-CCA-GEO4-0-1	15/15	-	2,000	68.8 - 126	2,300	89	(8)	N	BSL

Footnotes:

NA = Not available

- = Not applicable

NV = No Value

(1) Qualifier Definitions:
J - Estimated value
B - Value is less than the detection limit but greater than the instrument detection limit
D - Value obtained from dilution of the sample

(2) The maximum detected concentration is the concentration used for screening.

(3) The background values listed are the range of values detected from the background locations (LV-BSB1-00, LV-BSB1-04, LV-BSB2-00, LV-BSB2-08, LV-BSB3-00, and LV-BSB3-04). Shown for discussion purposes only, not for screening of chemicals.

(4) The Screening Toxicity values are the Region IX PRGs for residential soil. Table updated 10/1/02.

(5) Rationale Codes:
Selection Reason: Above Screening Levels (ASL)
Class A Carcinogen (CAC)
No Screening Value (NV)
Deletion Reason: Infrequent Detection (IFD)
Essential Nutrient (NUT)
Below Screening Level (BSL)

(6) The Screening Toxicity value for 2-Methylnaphthalene is the Region III RBC for residential soil. Table updated 10/8/04.

(7) Potential ARAR/TBC values are from the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046. Value is the recommended soil cleanup objective, as per NYSDEC TAGM #4046.

(8) Potential ARAR/TBC values are from the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046. Value is the average of site background data.

(9) Used trans-1,2-Dichloroethene value.

TABLE 2.7

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4, 6)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
RRAA Surface Soil	67-64-1	Acetone	0.00675(J)	0.00675(J)	mg/kg	LV-SS-RRAA-GEO8-0-1	1/12	0.010 - 0.015	0.0068	-	160	0.20	(7)	N	BSL
	75-69-4	Trichlorofluoromethane	0.003(J)	0.005(J)	mg/kg	LV-SS-RRAA-GEO8-0-1	1/12	0.010 - 0.016	0.005	-	39	-	-	N	BSL
	208-96-8	Acenaphthylene	0.061(J)	0.50	mg/kg	LV-SS-RRAA-GEO9-0-1	6/12	0.35 - 0.48	0.50	-	NA	41	(7)	Y	NV
	120-12-7	Anthracene	0.0625(J)	0.39(J)	mg/kg	LV-SS-RRAA-GEO9-0-1	3/12	0.35 - 0.48	0.39	-	2,200	50	(7)	N	BSL
	100-52-7	Benzaldehyde	0.11(J)	0.11(J)	mg/kg	LV-SS-RRAA-GEO12-0-1	1/12	0.35 - 0.48	0.11	-	610	-	-	N	BSL
	56-55-3	Benzo(a)anthracene	0.044(J)	1.60	mg/kg	LV-SS-RRAA-GEO9-0-1	11/12	0.44	1.60	-	0.62	0.22	(7)	Y	ASL
	50-32-8	Benzo(a)pyrene	0.05(J)	1.60	mg/kg	LV-SS-RRAA-GEO9-0-1	11/12	0.44	1.60	-	0.062	0.061	(7)	Y	ASL
	205-99-2	Benzo(b)fluoranthene	0.06(J)	1.50	mg/kg	LV-SS-RRAA-GEO9-0-1	11/12	0.44	1.50	-	0.62	1.10	(7)	Y	ASL
	191-24-2	Benzo(g,h,i)perylene	0.038(J)	0.83	mg/kg	LV-SS-RRAA-GEO9-0-1	11/12	0.44	0.83	-	NA	50	(7)	Y	NV
	207-08-9	Benzo(k)fluoranthene	0.051(J)	1.60	mg/kg	LV-SS-RRAA-GEO9-0-1	11/12	0.44	1.60	-	6.20	1.10	(7)	N	BSL
	117-81-7	Bis(2-ethylhexyl)phthalate	0.49	8.7(D)	mg/kg	LV-SS-RRAA-GEO2-0-1	10/12	0.44	8.70	-	35	50	(7)	N	BSL
	86-74-8	Carbazole	0.1(J)	0.17(J)	mg/kg	LV-SS-RRAA-GEO9-0-1	3/12	0.35 - 0.48	0.17	-	24	-	-	N	BSL
	218-01-9	Chrysene	0.057(J)	1.60	mg/kg	LV-SS-RRAA-GEO9-0-1	11/12	0.44	1.60	-	62	0.40	(7)	N	BSL
	110-82-7	Cyclohexane	0.004(J)	0.004(J)	mg/kg	LV-SS-RRAA-GEO1-0-1	1/12	0.010 - 0.016	0.004	-	950	-	-	N	BSL
	53-70-3	Dibenzo(a,h)anthracene	0.08(J)	0.43	mg/kg	LV-SS-RRAA-GEO9-0-1	4/12	0.35 - 0.48	0.43	-	0.062	0.014	(7)	Y	ASL
	132-64-9	Dibenzofuran	0.096(J)	0.096(J)	mg/kg	LV-SS-RRAA-GEO9-0-1	1/12	0.35 - 0.85	0.096	-	29	6.2	(7)	N	BSL
	206-44-0	Fluoranthene	0.098(J)	2.80	mg/kg	LV-SS-RRAA-GEO9-0-1	11/12	0.44	2.80	-	230	50	(7)	N	BSL
	86-73-7	Fluorene	0.19(J)	0.19(J)	mg/kg	LV-SS-RRAA-GEO9-0-1	1/12	0.35 - 0.85	0.19	-	270	50	(7)	N	BSL
	193-39-5	Indeno(1,2,3-cd)pyrene	0.04(J)	1.20	mg/kg	LV-SS-RRAA-GEO9-0-1	11/12	0.44	1.20	-	0.62	3.20	(7)	Y	ASL
	91-57-6	2-Methylnaphthalene	0.11(J)	0.11(J)	mg/kg	LV-SS-RRAA-GEO9-0-1	1/12	0.35 - 0.85	0.11	-	31	36.4	(7)	N	BSL
	91-20-3	Naphthalene	0.064(J)	0.064(J)	mg/kg	LV-SS-RRAA-GEO9-0-1	1/12	0.35 - 0.85	0.064	-	5.6	13	(7)	N	BSL
	85-01-8	Phenanthrene	0.042(J)	2.00	mg/kg	LV-SS-RRAA-GEO9-0-1	11/12	0.44	2.00	-	NA	50	(7)	Y	ASL
	129-00-0	Pyrene	0.083(J)	3.00	mg/kg	LV-SS-RRAA-GEO9-0-1	11/12	0.44	3.00	-	230	50	(7)	N	BSL
	7429-90-5	Aluminum	7,190	14,500	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	14,500	8,180 - 12,000	7,600	10,493	(8)	Y	ASL
	7440-38-2	Arsenic	8.3(J)	14(J)	mg/kg	LV-SS-RRAA-GEO2-0-1	12/12	-	14	7.60 - 10.7	0.39	8.90	(8)	Y	ASL, CAC
	7440-39-3	Barium	85	215	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	215	85.5 - 89.1	540	88	(8)	N	BSL
	7440-41-7	Beryllium	0.27(J)	0.68(J)	mg/kg	LV-SS-RRAA-GEO12-0-1	11/12	0.61	0.68	0.27 - 0.33	15	0.30	(8)	N	BSL
	7440-43-9	Cadmium	0.2(J)	1.00	mg/kg	LV-SS-RRAA-GEO1-0-1	12/12	-	1.00	0.47 - 0.64	3.70	0.57	(8)	N	BSL
	7440-70-2	Calcium	611(J)	28,500	mg/kg	LV-SS-RRAA-GEO11-0-1	12/12	-	28,500	3,800 - 20,700	NA	11,336	(8)	N	NUT
	7440-47-3	Chromium	8.90	20	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	20	10.7 - 12.7	30	12	(8)	Y	CAC
	7440-48-4	Cobalt	5.6(J)	10.7	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	10.7	5.00 - 6.60	900	5.73	(8)	N	BSL
	7440-50-8	Copper	13.1(J)	103(J)	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	103	15.9 - 22.5	310	19	(8)	N	BSL
	7439-89-6	Iron	18300(J)	26300(J)	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	26,300	16,000 - 19,100	2,300	17,933	(8)	Y	ASL
	7439-92-1	Lead	20	211	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	211	21 - 76	400	50	(8)	N	BSL
	7439-95-4	Magnesium	1,830	3,700	mg/kg	LV-SS-RRAA-GEO12-0-1	12/12	-	3,700	1,830 - 3,680	NA	2,693	(8)	N	NUT
	7439-96-5	Manganese	462	1,180	mg/kg	LV-SS-RRAA-GEO7-0-1	12/12	-	1,180	693 - 1,290	180	935	(8)	Y	ASL
	7439-97-6	Mercury	0.07	0.53	mg/kg	LV-SS-RRAA-GEO10-0-1	10/12	0.10 - 0.11	0.53	0.10 - 0.12	2.30	0.10	(7)	N	BSL
	7440-02-0	Nickel	13.3	31.5	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	31.5	10.6 - 14.5	160	12.9	(8)	N	BSL

TABLE 2.7

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4, 6)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
RRAA Surface Soil	7440-09-7	Potassium	581(J)	1,400	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	1,400	763 - 949	NA	878	(8)	N	NUT
	7782-49-2	Selenium	1.5(J)	1.5(J)	mg/kg	LV-SS-RRAA-GEO11-0-1	1/12	4.30 - 8.00	1.50	0.65 - 1.20	39	0.94	(8)	N	BSL
	7440-23-5	Sodium	24.8(J)	107(J)	mg/kg	LV-SS-RRAA-GEO2-0-1	11/12	610	107	175 - 1,290	NA	550	(8)	N	NUT
	7440-28-0	Thallium	0.34(J)	1(J)	mg/kg	LV-SS-RRAA-GEO4-0-1	8/12	3.10 - 5.70	1.00	-	0.52	NV	-	Y	ASL
	7440-62-2	Vanadium	11	21	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	21	13.4 - 20.5	55	17	(8)	N	BSL
	7440-66-6	Zinc	62	250	mg/kg	LV-SS-RRAA-GEO8-0-1	7/7	-	250	68.8 - 126	2,300	94	(8)	N	BSL

Footnotes:

NA = Not available

- = Not applicable

NV = No Value

(1) Qualifier Definitions: J - Estimated value

D - Value obtained from dilution of the sample

(2) The maximum detected concentration is the concentration used for screening.

(3) The background values listed are the range of values detected from the background locations (LV-BSB1-00, LV-BSB2-00, and LV-BSB3-00). Shown for discussion purposes only, not for screening of chemicals.

(4) The Screening Toxicity values are the Region IX PRGs for residential soil. Table updated 10/1/02.

(5) Rationale Codes:

Selection Reason: Above Screening Levels (ASL)

Class A Carcinogen (CAC)

No Screening Value (NV)

Deletion Reason: Essential Nutrient (NUT)

Below Screening Level (BSL)

(6) The Screening Toxicity value for 2-Methylnaphthalene is the Region III RBC for residential soil. Table updated 10/8/04.

(7) Potential ARAR/TBC values are from the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046. Value is the recommended soil cleanup objective, as per NYSDEC TAGM #4046.

(8) Potential ARAR/TBC values are from the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046. Value is the average of site background data.

TABLE 2.8

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4, 6)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
RRAA All Soil	67-64-1	Acetone	0.003(J)	0.00675(J)	mg/kg	LV-SS-RRAA-GEO8-0-1	2/16	0.010 - 0.015	0.0068	-	160	0.20	(7)	N	BSL
	75-69-4	Trichlorofluoromethane	0.003(J)	0.0035(J)	mg/kg	LV-SS-RRAA-GEO8-0-1	2/16	0.010 - 0.016	0.004	-	39	-	-	N	BSL
	208-96-8	Acenaphthylene	0.061(J)	0.50	mg/kg	LV-SS-RRAA-GEO9-0-1	6/16	0.34 - 0.48	0.50	-	NA	41	(7)	Y	NV
	120-12-7	Anthracene	0.0625(J)	0.39(J)	mg/kg	LV-SS-RRAA-GEO9-0-1	3/16	0.34 - 0.48	0.39	-	2,200	50	(7)	N	BSL
	100-52-7	Benzaldehyde	0.11(J)	0.11(J)	mg/kg	LV-SS-RRAA-GEO12-0-1	1/16	0.34 - 0.48	0.11	-	610	-	-	N	BSL
	56-55-3	Benzo(a)anthracene	0.044(J)	1.60	mg/kg	LV-SS-RRAA-GEO9-0-1	11/16	0.34 - 0.44	1.60	-	0.62	0.22	(7)	Y	ASL
	50-32-8	Benzo(a)pyrene	0.05(J)	1.60	mg/kg	LV-SS-RRAA-GEO9-0-1	11/16	0.34 - 0.44	1.60	-	0.062	0.061	(7)	Y	ASL
	205-99-2	Benzo(b)fluoranthene	0.06(J)	1.50	mg/kg	LV-SS-RRAA-GEO9-0-1	11/16	0.34 - 0.44	1.50	-	0.62	1.10	(7)	Y	ASL
	191-24-2	Benzo(g,h,i)perylene	0.038(J)	0.83	mg/kg	LV-SS-RRAA-GEO9-0-1	11/16	0.34 - 0.44	0.83	-	NA	50	(7)	Y	NV
	207-08-9	Benzo(k)fluoranthene	0.051(J)	1.60	mg/kg	LV-SS-RRAA-GEO9-0-1	11/16	0.34 - 0.44	1.60	-	6.20	1.10	(7)	N	BSL
	117-81-7	Bis(2-ethylhexyl)phthalate	0.49	8.7(D)	mg/kg	LV-SS-RRAA-GEO2-0-1	10/16	0.34 - 0.44	8.70	-	35	50	(7)	N	BSL
	86-74-8	Carbazole	0.1(J)	0.17(J)	mg/kg	LV-SS-RRAA-GEO9-0-1	3/16	0.34 - 0.48	0.17	-	24	-	-	N	BSL
	218-01-9	Chrysene	0.057(J)	1.80	mg/kg	LV-SS-RRAA-GEO9-0-1	11/16	0.34 - 0.44	1.80	-	62	0.40	(7)	N	BSL
	110-82-7	Cyclohexane	0.004(J)	0.004(J)	mg/kg	LV-SB-RRAA-GEO1-0-1	1/16	0.010 - 0.016	0.004	-	950	-	-	N	BSL
	53-70-3	Dibenzo(a,h)anthracene	0.08(J)	0.43	mg/kg	LV-SS-RRAA-GEO9-0-1	4/16	0.34 - 0.48	0.43	-	0.062	0.014	(7)	Y	ASL
	132-64-9	Dibenzofuran	0.096(J)	0.096(J)	mg/kg	LV-SS-RRAA-GEO9-0-1	1/16	0.34 - 0.85	0.096	-	29	6.2	(7)	N	BSL
	206-44-0	Fluoranthene	0.098(J)	2.80	mg/kg	LV-SS-RRAA-GEO9-0-1	11/16	0.34 - 0.44	2.80	-	230	50	(7)	N	BSL
	86-73-7	Fluorene	0.19(J)	0.19(J)	mg/kg	LV-SS-RRAA-GEO9-0-1	1/16	0.34 - 0.85	0.19	-	270	50	(7)	N	BSL
	193-39-5	Indeno(1,2,3-cd)pyrene	0.04(J)	1.20	mg/kg	LV-SS-RRAA-GEO9-0-1	11/16	0.34 - 0.44	1.20	-	0.62	3.20	(7)	Y	ASL
	91-57-6	2-Methylnaphthalene	0.11(J)	0.11(J)	mg/kg	LV-SS-RRAA-GEO9-0-1	1/16	0.34 - 0.85	0.11	-	31	36.4	(7)	N	BSL
	91-20-3	Naphthalene	0.064(J)	0.064(J)	mg/kg	LV-SS-RRAA-GEO9-0-1	1/16	0.34 - 0.85	0.064	-	5.60	13	(7)	N	BSL
	85-01-8	Phenanthrene	0.042(J)	2.00	mg/kg	LV-SS-RRAA-GEO9-0-1	11/16	0.34 - 0.44	2.00	-	NA	50	(7)	Y	NV
	129-00-0	Pyrene	0.083(J)	3.00	mg/kg	LV-SS-RRAA-GEO9-0-1	11/16	0.34 - 0.44	3.00	-	230	50	(7)	N	BSL
	7429-90-5	Aluminum	7,190	14,500	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	14,500	8,180 - 14,300	7,600	11,213	(8)	Y	ASL
	7440-38-2	Arsenic	8.3(J)	14(J)	mg/kg	LV-SS-RRAA-GEO2-0-1	12/12	-	14	-	0.39	10.3	(8)	Y	ASL, CAC
	7440-39-3	Barium	85	215	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	215	7.60 - 13.8	540	131	(8)	N	BSL
	7440-41-7	Beryllium	0.27(J)	0.68(J)	mg/kg	LV-SS-RRAA-GEO12-0-1	11/12	0.61	0.68	85.5 - 246	15	0.39	(8)	N	BSL
	7440-43-9	Cadmium	0.2(J)	1.00	mg/kg	LV-SB-RRAA-GEO1-0-1	12/12	-	1.00	0.27 - 0.64	3.70	0.54	(8)	N	BSL
	7440-70-2	Calcium	611(J)	28,500	mg/kg	LV-SS-RRAA-GEO11-0-1	12/12	-	28,500	0.44 - 0.64	NA	6,258	(8)	N	NUT
	7440-47-3	Chromium	8.90	20	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	20	449 - 20,700	30	12.73	(8)	Y	CAC
	7440-48-4	Cobalt	5.6(J)	10.7	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	10.7	10.7 - 16.3	900	7.18	(8)	N	BSL
	7440-50-8	Copper	13.1(J)	103(J)	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	103	5.00 - 9.90	310	20	(8)	N	BSL
	7439-89-6	Iron	16300(J)	26300(J)	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	26,300	15.9 - 25	2,300	20,717	(8)	Y	ASL
	7439-92-1	Lead	20	211	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	211	16,000 - 26,400	400	32	(8)	N	BSL
	7439-95-4	Magnesium	1,830	3,700	mg/kg	LV-SS-RRAA-GEO12-0-1	12/12	-	3,700	9.60 - 76	NA	2,957	(8)	N	NUT
	7439-96-5	Manganese	462	1,180	mg/kg	LV-SS-RRAA-GEO7-0-1	12/12	-	1,180	1,830 - 3,680	180	917	(8)	Y	ASL
	7439-97-6	Mercury	0.07	0.53	mg/kg	LV-SS-RRAA-GEO10-0-1	10/12	0.10 - 0.11	0.53	693 - 1,290	2.3	0.10	(7)	N	BSL
	7440-02-0	Nickel	13.3	31.5	mg/kg	LV-SS-RRAA-GEO9-0-1	12/12	-	31.5	0.10 - 0.12	160	15.9	(8)	N	BSL

TABLE 2.8

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4, 6)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
RRAA All Soil	7440-09-7	Potassium	581(J)	1,400	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	1,400	10.6 - 19.9	NA	1,039	(8)	N	NUT
	7782-49-2	Selenium	1.5(J)	1.5(J)	mg/kg	LV-SS-RRAA-GEO11-0-1	1/12	4.30 - 8.00	1.50	763 - 1,330	39	0.63	(8)	N	BSL
	7440-23-5	Sodium	24.6(J)	107(J)	mg/kg	LV-SS-RRAA-GEO2-0-1	11/12	610	107	0.43 - 1.20	NA	399	(8)	N	NUT
	7440-28-0	Thallium	0.34(J)	1(J)	mg/kg	LV-SS-RRAA-GEO4-0-1	8/12	3.10 - 5.70	1.00	121 - 1,290	0.52	NV	-	Y	ASL
	7440-62-2	Vanadium	10.6	20.9	mg/kg	LV-SS-RRAA-GEO8-0-1	12/12	-	20.9	-	55	17	(8)	N	BSL
	7440-66-6	Zinc	62	250	mg/kg	LV-SS-RRAA-GEO8-0-1	7/7	-	250	12.9 - 25.85	2,300	89	(8)	N	BSL

Footnotes:

NA = Not available

- = Not applicable

NV = No Value

(1) Qualifier Definitions: J - Estimated value

D - Value obtained from dilution of the sample

(2) The maximum detected concentration is the concentration used for screening.

(3) The background values listed are the range of values detected from the background locations (LV-BSB1-00, LV-BSB1-04, LV-BSB2-00, LV-BSB2-08, LV-BSB3-00, and LV-BSB3-04). Shown for discussion purposes only, not for screening of chemicals.

(4) The Screening Toxicity values are the Region IX PRGs for residential soil. Table updated 10/1/02.

(5) Rationale Codes:

Selection Reason: Above Screening Levels (ASL)

Class A Carcinogen (CAC)

No Screening Value (NV)

Deletion Reason: Essential Nutrient (NUT)

Below Screening Level (BSL)

(6) The Screening Toxicity value for 2-Methylnaphthalene is the Region III RBC for residential soil. Table updated 10/8/04.

(7) Potential ARAR/TBC values are from the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046. Value is the recommended soil cleanup objective, as per NYSDEC TAGM #4046.

(8) Potential ARAR/TBC values are from the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046. Value is the average of site background data.

TABLE 2.9

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater (tap water)

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
Process Water	67-64-1	Acetone (Total)	0.85	2.2	ug/l	MWEDSA-1	4/26	0.50 - 5.70	2.2	-	61	50	(7)	N	BSL
	71-43-2	Benzene (Total)	2.66(J)	2.66(J)	ug/l	BIAMW-2	1/32	0.50 - 5.00	2.66	-	0.34	1	(6)	Y	ASL, CAC
	75-15-0	Carbon Disulfide (Total)	0.38	0.38	ug/l	PZ-47D	1/33	0.50 - 5.00	0.38	-	100	-	-	N	BSL, IFD
	75-35-4	1,1-Dichloroethylene (Total)	2.82	2.91	ug/l	MWD-2	2/33	0.50 - 5.00	2.91	-	34	5	(6)	N	BSL
	156-59-2	cis-1,2-Dichloroethylene (Total)	0.6(J)	44	ug/l	BIAMW-6	7/33	0.50 - 1.00	44	-	6.1	5	(6)	Y	ASL
	156-60-5	trans-1,2-Dichloroethene (Total)	2.64(J)	2.64(J)	ug/l	BIAMW-2	1/33	0.50 - 5.00	2.64	-	12	5	(6)	N	BSL, IFD
	78-93-3	Methyl ethyl ketone (Total)	2.90	2.90	ug/l	PZ-47D	1/26	1.00 - 5.00	2.90	-	190	50	(7)	N	BSL, IFD
	127-18-4	Tetrachloroethylene (Total)	0.2(J)	0.67	ug/l	MWCCA-3	2/33	0.50 - 5.00	0.67	-	0.66	5	(6)	Y	ASL
	108-88-3	Toluene (Total)	0.22	0.22	ug/l	PZ-47D	1/32	0.50 - 5.00	0.22	-	72	5	(6)	N	BSL, IFD
	79-1-6	Trichloroethylene (Total)	0.21(J)	101.5(D)	ug/l	MWD-2	21/33	0.50 - 1.00	102	-	0.028	5	(6)	Y	ASL
	1330-20-7	Xylene (Total)	0.14	0.14	ug/l	PZ-47D	1/32	0.50 - 5	0.14	-	21	5	(6)	N	BSL, IFD
	84-74-2	Di-n-butylphthalate (Total)	1(J)	1(J)	ug/l	BIAMW-5	1/12	5	1.00	-	360	50	(6)	N	BSL
	7429-90-5	Aluminum (Total)	92(B)	5710(J)	ug/l	BIAMW-7	15/19	200	5,710	-	3,600	-	-	Y	ASL
	7440-38-2	Arsenic (Total)	2.2(B)	6.4(B)	ug/l	MWBIA-8	5/21	1.60 - 15	6.40	-	0.045	25	(6)	Y	ASL
	7440-39-3	Barium (Total)	60.1(B)	313	ug/l	PZ-48	17/21	200	313	-	260	1,000	(6)	Y	ASL
	7440-41-7	Beryllium (Total)	0.12(B)	0.275(B)	ug/l	PZ-47D	4/21	0.01 - 5.00	0.28	-	7.3	3	(7)	N	BSL
	7440-43-9	Cadmium (Total)	0.36(B)	0.6(B)	ug/l	PZ-47D	2/21	0.40 - 5.00	0.60	-	1.8	5	(6)	N	BSL
	7440-70-2	Calcium (Total)	17,600	76,300	ug/l	MWD-1	21/21	-	76,300	-	NA	-	-	N	NUT
	7440-47-3	Chromium (Total)	1.9(B)	104.7(J)	ug/l	PZ-47D	15/19	0.50 - 10	105	-	11	50	(6)	Y	ASL
	7440-48-4	Cobalt (Total)	0.645(B)	12.5(B)	ug/l	BIAMW-4	10/21	0.70 - 50	12.50	-	73	-	-	N	BSL
	7440-50-8	Copper (Total)	0.73(B)	24.35(BJ)	ug/l	PZ-47D	8/21	0.70 - 25	24.35	-	150	200	(6)	N	BSL
	57-12-5	Cyanide (Total)	5.225(B)	5.225(B)	ug/l	PZ-47D	1/9	3.50 - 10	5.23	-	73	200	(6)	N	BSL
	7439-89-6	Iron (Total)	44.4(B)	13300	ug/l	BIAMW-7	19/20	1000	13,300	-	1,100	300	(6)	Y	ASL
	7439-92-1	Lead (Total)	4.30	17.65(J)	ug/l	PZ-47D	4/21	1.70 - 10	17.65	-	15	25	(6)	Y	ASL
	7439-95-4	Magnesium (Total)	2370(B)	10,350	ug/l	PZ-47D	21/21	-	10,350	-	NA	35,000	(7)	N	NUT
	7439-96-5	Manganese (Total)	2(B)	1,100	ug/l	MWEDSA-1	19/21	15	1,100	-	88	300	(6)	Y	ASL
	7440-02-0	Nickel (Total)	1.6(B)	75.6	ug/l	BIAMW-7	13/21	1.30 - 40	76	-	73	100	(6)	Y	ASL
	7440-09-7	Potassium (Total)	759(B)	11,000	ug/l	MWEDSA-1	15/21	5000	11,000	-	NA	-	-	N	NUT
	7440-22-4	Silver (Total)	1.55(B)	1.55(B)	ug/l	PZ-47D	1/21	0.50 - 10	1.55	-	18	50	(6)	N	BSL
	7440-23-5	Sodium (Total)	6,680	41,500	ug/l	BIAMW-5	21/21	-	41,500	-	NA	20,000	(6)	N	NUT
	7440-62-2	Vanadium (Total)	0.72(B)	8.9(B)	ug/l	BIAMW-7	11/21	0.70 - 50	8.90	-	26	-	-	N	BSL
	7440-66-6	Zinc (Total)	0.925(B)	81.15(J)	ug/l	PZ-47D	9/21	1.10 - 60	81	-	1,100	2,000	(7)	N	BSL

Footnotes:

NA = Not available

- = Not applicable

(1) Qualifier Definitions:

J - Estimated

B - Value is less than the detection limit but greater than the instrument detection limit

D - Value obtained from dilution of the sample

TABLE 2.9

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater (tap water)

(2) The maximum detected concentration is the concentration used for screening.

(3) No background samples were taken for groundwater.

(4) The Screening Toxicity values are the Region IX PRGs for tap water. Table updated 10/1/02.

(5) Rationale Codes:

Selection Reason:	Above Screening Levels (ASL)
	Class A Carcinogen (CAC)
	No Screening Value (NV)
Deletion Reason:	Infrequent Detection (IFD)
	Essential Nutrient (NUT)
	Below Screening Level (BSL)

(6) New York State Ambient Water Quality Standards. Values are based on class GA waterbodies.

(7) New York State Ambient Water Quality Guidance Values. Values are based on class GA waterbodies.

TABLE 2.10

SCREENING INHALATION HUMAN HEALTH RISK ASSESSMENT FOR THE VAPOR MIGRATION EXPOSURE PATHWAY

Little Valley Superfund Site

Exposure Point	CAS Number	Detected Volatile Organic Compound	Toxic / Volatile Chemical? (1)	Selected COPC? (2)	Maximum Detected Concentration (Qualifier) (3)	Units	Calculated Exposure Point Concentration (2)	Units	Tier 1 Risk-Based Screening Level (6)	Tier 1 Screening Level Exceeded By Max Detect?	Tier 1 Screening Level Exceeded By EPC?	Tier 2 Risk-Based Screening Level with Semi-Site Specific Attenuation Factor (7)	Tier 2 Screening Level Exceeded By Max Detect?	Tier 2 Screening Level Exceeded By EPC?
Indoor Air	67-64-1	Acetone	Yes	No	2.2	ug/l	Not a COPC	ug/l	220,000	NO	No Value	440,000	NO	No Value
from Groundwater	71-43-2	Benzene	Yes	Yes	2.66(J)	ug/l	0.87	ug/l	1.4	YES	NO	2.8	NO	NO
Volatiles Migration	75-15-0	Carbon Disulfide	Yes	No	0.38	ug/l	Not a COPC	ug/l	560	NO	No Value	1120	NO	No Value
	75-35-4	1,1-Dichloroethylene	Yes	No	2.91	ug/l	Not a COPC	ug/l	190	NO	No Value	380	NO	No Value
	156-59-2	cis-1,2-Dichloroethylene	Yes	Yes	44	ug/l	15.96	ug/l	210	NO	NO	420	NO	NO
	156-60-5	trans-1,2-Dichloroethen	Yes	No	2.64(J)	ug/l	Not a COPC	ug/l	180	NO	No Value	360	NO	No Value
	78-93-3	Methyl ethyl ketone	Yes	No	2.90	ug/l	Not a COPC	ug/l	440,000	NO	No Value	880,000	NO	No Value
	127-18-4	Tetrachloroethylene	Yes	Yes	0.67	ug/l	0.67	ug/l	0.55	YES	YES	1.10	NO	NO
	108-88-3	Toluene	Yes	No	0.22	ug/l	Not a COPC	ug/l	1,500	NO	No Value	3,000	NO	No Value
	79-1-6	Trichloroethylene (4)	Yes	Yes	101.5(D)	ug/l	36	ug/l	0.052	YES	YES	0.104	YES	YES
	79-1-6	Trichloroethylene (4)	Yes	Yes	101.5(D)	ug/l	36	ug/l	2.9	YES	YES	5.8	YES	YES
	1330-20-7	Xylene (5)	Yes	No	0.14	ug/l	Not a COPC	ug/l	23,000	NO	No Value	46,000	NO	No Value
	84-74-2	Di-n-butylphthalate	No	No	1(J)	ug/l	Not a COPC	ug/l	No Value	No Value	No Value	No Value	No Value	No Value

Footnotes:

(1) A chemical is considered "volatile" if its Henry's Law Constant > 10-5 atm-m3/mol (See Table 1 of the Draft Subsurface Vapor Intrusion Guidance [EPA, 2002d])

(2) See RAGS Part D Tables 3.9 RME and CT

(3) Qualifier Definitions: J = Estimated Value
D = Value obtained from dilution of the sample

(4) The two screening levels for TCE reflect the more stringent toxicity factor from the NCEA (2002) [first row] and the less stringent toxicity factor used by CalEPA (OEHHA) [second row]

(5) Screening value for m-Xylene

(6) Groundwater screening values reflect a Soil Gas-to-Indoor Air Attenuation factor of 0.001 and partitioning across the water table that obeys Henry's Law;
Target Carcinogenic Risk is 1x10-6 and Target Non-Carcinogenic Hazard Index is 1.0

(7) Groundwater screening values reflect a Soil Gas-to-Indoor Air Attenuation factor of 0.0005 and partitioning across the water table that obeys Henry's Law;
Target Carcinogenic Risk is 1x10-6 and Target Non-Carcinogenic Hazard is 1.0

TABLE 3.1 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future

Medium: Surface Water

Exposure Medium: Surface Water

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
Surface Water	1,2-Dichloroethane	ug/l	0.50	-	0.5(J)	0.5	ug/l	Max	(2)
	cis-1,2-Dichloroethylene	ug/l	12	-	12	12	ug/l	Max	(2)
	Methyl chloride (chloromethane)	ug/l	3.89	5.54	12	5.54	ug/l	97.5% UCL-C	(3)
	Trichloroethylene	ug/l	6.39	9.09	18.5	9.09	ug/l	97.5% UCL-C	(3)
	Bis(2-ethylhexyl)phthalate (BEHP)	ug/l	5.50	-	5.5(J)	5.5	ug/l	Max	(2)
	Iron	ug/l	1,106	-	2,655	2,655	ug/l	Max	(2)
	Lead	ug/l	8.70	-	15(J)	6.12	ug/l	Ave	(1)
	Manganese	ug/l	124	-	241	241	ug/l	Max	(2)

Footnotes:

Arithmetic mean calculated using detected concentrations.
Average concentration calculated using detected concentrations and 1/2 the SQL for non-detected concentrations.
Codes used for the "EPC Statistic": Maximum Detected Value (Max)
Average Concentration (Ave)
97.5% Chebyshev UCL (97.5% UCL-C)

EPC Rationale:

(1) Based on EPA Technical Review Workgroup for Lead, the EPC is the average concentration.

(2) Based on EPA Guidance, if less than 10 samples are present in a data set, the maximum concentration is used as the EPC.

(3) Non-Parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev UCL was used as the EPC [ProUCL User's Guide, 5/01]

TABLE 3.1 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future

Medium: Surface Water

Exposure Medium: Surface Water

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
Surface Water	1,2-Dichloroethane	ug/l	0.50	-	0.5(J)	0.5	ug/l	Max	(2)
	cis-1,2-Dichloroethylene	ug/l	12	-	12	12	ug/l	Max	(2)
	Methyl chloride (chloromethane)	ug/l	3.89	5.54	12	5.54	ug/l	97.5% UCL-C	(3)
	Trichloroethylene	ug/l	6.39	9.09	18.5	9.09	ug/l	97.5% UCL-C	(3)
	Bis(2-ethylhexyl)phthalate (BEHP)	ug/l	5.50	-	5.5(J)	5.5	ug/l	Max	(2)
	Iron	ug/l	1,106	-	2,655	2,655	ug/l	Max	(2)
	Lead	ug/l	8.70	-	15(J)	6.12	ug/l	Ave	(1)
	Manganese	ug/l	124	-	241	241	ug/l	Max	(2)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Average concentration calculated using detected concentrations and 1/2 the SQL for non-detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)

Average Concentration (Ave)

97.5% Chebyshev UCL (97.5% UCL-C)

EPC Rationale:

(1) Based on EPA Technical Review Workgroup for Lead, the EPC is the average concentration.

(2) Based on EPA Guidance, if less than 10 samples are present in a data set, the maximum concentration is used as the EPC.

(3) Non-Parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev UCL was used as the EPC [ProUCL User's Guide, 5/01]

TABLE 3.2 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
Sediment	Benzo(a)anthracene	mg/kg	0.58	-	1.8(J)	1.80	mg/kg	Max	(1)
	Benzo(a)pyrene	mg/kg	0.61	-	2(J)	2.00	mg/kg	Max	(1)
	Benzo(b)fluoranthene	mg/kg	0.62	-	1.7(J)	1.70	mg/kg	Max	(1)
	Benzo(ghi)perylene	mg/kg	0.41	-	0.9(J)	0.90	mg/kg	Max	(1)
	Bis(2-ethylhexyl)phthalate (BEHP)	mg/kg	12.6	-	40	40	mg/kg	Max	(1)
	Indeno(1,2,3-cd)pyrene	mg/kg	0.41	-	1.2(J)	1.20	mg/kg	Max	(1)
	Phenanthrene	mg/kg	0.59	-	1.8(J)	1.80	mg/kg	Max	(1)
	Aluminum	mg/kg	9,347	-	11,300	11,300	mg/kg	Max	(1)
	Arsenic	mg/kg	6.19	-	9.10	9.10	mg/kg	Max	(1)
	Iron	mg/kg	18,233	-	21,900	21,900	mg/kg	Max	(1)
	Manganese	mg/kg	210	-	417	417	mg/kg	Max	(1)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Codes used for the "EPC Statistic": Maximum Detected Value (Max)

EPC Rationale:

(1) Based on EPA Guidance, if less than 10 samples are present in a data set, the maximum concentration is used as the EPC.

TABLE 3.2 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
Sediment	Benzo(a)anthracene	mg/kg	0.58	-	1.8(J)	1.80	mg/kg	Max	(1)
	Benzo(a)pyrene	mg/kg	0.61	-	2(J)	2.00	mg/kg	Max	(1)
	Benzo(b)fluoranthene	mg/kg	0.62	-	1.7(J)	1.70	mg/kg	Max	(1)
	Benzo(ghi)perylene	mg/kg	0.41	-	0.9(J)	0.90	mg/kg	Max	(1)
	Bis(2-ethylhexyl)phthalate (BEHP)	mg/kg	12.6	-	40	40	mg/kg	Max	(1)
	Indeno(1,2,3-cd)pyrene	mg/kg	0.41	-	1.2(J)	1.20	mg/kg	Max	(1)
	Phenanthrene	mg/kg	0.59	-	1.8(J)	1.80	mg/kg	Max	(1)
	Aluminum	mg/kg	9,347	-	11,300	11,300	mg/kg	Max	(1)
	Arsenic	mg/kg	6.19	-	9.10	9.10	mg/kg	Max	(1)
	Iron	mg/kg	18,233	-	21,900	21,900	mg/kg	Max	(1)
	Manganese	mg/kg	210	-	417	417	mg/kg	Max	(1)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Codes used for the "EPC Statistic": Maximum Detected Value (Max)

EPC Rationale:

(1) Based on EPA Guidance, if less than 10 samples are present in a data set, the maximum concentration is used as the EPC.

TABLE 3.3 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
BIA Surface Soil	Benzo(ghi)perylene	mg/kg	0.045	0.24	0.06(J)	0.06	mg/kg	Max	(3)
	Phenanthrene	mg/kg	0.040	0.23	0.065(J)	0.065	mg/kg	Max	(3)
	Aluminum	mg/kg	10,379	16,437	19,200	16,437	mg/kg	95% UCL-C	(2)
	Arsenic	mg/kg	7.88	-	11.4(J)	11.4	mg/kg	Max	(5)
	Chromium	mg/kg	14.03	17.5	27.4	17.5	mg/kg	95% UCL-N	(1)
	Iron	mg/kg	19,990	21,952	25,500	21,952	mg/kg	95% UCL-N	(1)
	Manganese	mg/kg	579	652	776	652	mg/kg	95% UCL-N	(1)
	Thallium	mg/kg	8.98	17.9	17.6	17.6	mg/kg	Max	(4)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Codes used for the "EPC Statistic": Maximum Detected Value (Max)
95% UCL of Normal Data (95% UCL-N)
95% Chebyshev UCL (95% UCL-C)

EPC Rationale:

(1) Wilks/Shapiro Test indicates a normal distribution

(2) Non-Parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL was used as the EPC [ProUCL User's Guide, 5/01]

(3) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(4) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(5) Based on EPA Guidance, if less than 10 samples are present in a data set, the maximum concentration is used as the EPC.

TABLE 3.3 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
BIA Surface Soil	Benzo(ghi)perylene	mg/kg	0.045	0.24	0.06(J)	0.06	mg/kg	Max	(3)
	Phenanthrene	mg/kg	0.040	0.23	0.065(J)	0.065	mg/kg	Max	(3)
	Aluminum	mg/kg	10,379	16,437	19,200	16,437	mg/kg	95% UCL-C	(2)
	Arsenic	mg/kg	7.88	-	11.4(J)	11.4	mg/kg	Max	(5)
	Chromium	mg/kg	14.03	17.5	27.4	17.5	mg/kg	95% UCL-N	(1)
	Iron	mg/kg	19,990	21,952	25,500	21,952	mg/kg	95% UCL-N	(1)
	Manganese	mg/kg	579	652	776	652	mg/kg	95% UCL-N	(1)
	Thallium	mg/kg	8.98	17.9	17.6	17.6	mg/kg	Max	(4)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)

95% UCL of Normal Data (95% UCL-N)

95% Chebyshev UCL (95% UCL-C)

EPC Rationale:

(1) Wilks/Shapiro Test indicates a normal distribution

(2) Non-Parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL was used as the EPC [ProUCL User's Guide, 5/01]

(3) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(4) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(5) Based on EPA Guidance, if less than 10 samples are present in a data set, the maximum concentration is used as the EPC.

TABLE 3.4 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
BIA All Soil	Benzene	mg/kg	0.004	0.006	0.004(J)	0.004	mg/kg	Max	(5)
	Trichloroethylene	mg/kg	0.057	0.018	0.056	0.018	mg/kg	95% UCL-C	(3)
	Benzo(a)pyrene	mg/kg	0.067	0.26	0.1195(J)	0.12	mg/kg	Max	(6)
	Benzo(ghi)perylene	mg/kg	0.037	0.26	0.06(J)	0.06	mg/kg	Max	(6)
	Phenanthrene	mg/kg	0.057	0.21	0.1275(J)	0.13	mg/kg	Max	(6)
	Aluminum	mg/kg	10,461	11,391	19,200	11,391	mg/kg	95% UCL-T	(2)
	Arsenic	mg/kg	9.22	13.27	27.8(J)	13.27	mg/kg	95% UCL-C	(3)
	Barium	mg/kg	160	193	737	193	mg/kg	95% UCL-T	(2)
	Chromium	mg/kg	15.3	24	64.8	24	mg/kg	95% UCL-C	(3)
	Iron	mg/kg	22,583	23,761	28,100	23,761	mg/kg	95% UCL-N	(1)
	Manganese	mg/kg	574	654	1,080	654	mg/kg	95% UCL-N	(1)
	Thallium	mg/kg	7.88	12.5	17.6	12.5	mg/kg	97.5% UCL-C	(4)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)
95% UCL of Normal Data (95% UCL-N)
95% UCL of Log-transformed Data (95% UCL-T)
95% Chebyshev UCL (95% UCL-C)
97.5% Chebyshev UCL (97.5% UCL-C)

EPC Rationale:

(1) Wilks/Shapiro Test indicates a normal distribution

(2) Wilks/Shapiro Test indicates a lognormal distribution

(3) Non-Parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL was used as the EPC [ProUCL User's Guide, 5/01]

(4) Non-Parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev UCL was used as the EPC [ProUCL User's Guide, 5/01]

(5) 95% UCL based on a normal distribution. The 95% UCL of the Normal data exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(6) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

TABLE 3.4 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
BIA All Soil	Benzene	mg/kg	0.004	0.006	0.004(J)	0.004	mg/kg	Max	(5)
	Trichloroethylene	mg/kg	0.057	0.018	0.056	0.018	mg/kg	95% UCL-C	(3)
	Benzo(a)pyrene	mg/kg	0.067	0.26	0.1195(J)	0.12	mg/kg	Max	(6)
	Benzo(ghi)perylene	mg/kg	0.037	0.26	0.06(J)	0.06	mg/kg	Max	(6)
	Phenanthrene	mg/kg	0.057	0.21	0.1275(J)	0.13	mg/kg	Max	(6)
	Aluminum	mg/kg	10,461	11,391	19,200	11,391	mg/kg	95% UCL-T	(2)
	Arsenic	mg/kg	9.22	13.27	27.8(J)	13.27	mg/kg	95% UCL-C	(3)
	Barium	mg/kg	160	193	737	193	mg/kg	95% UCL-T	(2)
	Chromium	mg/kg	15.3	24	64.8	24	mg/kg	95% UCL-C	(3)
	Iron	mg/kg	22,583	23,761	28,100	23,761	mg/kg	95% UCL-N	(1)
	Manganese	mg/kg	574	654	1,080	654	mg/kg	95% UCL-N	(1)
	Thallium	mg/kg	7.88	12.5	17.6	12.5	mg/kg	97.5% UCL-C	(4)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)
95% UCL of Normal Data (95% UCL-N)
95% UCL of Log-transformed Data (95% UCL-T)
95% Chebyshev UCL (95% UCL-C)
97.5% Chebyshev UCL (97.5% UCL-C)

EPC Rationale:

(1) Wilks/Shapiro Test indicates a normal distribution

(2) Wilks/Shapiro Test indicates a lognormal distribution

(3) Non-Parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL was used as the EPC [ProUCL User's Guide, 5/01]

(4) Non-Parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev UCL was used as the EPC [ProUCL User's Guide, 5/01]

(5) 95% UCL based on a normal distribution. The 95% UCL of the Normal data exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(6) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

TABLE 3.5 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
CCA Surface Soil	Trichloroethylene	mg/kg	8.45	53.4	72(D)	53.4	mg/kg	99% UCL-C	(6)
	Acenaphthylene	mg/kg	1.90	-	1.90	1.9	mg/kg	Max	(2)
	Benzo(a)anthracene	mg/kg	10.18	-	29	29	mg/kg	Max	(2)
	Benzo(a)pyrene	mg/kg	10.05	-	29	29	mg/kg	Max	(2)
	Benzo(b)fluoranthene	mg/kg	11.65	-	44	44	mg/kg	Max	(2)
	Benzo(ghi)perylene	mg/kg	8.30	-	8.30	8.3	mg/kg	Max	(2)
	Benzo(k)fluoranthene	mg/kg	9.24	-	18	18	mg/kg	Max	(2)
	Dibenzo(a,h)anthracene	mg/kg	0.94	-	0.94	0.94	mg/kg	Max	(2)
	Indeno(1,2,3-cd)pyrene	mg/kg	10	-	10	10	mg/kg	Max	(2)
	Naphthalene	mg/kg	8.50	-	8.50	8.50	mg/kg	Max	(2)
	Phenanthrene	mg/kg	5.75	-	20	20	mg/kg	Max	(2)
	Aluminum	mg/kg	7,990	9,590	14,000	9,590	mg/kg	95% UCL-N	(3)
	Antimony	mg/kg	13.85	36.7	50	36.7	mg/kg	97.5% UCL-C	(5)
	Arsenic	mg/kg	17.40	23.4	40	23.4	mg/kg	95% UCL-N	(3)
	Cadmium	mg/kg	6.29	16.3	41	16.3	mg/kg	95% UCL-T	(4)
	Chromium	mg/kg	199	392	1,510	392	mg/kg	95% UCL-T	(4)
	Copper	mg/kg	855	1,215	1,780	1,215	mg/kg	95% UCL-N	(3)
	Iron	mg/kg	35,336	44,607	69,000	44,607	mg/kg	95% UCL-N	(3)
	Lead	mg/kg	416	-	2,100	416	mg/kg	Ave	(1)
	Manganese	mg/kg	773	1,198	1,800	1,198	mg/kg	95% UCL-T	(4)

TABLE 3.5 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
CCA Surface Soil	Mercury	mg/kg	1	2.15	2.90	2.15	mg/kg	95% UCL-T	(4)
	Nickel	mg/kg	223	518	1,300	518	mg/kg	95% UCL-T	(4)
	Thallium	mg/kg	4	2.36	3.60	2.36	mg/kg	95% UCL-T	(4)
	Vanadium	mg/kg	25	36.1	72	36.1	mg/kg	95% UCL-T	(4)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Average concentration calculated using detected concentrations and 1/2 the SQL for non-detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)
Average Concentration (Ave)
95% UCL of Normal Data (95% UCL-N)
95% UCL of Log-transformed Data (95% UCL-T)
97.5% Chebyshev UCL (97.5% UCL-C)
99% Chebyshev UCL (99% UCL-C)

EPC Rationale:

(1) Based on EPA Technical Review Workgroup for Lead, the EPC is the average concentration.

(2) Based on EPA Guidance, if less than 10 samples are present in a data set, the maximum concentration is used as the EPC.

(3) Wilks/Shapiro Test indicates a normal distribution.

(4) Wilks/Shapiro Test indicates a log-normal distribution.

(5) Non-Parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev (mean, std) UCL was used as the EPC [ProUCL User's Guide, 5/01]

(6) Non-Parametric distribution with a standard deviation of the log-transformed data between 2 and 3. The 99% Chebyshev (mean, std) UCL was used as the EPC [ProUCL User's Guide, 5/01]

TABLE 3.5 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
CCA Surface Soil	Trichloroethylene	mg/kg	8.45	53.4	72(D)	53.4	mg/kg	99% UCL-C	(6)
	Acenaphthylene	mg/kg	1.90	-	1.90	1.9	mg/kg	Max	(2)
	Benzo(a)anthracene	mg/kg	10.18	-	29	29	mg/kg	Max	(2)
	Benzo(a)pyrene	mg/kg	10.05	-	29	29	mg/kg	Max	(2)
	Benzo(b)fluoranthene	mg/kg	11.65	-	44	44	mg/kg	Max	(2)
	Benzo(ghi)perylene	mg/kg	8.30	-	8.30	8.3	mg/kg	Max	(2)
	Benzo(k)fluoranthene	mg/kg	9.24	-	18	18	mg/kg	Max	(2)
	Dibenzo(a,h)anthracene	mg/kg	0.94	-	0.94	0.94	mg/kg	Max	(2)
	Indeno(1,2,3-cd)pyrene	mg/kg	10	-	10	10	mg/kg	Max	(2)
	Naphthalene	mg/kg	8.50	-	8.50	8.5	mg/kg	Max	(2)
	Phenanthrene	mg/kg	5.75	-	20	20	mg/kg	Max	(2)
	Aluminum	mg/kg	7,990	9,590	14,000	9,590	mg/kg	95% UCL-N	(3)
	Antimony	mg/kg	13.85	36.7	50	36.7	mg/kg	97.5% UCL-C	(5)
	Arsenic	mg/kg	17.40	23.4	40	23.4	mg/kg	95% UCL-N	(3)
	Cadmium	mg/kg	6.29	16.3	41	16.34	mg/kg	95% UCL-T	(4)
	Chromium	mg/kg	199	392	1,510	392	mg/kg	95% UCL-T	(4)
	Copper	mg/kg	855	1,215	1,780	1,215	mg/kg	95% UCL-N	(3)
	Iron	mg/kg	35,336	44,607	69,000	44,607	mg/kg	95% UCL-N	(3)
	Lead	mg/kg	416	-	2,100	416	mg/kg	Ave	(1)
	Manganese	mg/kg	773	1,198	1,800	1,198	mg/kg	95% UCL-T	(4)

TABLE 3.5 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
CCA Surface Soil	Mercury	mg/kg	1	2.15	2.90	2.15	mg/kg	95% UCL-T	(4)
	Nickel	mg/kg	223	518	1,300	518	mg/kg	95% UCL-T	(4)
	Thallium	mg/kg	4	2.36	3.60	2.36	mg/kg	95% UCL-T	(4)
	Vanadium	mg/kg	25	36.1	72	36.1	mg/kg	95% UCL-T	(4)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Average concentration calculated using detected concentrations and 1/2 the SQL for non-detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)
Average Concentration (Ave)
95% UCL of Normal Data (95% UCL-N)
95% UCL of Log-transformed Data (95% UCL-T)
97.5% Chebyshev UCL (97.5% UCL-C)
99% Chebyshev UCL (99% UCL-C)

EPC Rationale:

(1) Based on EPA Technical Review Workgroup for Lead, the EPC is the average concentration.

(2) Based on EPA Guidance, if less than 10 samples are present in a data set, the maximum concentration is used as the EPC.

(3) Wilks/Shapiro Test indicates a normal distribution.

(4) Wilks/Shapiro Test indicates a log-normal distribution.

(5) Non-Parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev (mean, std) UCL was used as the EPC [ProUCL User's Guide, 5/01]

(6) Non-Parametric distribution with a standard deviation of the log-transformed data between 2 and 3. The 99% Chebyshev (mean, std) UCL was used as the EPC [ProUCL User's Guide, 5/01]

TABLE 3.6 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
CCA All Soil	Benzene	mg/kg	0.001	0.13	0.001(J)	0.001	mg/kg	Max	(8)
	Methylcyclohexane	mg/kg	0.65	0.43	1.3(J)	0.43	mg/kg	97.5% UCL-C	(5)
	Trichloroethylene	mg/kg	4.74	27.8	72(D)	27.8	mg/kg	99% UCL-C	(6)
	Acenaphthylene	mg/kg	1.9	3.10	1.90	1.90	mg/kg	Max	(9)
	Benzo(a)anthracene	mg/kg	9.06	17.1	29	17.1	mg/kg	97.5% UCL-C	(5)
	Benzo(a)pyrene	mg/kg	8.62	16.9	29	16.9	mg/kg	97.5% UCL-C	(5)
	Benzo(b)fluoranthene	mg/kg	10.48	25.4	44	25.4	mg/kg	97.5% UCL-C	(5)
	Benzo(ghi)perylene	mg/kg	5.00	5.64	8.30	5.64	mg/kg	97.5% UCL-C	(5)
	Benzo(k)fluoranthene	mg/kg	6.93	10.8	18	10.8	mg/kg	97.5% UCL-C	(5)
	Dibenzo(a,h)anthracene	mg/kg	0.94	2.95	0.94	0.94	mg/kg	Max	(9)
	Indeno(1,2,3-cd)pyrene	mg/kg	6.10	6.53	10	6.53	mg/kg	97.5% UCL-C	(5)
	Naphthalene	mg/kg	4.80	5.69	8.50	5.69	mg/kg	97.5% UCL-C	(5)
	Phenanthrene	mg/kg	6.42	15.2	20	15.2	mg/kg	95% UCL-T	(3)
	Aluminum	mg/kg	8,351	9,525	14,000	9,525	mg/kg	95% UCL-N	(2)
	Antimony	mg/kg	11.21	14.5	50	14.5	mg/kg	95% UCL-T	(3)
	Arsenic	mg/kg	16	22.2	40	22.2	mg/kg	95% UCL-T	(3)
	Cadmium	mg/kg	6.27	30	41	30	mg/kg	95% UCL-T	(3)
	Chromium	mg/kg	160	287	1,510	287	mg/kg	95% UCL-T	(3)
	Copper	mg/kg	638.68	4,204	1,780	1,780	mg/kg	Max	(7)
	Iron	mg/kg	32,213	39,194	69,000	39,194	mg/kg	95% UCL-T	(3)
	Lead	mg/kg	310	-	2,100	310	mg/kg	Ave	(1)

TABLE 3.6 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
CCA All Soil	Manganese	mg/kg	907	1,320	2,480	1,320	mg/kg	95% UCL-T	(3)
	Mercury	mg/kg	0.70	1.57	2.90	1.57	mg/kg	97.5% UCL-C	(5)
	Nickel	mg/kg	169	373	1,300	373	mg/kg	95% UCL-T	(3)
	Thallium	mg/kg	3.55	2.42	3.60	2.42	mg/kg	95% UCL-C	(4)
	Vanadium	mg/kg	21.47	28.2	72	28.2	mg/kg	95% UCL-T	(3)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Average concentration calculated using detected concentrations and 1/2 the SQL for non-detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)
Average Concentration (Ave)
95% UCL of Normal Data (95% UCL-N)
95% UCL of Log-transformed Data (95% UCL-T)
97.5% Chebyshev UCL (97.5% UCL-C)
99% Chebyshev UCL (99% UCL-C)

EPC Rationale:

(1) Based on EPA Technical Review Workgroup for Lead, the EPC is the average concentration.

(2) Wilks/Shapiro Test indicates a normal distribution.

(3) Wilks/Shapiro Test indicates a log-normal distribution.

(4) Non-Parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev (mean, std) UCL was used as the EPC [ProUCL User's Guide, 5/01]

(5) Non-Parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev (mean, std) UCL was used as the EPC [ProUCL User's Guide, 5/01]

TABLE 3.6 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale

(6) Non-Parametric distribution with a standard deviation of the log-transformed data between 2 and 3. The 99% Chebyshev (mean, std) UCL was used as the EPC [ProUCL User's Guide, 5/01]

(7) 95% UCL based on a log-normal distribution. The 95% UCL of the Log-transformed data exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(8) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(9) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

TABLE 3.6 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
CCA All Soil	Benzene	mg/kg	0.001	0.13	0.001(J)	0.001	mg/kg	Max	(8)
	Methylcyclohexane	mg/kg	0.65	0.43	1.3(J)	0.43	mg/kg	97.5% UCL-C	(5)
	Trichloroethylene	mg/kg	4.74	27.8	72(D)	27.8	mg/kg	99% UCL-C	(6)
	Acenaphthylene	mg/kg	1.9	3.10	1.90	1.90	mg/kg	Max	(9)
	Benzo(a)anthracene	mg/kg	9.06	17.1	29	17.1	mg/kg	97.5% UCL-C	(5)
	Benzo(a)pyrene	mg/kg	8.62	16.9	29	16.9	mg/kg	97.5% UCL-C	(5)
	Benzo(b)fluoranthene	mg/kg	10.48	25.4	44	25.4	mg/kg	97.5% UCL-C	(5)
	Benzo(ghi)perylene	mg/kg	5.00	5.64	8.30	5.64	mg/kg	97.5% UCL-C	(5)
	Benzo(k)fluoranthene	mg/kg	6.93	10.8	18	10.8	mg/kg	97.5% UCL-C	(5)
	Dibenzo(a,h)anthracene	mg/kg	0.94	2.95	0.94	0.94	mg/kg	Max	(9)
	Indeno(1,2,3-cd)pyrene	mg/kg	6.10	6.53	10	6.53	mg/kg	97.5% UCL-C	(5)
	Naphthalene	mg/kg	4.80	5.69	8.50	5.69	mg/kg	97.5% UCL-C	(5)
	Phenanthrene	mg/kg	6.42	15.2	20	15.2	mg/kg	95% UCL-T	(3)
	Aluminum	mg/kg	8,351	9,525	14,000	9,525	mg/kg	95% UCL-N	(2)
	Antimony	mg/kg	11.21	14.5	50	14.5	mg/kg	95% UCL-T	(3)
	Arsenic	mg/kg	16	22.2	40	22.2	mg/kg	95% UCL-T	(3)
	Cadmium	mg/kg	6.27	30	41	30	mg/kg	95% UCL-T	(3)
	Chromium	mg/kg	160	287	1,510	287	mg/kg	95% UCL-T	(3)
	Copper	mg/kg	638.68	4,204	1,780	1,780	mg/kg	Max	(7)
	Iron	mg/kg	32,213	39,194	69,000	39,194	mg/kg	95% UCL-T	(3)
	Lead	mg/kg	310	-	2,100	310	mg/kg	Ave	(1)

TABLE 3.6 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
CCA All Soil	Manganese	mg/kg	907	1,320	2,480	1,320	mg/kg	95% UCL-T	(3)
	Mercury	mg/kg	0.70	1.57	2.90	1.57	mg/kg	97.5% UCL-C	(5)
	Nickel	mg/kg	169	373	1,300	373	mg/kg	95% UCL-T	(3)
	Thallium	mg/kg	3.55	2.42	3.60	2.42	mg/kg	95% UCL-C	(4)
	Vanadium	mg/kg	21.47	28.2	72	28.2	mg/kg	95% UCL-T	(3)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Average concentration calculated using detected concentrations and 1/2 the SQL for non-detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)
Average Concentration (Ave)
95% UCL of Normal Data (95% UCL-N)
95% UCL of Log-transformed Data (95% UCL-T)
97.5% Chebyshev UCL (97.5% UCL-C)
99% Chebyshev UCL (99% UCL-C)

EPC Rationale:

(1) Based on EPA Technical Review Workgroup for Lead, the EPC is the average concentration.

(2) Wilks/Shapiro Test indicates a normal distribution.

(3) Wilks/Shapiro Test indicates a log-normal distribution.

(4) Non-Parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev (mean, std) UCL was used as the EPC [ProUCL User's Guide, 5/01]

(5) Non-Parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev (mean, std) UCL was used as the EPC [ProUCL User's Guide, 5/01]

TABLE 3.6 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale

(6) Non-Parametric distribution with a standard deviation of the log-transformed data between 2 and 3. The 99% Chebyshev (mean, std) UCL was used as the EPC [ProUCL User's Guide, 5/01

(7) 95% UCL based on a log-normal distribution. The 95% UCL of the Log-transformed data exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(8) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(9) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

TABLE 3.7 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
RRAA Surface Soil	Acenaphthylene	mg/kg	0.20	0.27	0.50	0.27	mg/kg	95% UCL-N	(2)
	Benzo(a)anthracene	mg/kg	0.35	0.80	1.60	0.80	mg/kg	95% UCL-T	(3)
	Benzo(a)pyrene	mg/kg	0.38	0.84	1.60	0.84	mg/kg	95% UCL-T	(3)
	Benzo(b)fluoranthene	mg/kg	0.40	0.87	1.50	0.87	mg/kg	95% UCL-T	(3)
	Benzo(ghi)perylene	mg/kg	0.22	0.53	0.83	0.53	mg/kg	95% UCL-T	(3)
	Dibenzo(a,h)anthracene	mg/kg	0.22	0.26	0.43	0.26	mg/kg	95% UCL-N	(2)
	Indeno(1,2,3-cd)pyrene	mg/kg	0.28	0.65	1.20	0.65	mg/kg	95% UCL-T	(3)
	Phenanthrene	mg/kg	0.39	0.89	2.00	0.89	mg/kg	95% UCL-T	(3)
	Aluminum	mg/kg	11,393	12,672	14,500	12,672	mg/kg	95% UCL-N	(2)
	Arsenic	mg/kg	10.96	11.9	14(J)	11.9	mg/kg	95% UCL-N	(2)
	Chromium	mg/kg	13.63	15.1	20	15.1	mg/kg	95% UCL-N	(2)
	Iron	mg/kg	22,042	23,516	26300(J)	23,516	mg/kg	95% UCL-N	(2)
	Manganese	mg/kg	868	967	1,180	967	mg/kg	95% UCL-N	(2)
	Thallium	mg/kg	0.70	2.05	1(J)	1.00	mg/kg	Max	(4)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)

95% UCL of Normal Data (95% UCL-N)

95% UCL of Log-transformed Data (95% UCL-T)

TABLE 3.7 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale

EPC Rationale:

(1) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(2) Wilks/Shapiro Test indicates a normal distribution.

(3) Wilks/Shapiro Test indicates a log-normal distribution.

(4) 95% UCL based on a log-normal distribution. The 95% UCL of the Log-transformed data exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

TABLE 3.7 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
RRAA Surface Soil	Acenaphthylene	mg/kg	0.20	0.27	0.50	0.27	mg/kg	95% UCL-N	(2)
	Benzo(a)anthracene	mg/kg	0.35	0.80	1.60	0.80	mg/kg	95% UCL-T	(3)
	Benzo(a)pyrene	mg/kg	0.38	0.84	1.60	0.84	mg/kg	95% UCL-T	(3)
	Benzo(b)fluoranthene	mg/kg	0.40	0.87	1.50	0.87	mg/kg	95% UCL-T	(3)
	Benzo(ghi)perylene	mg/kg	0.22	0.53	0.83	0.53	mg/kg	95% UCL-T	(3)
	Dibenzo(a,h)anthracene	mg/kg	0.22	0.26	0.43	0.26	mg/kg	95% UCL-N	(2)
	Indeno(1,2,3-cd)pyrene	mg/kg	0.28	0.65	1.20	0.65	mg/kg	95% UCL-T	(3)
	Phenanthrene	mg/kg	0.39	0.89	2.00	0.89	mg/kg	95% UCL-T	(3)
	Aluminum	mg/kg	11,393	12,672	14,500	12,672	mg/kg	95% UCL-N	(2)
	Arsenic	mg/kg	10.96	11.9	14(J)	11.9	mg/kg	95% UCL-N	(2)
	Chromium	mg/kg	13.63	15.1	20	15.1	mg/kg	95% UCL-N	(2)
	Iron	mg/kg	22,042	23,516	26300(J)	23,516	mg/kg	95% UCL-N	(2)
	Manganese	mg/kg	868	967	1,180	967	mg/kg	95% UCL-N	(2)
	Thallium	mg/kg	0.70	2.05	1(J)	1.00	mg/kg	Max	(4)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)

95% UCL of Normal Data (95% UCL-N)

95% UCL of Log-transformed Data (95% UCL-T)

TABLE 3.7 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale

EPC Rationale:

(1) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(2) Wilks/Shapiro Test indicates a normal distribution.

(3) Wilks/Shapiro Test indicates a log-normal distribution.

(4) 95% UCL based on a log-normal distribution. The 95% UCL of the Log-transformed data exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

TABLE 3.8 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
RRAA All Soil	Acenaphthylene	mg/kg	0.16	0.27	0.50	0.27	mg/kg	95% UCL-T	(3)
	Benzo(a)anthracene	mg/kg	0.35	0.57	1.60	0.57	mg/kg	95% UCL-T	(3)
	Benzo(a)pyrene	mg/kg	0.38	0.58	1.60	0.58	mg/kg	95% UCL-T	(3)
	Benzo(b)fluoranthene	mg/kg	0.40	0.57	1.50	0.57	mg/kg	95% UCL-T	(3)
	Benzo(ghi)perylene	mg/kg	0.22	0.37	0.83	0.37	mg/kg	95% UCL-T	(3)
	Dibenzo(a,h)anthracene	mg/kg	0.22	0.24	0.43	0.24	mg/kg	95% UCL-T	(3)
	Indeno(1,2,3-cd)pyrene	mg/kg	0.28	0.47	1.20	0.47	mg/kg	95% UCL-T	(3)
	Phenanthrene	mg/kg	0.39	0.65	2.00	0.65	mg/kg	95% UCL-T	(3)
	Aluminum	mg/kg	11,393	12,672	14,500	12,672	mg/kg	95% UCL-N	(2)
	Arsenic	mg/kg	10.96	11.9	14(J)	11.9	mg/kg	95% UCL-N	(2)
	Chromium	mg/kg	13.63	15.1	20	15.1	mg/kg	95% UCL-N	(2)
	Iron	mg/kg	22,042	23,516	26300(J)	23,516	mg/kg	95% UCL-N	(2)
	Manganese	mg/kg	868	967	1,180	967	mg/kg	95% UCL-N	(2)
	Thallium	mg/kg	0.70	2.05	1(J)	1.00	mg/kg	Max	(4)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)

95% UCL of Normal Data (95% UCL-N)

95% UCL of Log-transformed Data (95% UCL-T)

TABLE 3.8 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale

EPC Rationale:

(1) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(2) Wilks/Shapiro Test indicates a normal distribution.

(3) Wilks/Shapiro Test indicates a log-normal distribution.

(4) 95% UCL based on a log-normal distribution. The 95% UCL of the Log-transformed data exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

TABLE 3.8 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
RRAA All Soil	Acenaphthylene	mg/kg	0.16	0.27	0.50	0.27	mg/kg	95% UCL-T	(3)
	Benzo(a)anthracene	mg/kg	0.35	0.57	1.60	0.57	mg/kg	95% UCL-T	(3)
	Benzo(a)pyrene	mg/kg	0.38	0.58	1.60	0.58	mg/kg	95% UCL-T	(3)
	Benzo(b)fluoranthene	mg/kg	0.40	0.57	1.50	0.57	mg/kg	95% UCL-T	(3)
	Benzo(ghi)perylene	mg/kg	0.22	0.37	0.83	0.37	mg/kg	95% UCL-T	(3)
	Dibenzo(a,h)anthracen	mg/kg	0.22	0.24	0.43	0.24	mg/kg	95% UCL-T	(3)
	Indeno(1,2,3-cd)pyrene	mg/kg	0.28	0.47	1.20	0.47	mg/kg	95% UCL-T	(3)
	Phenanthrene	mg/kg	0.39	0.65	2.00	0.65	mg/kg	95% UCL-T	(3)
	Aluminum	mg/kg	11,393	12,672	14,500	12,672	mg/kg	95% UCL-N	(2)
	Arsenic	mg/kg	10.96	11.9	14(J)	11.9	mg/kg	95% UCL-N	(2)
	Chromium	mg/kg	13.63	15.1	20	15.1	mg/kg	95% UCL-N	(2)
	Iron	mg/kg	22,042	23,516	26300(J)	23,516	mg/kg	95% UCL-N	(2)
	Manganese	mg/kg	868	967	1,180	967	mg/kg	95% UCL-N	(2)
	Thallium	mg/kg	0.70	2.05	1(J)	1.00	mg/kg	Max	(4)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)

95% UCL of Normal Data (95% UCL-N)

95% UCL of Log-transformed Data (95% UCL-T)

EPC Rationale:

(1) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(2) Wilks/Shapiro Test indicates a normal distribution.

(3) Wilks/Shapiro Test indicates a log-normal distribution.

(4) 95% UCL based on a log-normal distribution. The 95% UCL of the Log-transformed data exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC. concentration was used as the EPC.

TABLE 3.9 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater (tap water)

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
Process Water	Benzene	ug/l	2.66	0.87	2.66(J)	0.87	ug/l	95% UCL-C	(2)
	cis-1,2-Dichloroethylene	ug/l	17.79	15.96	44	15.96	ug/l	97.5% UCL-C	(3)
	Tetrachloroethylene	ug/l	0.44	0.67	0.67	0.67	ug/l	Max	(6)
	Trichloroethylene	ug/l	17.13	36	101.5(D)	36	ug/l	97.5% UCL-C	(3)
	Aluminum	ug/l	1,058	2,982	5710(J)	2,982	ug/l	97.5% UCL-C	(3)
	Arsenic	ug/l	5.13	6.90	6.4(B)	6.40	ug/l	Max	(6)
	Barium	ug/l	191	251	313	251	ug/l	95% UCL-C	(2)
	Chromium	ug/l	24	56	104.7(J)	56	ug/l	95% UCL-T	(1)
	Iron	ug/l	2,799	9,146	13,300	9,146	ug/l	95% UCL-T	(1)
	Lead	ug/l	10.79	-	17.65(J)	4.14	ug/l	Ave	(4)
	Manganese	ug/l	258	2,278	1,100	1,100	ug/l	Max	(5)
	Nickel	ug/l	22	60	76	60	ug/l	95% UCL-T	(1)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Average concentration calculated using detected concentrations and 1/2 the SQL for non-detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)

Average Concentration (Ave)

95% UCL of Log-transformed Data (95% UCL-T)

95% Chebyshev UCL (95% UCL-C)

97.5% Chebyshev UCL (97.5% UCL-C)

TABLE 3.9 RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater (tap water)

(1) Wilks/Shapiro Test indicates a lognormal distribution

(2) Non-Parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL was used as the EPC [ProUCL User's Guide, 5/01]

(3) Non-Parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev UCL was used as the EPC [ProUCL User's Guide, 5/01]

(4) Based on EPA Technical Review Workgroup for Lead, the EPC is the average concentration.

(5) 95% UCL based on a log-normal distribution. The 95% UCL of the Log-transformed data exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(6) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

TABLE 3.9 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future

Medium: Groundwater

Exposure Medium: Groundwater (tap water)

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
Process Water	Benzene (Total)	ug/l	2.66	0.87	2.66(J)	0.87	ug/l	95% UCL-C	(2)
	cis-1,2-Dichloroethylene (Total)	ug/l	17.79	15.96	44	15.96	ug/l	97.5% UCL-C	(3)
	Tetrachloroethylene (Total)	ug/l	0.44	0.67	0.67	0.67	ug/l	Max	(6)
	Trichloroethylene (Total)	ug/l	17.13	36	101.5(D)	36	ug/l	97.5% UCL-C	(3)
	Aluminum (Total)	ug/l	1,058	2,982	5710(J)	2,982	ug/l	97.5% UCL-C	(3)
	Arsenic (Total)	ug/l	5.13	6.90	6.4(B)	6.40	ug/l	Max	(6)
	Barium (Total)	ug/l	191	251	313	251	ug/l	95% UCL-C	(2)
	Chromium (Total)	ug/l	24	56	104.7(J)	56	ug/l	95% UCL-T	(1)
	Iron (Total)	ug/l	2,799	9,146	13,300	9,146	ug/l	95% UCL-T	(1)
	Lead (Total)	ug/l	10.79	-	17.65(J)	4.14	ug/l	Ave	(4)
	Manganese (Total)	ug/l	258	2,278	1,100	1,100	ug/l	Max	(5)
	Nickel (Total)	ug/l	22	60	76	60	ug/l	95% UCL-T	(1)

Footnotes:

Arithmetic mean calculated using detected concentrations.

Average concentration calculated using detected concentrations and 1/2 the SQL for non-detected concentrations.

Codes used for the "EPC Statistic":

Maximum Detected Value (Max)

Average Concentration (Ave)

95% UCL of Log-transformed Data (95% UCL-T)

95% Chebyshev UCL (95% UCL-C)

97.5% Chebyshev UCL (97.5% UCL-C)

TABLE 3.9 CT

EXPOSURE POINT CONCENTRATION SUMMARY

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater (tap water)

(1) Wilks/Shapiro Test indicates a lognormal distribution

(2) Non-Parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL was used as the EPC [ProUCL User's Guide, 5/01]

(3) Non-Parametric distribution with a standard deviation of the log-transformed data between 1 and 2. The 97.5% Chebyshev UCL was used as the EPC [ProUCL User's Guide, 5/01]

(4) Based on EPA Technical Review Workgroup for Lead, the EPC is the average concentration.

(5) 95% UCL based on a log-normal distribution. The 95% UCL of the Log-transformed data exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

(6) 95% UCL based on a non-parametric distribution with a standard deviation of the log-transformed data between 0 and 1. The 95% Chebyshev UCL exceeds the maximum detected concentration, so the maximum detected concentration was used as the EPC.

Table: 3.10
Site: Little Valley Superfund Site
Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater (Shallow Aquifer)
Exposure Point: Indoor Air (Wash Down Scenario)
Receptor Population: Commercial Worker
Receptor Age: Adult
Exposure Route: Inhalation

Cair	mg/m^3	Cair = [(CairMax/2)*t1 + CairMax*t2] / [t1+t2]
CairMAX	mg/m^3	CairMax = CGW*f*Fw*t1/Vair

	Maximum Chemical Concentration in Indoor Air	Duration of Spraying	Duration in Sprayed Area After Spraying	Chemical Concentration in Indoor Air
Variable Symbols (2) =	CairMAX	t1	t2	Cair
Parameter Values (2) =	Calculated	0.75	0.25	Calculated
Parameter Units (2) =	mg/m^3	hours	hours	mg/m^3

Volatile Chemical of Concern (1)	Maximum Chemical Concentration in Indoor Air mg/m^3	Duration of Spraying hours	Duration in Sprayed Area After Spraying hours	Chemical Concentration in Indoor Air mg/m^3
Benzene	0.0028	0.75	0.25	0.0017
cis-1,2-Dichloroethylene	0.0513	0.75	0.25	0.0321
Tetrachloroethylene	0.0022	0.75	0.25	0.0013
Trichloroethylene	0.1157	0.75	0.25	0.0723

Footnotes:

(1) The groundwater COPCs of Aluminum, Arsenic, Barium, Chromium, Iron, Lead, Manganese, and Nickel are not volatile and are not evaluated for this exposure route.

(2) See Tables 4.6RME and 4.6CT for parameter definitions and rationale.

Table: 3.10 (continued)
Site: Little Valley Superfund Site
Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater (Shallow Aquifer)
Exposure Point: Indoor Air (Wash Down Scenario)
Receptor Population: Commercial Worker
Receptor Age: Adult
Exposure Route: Inhalation

Cair	mg/m^3	Cair = [(CairMax/2)*t1 + CairMax*t2] / [t1+t2]
CairMAX	mg/m^3	CairMax = CGW*f*Fw*t1/Vair

	Chemical Concentration in Groundwater	Fraction of Dissolved Chemical Volatilized	Wash Water Flow Rate	Duration of Spraying	Room Volume	Maximum Chemical Concentration in Indoor Air
Variable Symbols (2) =	CGW	f	Fw	t1	Vair	CairMAX
Parameter Values (2) =	Chemical Specific	0.9	1000	0.75	210	Calculated
Parameter Units (2) =	mg/l	unitless	l/hour	hours	m^3	mg/m^3

Volatile Chemical of Concern (1)	Chemical Concentration in Groundwater	Fraction of Dissolved Chemical Volatilized	Wash Water Flow Rate	Duration of Spraying	Room Volume	Maximum Chemical Concentration in Indoor Air
	mg/l	unitless	l/hour	hours	m^3	mg/m^3
Benzene	0.0009	0.9	1000	0.75	210	0.0028
cis-1,2-Dichloroethylene	0.0160	0.9	1000	0.75	210	0.0513
Tetrachloroethylene	0.0007	0.9	1000	0.75	210	0.0022
Trichloroethylene	0.0360	0.9	1000	0.75	210	0.1157

Footnotes:

(1) The groundwater COPCs of Aluminum, Arsenic, Barium, Chromium, Iron, Lead, Manganese, and Nickel are not volatile and are not evaluated for this exposure route.

(2) See Tables 4.6RME and 4.6CT for parameter definitions and rationale.

Table: 3.11
Site: Little Valley Superfund Site
Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater (Shallow Aquifer)
Exposure Point: Indoor Air (Car Wash Scenario)
Receptor Population: Commercial Worker
Receptor Age: Adult
Exposure Route: Inhalation

Cair	mg/m^3	Cair = [(CairMax/2)*t1 + CairMax*t2] / [t1+t2]
CairMAX	mg/m^3	CairMax = CGW*f*Fw*t1/Vair

	Maximum Chemical Concentration in Indoor Air	Duration of Spraying	Duration in Sprayed Area After Spraying	Chemical Concentration in Indoor Air
Variable Symbols (2) =	CairMAX	t1	t2	Cair
Parameter Values (2) =	Calculated	0.083	0.033	Calculated
Parameter Units (2) =	mg/m^3	hours	hours	mg/m^3

Volatile Chemical of Concern (1)	Maximum Chemical Concentration in Indoor Air	Duration of Spraying	Duration in Sprayed Area After Spraying	Chemical Concentration in Indoor Air
	mg/m^3	hours	hours	mg/m^3
Benzene	0.0032	0.083	0.033	0.0021
cis-1,2-Dichloroethylene	0.0596	0.083	0.033	0.0383
Tetrachloroethylene	0.0025	0.083	0.033	0.0016
Trichloroethylene	0.1345	0.083	0.033	0.0864

Footnotes:

(1) The groundwater COPCs of Aluminum, Arsenic, Barium, Chromium, Iron, Lead, Manganese, and Nickel are not volatile and are not evaluated for this exposure route.

(2) See Tables 4.6RME and 4.6CT for parameter definitions and rationale.

Table: 3.11 (continued)
Site: Little Valley Superfund Site
Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater (Shallow Aquifer)
Exposure Point: Indoor Air (Car Wash Scenario)
Receptor Population: Commercial Worker
Receptor Age: Adult
Exposure Route: Inhalation

Cair	mg/m^3	Cair = [(CairMax/2)*t1 + CairMax*t2] / [t1+t2]
CairMAX	mg/m^3	CairMax = CGW*f*Fw*t1/Vair

	Chemical Concentration in Groundwater	Fraction of Dissolved Chemical Volatilized	Wash Water Flow Rate	Duration of Spraying	Room Volume	Maximum Chemical Concentration in Indoor Air
Variable Symbols (2) =	CGW	f	Fw	t1	Vair	CairMAX
Parameter Values (2) =	Chemical-Specific	0.9	5000	0.083	100	Calculated
Parameter Units (2) =	mg/l	unitless	l/hour	hours	m^3	mg/m^3

Volatile Chemical of Concern (1)	Chemical Concentration in Groundwater	Fraction of Dissolved Chemical Volatilized	Wash Water Flow Rate	Duration of Spraying	Room Volume	Maximum Chemical Concentration in Indoor Air
	mg/l	unitless	l/hour	hours	m^3	mg/m^3
Benzene	0.0009	0.9	5000	0.083	100	0.0032
cis-1,2-Dichloroethylene	0.0160	0.9	5000	0.083	100	0.0596
Tetrachloroethylene	0.0007	0.9	5000	0.083	100	0.0025
Trichloroethylene	0.0360	0.9	5000	0.083	100	0.1345

Footnotes:

(1) The groundwater COPCs of Aluminum, Arsenic, Barium, Chromium, Iron, Lead, Manganese, and Nickel are not volatile and are not evaluated for this exposure route.

(2) See Tables 4.6RME and 4.6CT for parameter definitions and rationale.

TABLE 4.1 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Commercial Worker	Adult	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.3 RME or 3.5 RME	mg/kg		CDI (mg/kg-day) =
			Cattaraugus Cutlery Area	IR-S	Ingestion Rate of Soil	50	mg/day	(2)	$\frac{CS*IR\text{-}S*FI*EF*ED*CF1}{BW*AT}$
				FI	Fraction Ingested	1	unitless	(3)	
				EF	Exposure Frequency	250	days/year	(2)	
				ED	Exposure Duration	25	years	(2)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(5)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	9,125	days	(4)	
	Resident	Adult	Railroad Avenue Area	CS	Chemical Concentration in Soil	See Table 3.7 RME	mg/kg		CDI (mg/kg-day) =
				IR-S	Ingestion Rate of Soil	100	mg/day	(7)	$\frac{CS*IR\text{-}S*FI*EF*ED*CF1}{BW*AT}$
				FI	Fraction Ingested	1	unitless	(3)	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	30/24	years	(1), (7), (19)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(5)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	10,950	days	(4)	

TABLE 4.1 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Resident	Child (0 to 6 years)	Railroad Avenue Area	CS	Chemical Concentration in Soil	See Table 3.7 RME	mg/kg		CDI (mg/kg-day) = CS*IR-S*FI*EF*ED*CF1 / BW*AT
				IR-S	Ingestion Rate of Soil	200	mg/day	(7)	
				FI	Fraction Ingested	1	unitless	(3)	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	6	years	(1), (7)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(5)	
				BW	Body Weight	15	kg	(7)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	
	Trespasser	Adolescent (12-18 years)	Bush Industries Area Cattaraugus Cutlery Area	CS	Chemical Concentration in Soil	See Tables 3.3 RME or 3.5 RME	mg/kg		CDI (mg/kg-day) = CS*IR-S*FI*EF*ED*CF1 / BW*AT
				IR-S	Ingestion Rate of Soil	200	mg/day	(8)	
				FI	Fraction Ingested	1	unitless	(3)	
				EF	Exposure Frequency	104	days/year	(9)	
				ED	Exposure Duration	6	years	(10)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(5)	
				BW	Body Weight	57.2	kg	(11)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	
Dermal Absorption	Commercial Worker	Adult	Bush Industries Area Cattaraugus Cutlery Area	CS	Chemical Concentration in Soil	See Tables 3.3 RME or 3.5 RME	mg/kg		DAD (mg/kg-day)= CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				CF	Conversion Factor	1.00E-006	kg/mg	(5)	
				SA	Skin Surface Area Available for Contact	3,300	cm^2	(12), (13), (14)	
				AF	Soil to Skin Adherance Factor	0.2	mg/cm^2-event	(12), (14)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	250	days/year	(2)	

TABLE 4.1 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Commercial Worker	Adult	Bush Industries Area	ED	Exposure Duration	25	years	(2)	DAD (mg/kg-day)=
			Cattaraugus Cutlery Area	BW	Body Weight	70	kg	(1)	CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	9,125	days	(4)	
	Resident	Adult	Railroad Avenue Area	CS	Chemical Concentration in Soil	See Table 3.7 RME	mg/kg		DAD (mg/kg-day)=
				CF	Conversion Factor	1.00E-006	kg/mg	(5)	CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				SA	Skin Surface Area Available for Contact	5,700	cm^2	(7), (14)	
				AF	Soil to Skin Adherence Factor	0.07	mg/cm^2-event	(7), (14)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	30/24	years	(1), (7), (19)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	10,950	days	(4)	
		Child	Railroad Avenue Area	CS	Chemical Concentration in Soil	See Table 3.7 RME	mg/kg		DAD (mg/kg-day)=
				CF	Conversion Factor	1.00E-006	kg/mg	(5)	CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				SA	Skin Surface Area Available for Contact	2,800	cm^2	(7), (14)	
				AF	Soil to Skin Adherence Factor	0.2	mg/cm^2-event	(7), (14)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	6	years	(1), (7)	
				BW	Body Weight	15	kg	(7)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	

TABLE 4.1 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Trespasser	Adolescent (12-18 years)	Bush Industries Area; Cattaraugus Cutlery Area	CS	Chemical Concentration in Soil	See Tables 3.3 RME or 3.5 RME	mg/kg		DAD (mg/kg-day)= CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				CF	Conversion Factor	1.00E-006	kg/mg	(5)	
				SA	Skin Surface Area Available for Contact	5,180	cm^2	(15)	
				AF	Soil to Skin Adherence Factor	0.2	mg/cm^2-event	(7)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	104	days/year	(9)	
				ED	Exposure Duration	6	years	(10)	
				BW	Body Weight	57.2	kg	(11)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	
Inhalation	Commercial Worker	Adult	Bush Industries Area; Cattaraugus Cutlery Area	CS	Chemical Concentration in Soil	See Tables 3.3 RME or 3.5 RME	mg/kg		Intake (mg/kg-day) = CS*IR*((1/PEF)+(1/VF))*ET*EF*ED / BW*AT
				IR	Inhalation Rate	2.5	m^3/hour	(2), (6)	
				PEF	Particulate Emission Factor	Calculated	m^3/kg	See Tables 4.7 and 4.8	
				VF	Volatilization Factor	Calculated	m^3/kg	See Table 4.22RME	
				ET	Exposure Time	8	hours/day	(16)	
				EF	Exposure Frequency	250	days/year	(2)	
				ED	Exposure Duration	25	years	(2)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	9,125	days	(4)	

TABLE 4.1 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Resident	Adult	Railroad Avenue Area	CS	Chemical Concentration in Soil	See Table 3.7 RME	mg/kg		Intake (mg/kg-day) =
				IR	Inhalation Rate	0.83	m^3/hour	(7), (17)	$\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
				PEF	Particulate Emission Factor	Calculated	m^3/kg	See Table 4.9	
				VF	Volatilization Factor	Calculated	m^3/kg	See Table 4.23RME	
				ET	Exposure Time	24	hours/day	(17)	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	30/24	years	(1), (7), (19)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	10,950	days	(4)	
		Child	Railroad Avenue Area	CS	Chemical Concentration in Soil.	See Table 3.7 RME	mg/kg		Intake (mg/kg-day) =
				IR	Inhalation Rate	0.42	m^3/hour	(20)	$\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
				PEF	Particulate Emission Factor	Calculated	m^3/kg	See Table 4.9	
				VF	Volatilization Factor	Calculated	m^3/kg	See Table 4.25	
				ET	Exposure Time	24	hours/day	(17)	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	6	years	(1), (7)	
				BW	Body Weight	15	kg	(7)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	
	Trespasser	Adolescent	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.3 RME or 3.5 RME	mg/kg		Intake (mg/kg-day) =
		(12-18 years)	Cattaraugus Cutlery Area	IR	Inhalation Rate	0.83	m^3/hour	(7)	$\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
				PEF	Particulate Emission Factor	Calculated	m^3/kg	See Tables 4.7 and 4.8	

TABLE 4.1 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Trespasser	Adolescent (12-18 years)	Bush Industries Area Cattaraugus Cutlery Area	VF	Volatilization Factor	Calculated	m^3/kg	See Table 4.26	Intake (mg/kg-day) = $\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
				ET	Exposure Time	2	hours/day	(18)	
				EF	Exposure Frequency	104	days/year	(9)	
				ED	Exposure Duration	6	years	(10)	
				BW	Body Weight	57.2	kg	(11)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	

Footnotes:

(1) EPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors." OSWER Directive 9285.6-03. March 25. - Default values.

(2) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit 1-2, default value for Non-Residential (Commercial/Industrial) Indoor Worker.

(3) EPA, 1989. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part A). EPA/540/1-89/002. Section 6.6.2 Conservative assumption that all soil or dust contacted is contaminated.

(4) EPA, 1989. Value for non-carcinogenic effects is the ED converted to days, and the value for carcinogenic effects is based on a 70 year lifetime.

(5) Required for proper units conversion.

(6) EPA, 1997. Exposure Factors Handbook. EPA/600/P-95/002Fa. August. Inhalation rate for 24 hour period prorated to an 8 hour work day.

(7) EPA, 2002. December. Exhibit 1-2, default value for On-site Resident, 20 m^3/day Also used for the adolescent trespasser. An hourly rate was calculated by: 20m^3/day/24 hours/day.

(8) EPA, 2002. Child-Specific Exposure Factors Handbook. EPA-600-P-00-002B. September. Table 5-19, Recommended mean value for children; Believed to be conservative for an older adolescent Trespasser.

(9) Site-specific assumption of 2 days per week per year due to some site access restrictions and limitations on outdoor activities due to climate.

(10) Consistent with the age range of the adolescent Trespasser.

(11) EPA, 1997. August. Table 7-2, Average of the mean body weights for boys and girls in the age range from 12 to 18.

(12) EPA, 2002. December. Exhibit 1-2, default value for Non-Residential (Commercial/Industrial) Outdoor Worker.

(13) Commercial Workers are assumed to have their head, neck, forearms and hands exposed.

(14) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Interim, EPA/540/R/99/005, OSWER 9285.7-02EP, September. RME values for the residential scenario

(15) EPA, 2001. September. Exhibit C-1, Reported average skin area for an adolescent aged 12 - 18 years wearing a short-sleeved shirt, shorts, and shoes with skin exposure limited to the head, hands, and forearms, and lower legs.

(16) Assumes a standard 8 hour work day.

(17) Assumes a 24-hour residential exposure time.

(18) Site-specific assumption of 2 hours per day.

(19) Per EPA Region 2, the adult resident cancer risk is calculated using an adult ED of 24 years and a child ED of 6 years, while a non-cancer risk is calculated using an adult ED of 30 years.

(20) EPA, 1997. August. Hourly value shown is based on 10 m^3/day for 24 hours/day.

TABLE 4.1 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Current/Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Commercial Worker	Adult	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.3CT or 3.5CT	mg/kg		CDI (mg/kg-day) =
			Cattaraugus Cutlery Area	IR-S	Ingestion Rate of Soil	50	mg/day	(2)	CS*IR-S*FI*EF*ED*CF1 / BW*AT
				FI	Fraction Ingested	1	unitless	(3)	
				EF	Exposure Frequency	219	days/year	(6)	
				ED	Exposure Duration	9	years	(6)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(5)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(4)	
	Resident	Adult	Railroad Avenue Area	CS	Chemical Concentration in Soil	See Table 3.7CT	mg/kg		CDI (mg/kg-day) =
				IR-S	Ingestion Rate of Soil	100	mg/day	(7)	CS*IR-S*FI*EF*ED*CF1 / BW*AT
				FI	Fraction Ingested	1	unitless	(3)	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	9	years	(14)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(5)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(4)	
		Child (0 to 6 years)	Railroad Avenue Area	CS	Chemical Concentration in Soil	See Table 3.7CT	mg/kg		CDI (mg/kg-day) =
				IR-S	Ingestion Rate of Soil	200	mg/day	(7)	CS*IR-S*FI*EF*ED*CF1 / BW*AT
				FI	Fraction Ingested	1	unitless	(3)	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	6	years	(7)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(5)	
				BW	Body Weight	15	kg	(7)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	

TABLE 4.1 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Current/Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Trespasser	Adolescent (12-18 years)	Bush Industries Area, Cattaraugus Cutlery Area	CS	Chemical Concentration in Soil	See Tables 3.3CT or 3.5CT	mg/kg		CDI (mg/kg-day) = $\frac{CS*IR\text{-}S*FI*EF*ED*CF1}{BW*AT}$
				IR-S	Ingestion Rate of Soil	200	mg/day	(8)	
				FI	Fraction Ingested	1	unitless	(3)	
				EF	Exposure Frequency	52	days/year	(9)	
				ED	Exposure Duration	6	years	(10)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(5)	
				BW	Body Weight	57.2	kg	(11)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	
Dermal Absorption	Commercial Worker	Adult	Bush Industries Area, Cattaraugus Cutlery Area	CS	Chemical Concentration in Soil	See Tables 3.3CT or 3.5CT	mg/kg		DAD (mg/kg-day)= $\frac{CS*CF*SA*AF*ABS\text{-}d*EF*ED}{BW*AT}$
				CF	Conversion Factor	1.00E-006	kg/mg	(5)	
				SA	Skin Surface Area Available for Contact	3,300	cm^2	(6), (12), (13)	
				AF	Soil to Skin Adherence Factor	0.02	mg/cm^2-event	(2), (6)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	219	days/year	(6)	
				ED	Exposure Duration	9	years	(6)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(4)	
Dermal Absorption	Resident	Adult	Railroad Avenue Area	CS	Chemical Concentration in Soil	See Table 3.7CT	mg/kg		DAD (mg/kg-day)= $\frac{CS*CF*SA*AF*ABS\text{-}d*EF*ED}{BW*AT}$
				CF	Conversion Factor	1.00E-006	kg/mg	(5)	
				SA	Skin Surface Area Available for Contact	5,700	cm^2	(14)	
				AF	Soil to Skin Adherence Factor	0.01	mg/cm^2-event	(14)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	350	days/year	(7)	

TABLE 4.1 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Current/Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Resident	Adult	Railroad Avenue Area	ED	Exposure Duration	9	years	(14)	DAD (mg/kg-day)=
				BW	Body Weight	70	kg	(1)	CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(4)	
		Child	Railroad Avenue Area	CS	Chemical Concentration in Soil	See Table 3.7CT	mg/kg		DAD (mg/kg-day)=
				CF	Conversion Factor	1.00E-006	kg/mg	(5)	CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				SA	Skin Surface Area Available for Contact	2,800	cm^2	(14)	
				AF	Soil to Skin Adherence Factor	0.04	mg/cm^2-event	(14)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	6	years	(7)	
				BW	Body Weight	15	kg	(7)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	
	Trespasser	Adolescent (12-18 years)	Bush Industries Area / Cattaraugus Cutlery Area	CS	Chemical Concentration in Soil	See Tables 3.3CT or 3.5CT	mg/kg		DAD (mg/kg-day)=
				CF	Conversion Factor	1.00E-006	kg/mg	(5)	CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				SA	Skin Surface Area Available for Contact	5,180	cm^2	(15)	
				AF	Soil to Skin Adherence Factor	0.04	mg/cm^2-event	(14)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	52	days/year	(9)	
				ED	Exposure Duration	6	years	(10)	
				BW	Body Weight	57.2	kg	(11)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	

TABLE 4.1 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Current/Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Commercial Worker	Adult	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.3CT or 3.5CT	mg/kg		Intake (mg/kg-day) =
			Cattaraugus Cutlery Area	IR	Inhalation Rate	1.5	m^3/hour	(18)	$\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
				PEF	Particulate Emission Factor	Calculated	m^3/kg	See Tables 4.7 and 4.8	
				VF	Volatilization Factor	Calculated	m^3/kg	See Table 4.23CT	
				ET	Exposure Time	8	hours/day	(16)	
				EF	Exposure Frequency	219	days/year	(6)	
				ED	Exposure Duration	9	years	(6)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(4)	
Inhalation	Resident	Adult	Railroad Avenue Area	CS	Chemical Concentration in Soil	See Table 3.7CT	mg/kg		Intake (mg/kg-day) =
				IR	Inhalation Rate	0.83	m^3/hour	(18)	$\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
				PEF	Particulate Emission Factor	Calculated	m^3/kg	See Table 4.9	
				VF	Volatilization Factor	Calculated	m^3/kg	See Table 4.23CT	
				ET	Exposure Time	16	hours/day	(20)	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	9	years	(14)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(4)	
		Child	Railroad Avenue Area	CS	Chemical Concentration in Soil	See Table 3.7CT	mg/kg		Intake (mg/kg-day) =
				IR	Inhalation Rate	0.42	m^3/hour	(19)	$\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
				PEF	Particulate Emission Factor	Calculated	m^3/kg	See Table 4.9	
				VF	Volatilization Factor	Calculated	m^3/kg	See Table 4.25	
				ET	Exposure Time	16	hours/day	(20)	

TABLE 4.1 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Current/Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Resident	Child		EF	Exposure Frequency	350	days/year	(7)	Intake (mg/kg-day) =
				ED	Exposure Duration	6	years	(7)	$\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
				BW	Body Weight	15	kg	(7)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	
	Trespasser	Adolescent (12-18 years)	Bush Industries Area Cattaraugus Cutlery Area	CS	Chemical Concentration in Soil	See Tables 3.3CT or 3.5CT	mg/kg		Intake (mg/kg-day) =
				IR	Inhalation Rate	0.83	m^3/hour	(18)	$\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
				PEF	Particulate Emission Factor	Calculated	m^3/kg	See Tables 4.7 and 4.8	
				VF	Volatilization Factor	Calculated	m^3/kg	See Table 4.26	
				ET	Exposure Time	2	hours/day	(17)	
				EF	Exposure Frequency	52	days/year	(9)	
				ED	Exposure Duration	6	years	(10)	
				BW	Body Weight	57.2	kg	(11)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	

TABLE 4.1 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Current/Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name

Footnotes:

(1) EPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors." OSWER Directive 9285.6-03. March 25. - Default values.

(2) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit 1-2, default value for Non-Residential (Commercial/Industrial) Indoor Worker.

(3) EPA, 1989. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part A). EPA/540/1-89/002. Section 6.6.2 Conservative assumption that all soil or dust contacted is contaminated.

(4) EPA, 1989. Value for non-carcinogenic effects is the ED converted to days, and the value for carcinogenic effects is based on a 70 year lifetime.

(5) Required for proper units conversion.

(6) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Interim, EPA/540/R/99/005, OSWER 9285.7-02EP, September. Exhibit 3-5 recommended CT value for an Industrial Worker.

(7) EPA, 2002. December. Exhibit 1-2, default value for On-site Resident.

(8) EPA, 2002. Child-Specific Exposure Factors Handbook. EPA-600-P-00-002B. September. Table 5-19, Recommended mean value for children; Believed to be conservative for an older adolescent Trespasser.

(9) Assumes 1/2 of the RME value.

(10) Consistent with the age range of the adolescent Trespasser.

(11) EPA, 1997. Exposure Factors Handbook. EPA/600/P-95/002Fa. August. Table 7-2, Average of the mean body weights for boys and girls in the age range from 12 to 18.

(12) EPA, 2002. December. Exhibit 1-2, default value for Non-Residential (Commercial/Industrial) Outdoor Worker.

(13) Commercial Workers are assumed to have their head, forearms and hands exposed.

(14) EPA, 2001. September. Exhibit 3-5. CT value for residential scenario.

(15) EPA, 2001. September. Exhibit C-1, Reported average skin area for an adolescent aged 12 - 18 years wearing a short-sleeved shirt, shorts, and shoes with skin exposure limited to the head, hands, and forearms, and lower legs.

(16) Assumes a standard 8 hour work day.

(17) Site-specific assumption of 2 hours per day.

(18) EPA, 2002. December. Exhibit 1-2, default value for On-site Resident, 20 m^3/day. Also used for the adolescent trespasser. An hourly rate was calculated by: 20m^3/day/24 hours/day.

(19) EPA, 1997. August. Hourly value shown is based on 10 m^3/day for 24 hours/day.

(20) Assumes 8 hours are away from the residence.

TABLE 4.2 RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE
LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Resident	Adult	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.3 RME or 3.5 RME	mg/kg		CDI (mg/kg-day) =
			Cattaraugus Cutlery Area	IR-S	Ingestion Rate of Soil	100	mg/day	(7)	CS*IR-S*FI*EF*ED*CF1 / BW*AT
				FI	Fraction Ingested	1	unitless	(3)	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	30/24	years	(7), (9)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(5)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	10,950	days	(4)	
		Child	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.3 RME or 3.5 RME	mg/kg		CDI (mg/kg-day) =
			Cattaraugus Cutlery Area	IR-S	Ingestion Rate of Soil	200	mg/day	(7)	CS*IR-S*FI*EF*ED*CF1 / BW*AT
				FI	Fraction Ingested	1	unitless	(3)	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	6	years	(7)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(5)	
				BW	Body Weight	15	kg	(7)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	
Dermal Absorption	Resident	Adult	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.3 RME or 3.5 RME	mg/kg		DAD (mg/kg-day)=
			Cattaraugus Cutlery Area	CF	Conversion Factor	1.00E-006	kg/mg	(5)	CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				SA	Skin Surface Area Available for Contact	5,700	cm^2	(7)	
				AF	Soil to Skin Adherance Factor	0.07	mg/cm^2-event	(7)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	30/24	years	(7), (9)	

TABLE 4.2 RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE
LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Resident	Adult	Bush Industries Area	BW	Body Weight	70	kg	(1)	DAD (mg/kg-day)=
			Cattaraugus Cutlery Area	AT-C	Averaging Time - Cancer	25,550	days	(4)	CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				AT-N	Averaging Time - Non-Cancer	10,950	days	(4)	
		Child	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.3 RME or 3.5 RME	mg/kg		DAD (mg/kg-day)=
			Cattaraugus Cutlery Area	CF	Conversion Factor	1.00E-006	kg/mg	(5)	CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				SA	Skin Surface Area Available for Contact	2,800	cm^2	(7)	
				AF	Soil to Skin Adherence Factor	0.2	mg/cm^2-event	(7)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	6	years	(7)	
				BW	Body Weight	15	kg	(7)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	
Inhalation	Resident	Adult	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.3 RME or 3.5 RME	mg/kg		Intake (mg/kg-day) =
			Cattaraugus Cutlery Area	IR	Inhalation Rate	0.83	m^3/hour	(7), (8)	CS*IR*((1/PEF)+(1/VF))*ET*EF*ED / BW*AT
				PEF	Particulate Emission Factor	Calculated	m^3/kg	See Tables 4.7 and 4.8	
				VF	Volatilization Factor	Calculated	m^3/kg	See Table 4.24RME	
				ET	Exposure Time	24	hours/day	(8)	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	30/24	years	(7), (9)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	10,950	days	(4)	

TABLE 4.2 RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE
LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Resident	Child	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.3 RME or 3.5 RME	mg/kg		Intake (mg/kg-day) =
			Cattaraugus Cutlery Area	IR	Inhalation Rate	0.42	m^3/hour	(10)	$\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
				PEF	Particulate Emission Factor	Calculated	m^3/kg	See Tables 4.7 and 4.8	
				VF	Volatilization Factor	Calculated	m^3/kg	See Table 4.26	
				ET	Exposure Time	24	hours/day	(8)	
				EF	Exposure Frequency	350	days/year	(7)	
				ED	Exposure Duration	6	years	(7)	
				BW	Body Weight	15	kg	(7)	
				AT-C	Averaging Time - Cancer	25,550	days	(4)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(4)	

Footnotes:

(1) EPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors." OSWER Directive 9285.6-03. March 25. - Default values.

(2) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit 1-2.

(3) EPA, 1989. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part A). EPA/540/1-89/002. Section 6.6.2 Conservative assumption that all soil or dust contacted is contaminated.

(4) EPA, 1989. Value for non-carcinogenic effects is the ED converted to days, and the value for carcinogenic effects is based on a 70 year lifetime.

(5) Required for proper units conversion.

(6) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Interim, EPA/540/R/99/005, OSWER 9285.7-02EP, September. Exhibit 3-5.

(7) EPA, 2002. December. Exhibit 1-2, default value for On-site Resident.

(8) Value shown for IR and ET reflect that the product of IR*ET is 20 m3/day.

(9) Per EPA Region 2, the adult resident cancer risk is calculated using an adult ED of 24 years and a child ED of 6 years, while a non-cancer risk is calculated using an adult ED of 30 years.

(10) EPA, 1997. August. Hourly value shown is based on 10 m^3/day for 24 hours/day.

TABLE 4.2 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Populatio	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Resident	Adult	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3. 3CT or 3.5CT	mg/kg		CDI (mg/kg-day) =
			Cattaraugus Cutlery Area	IR-S	Ingestion Rate of Soil	100	mg/day	(5)	$\frac{CS*IR\text{-}S*FI*EF*ED*CF1}{BW*AT}$
				FI	Fraction Ingested	1	unitless	(2)	
				EF	Exposure Frequency	350	days/year	(5)	
				ED	Exposure Duration	9	years	(6)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(4)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(3)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(3)	
		Child	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3. 3CT or 3.5CT	mg/kg		CDI (mg/kg-day) =
			Cattaraugus Cutlery Area	IR-S	Ingestion Rate of Soil	200	mg/day	(5)	$\frac{CS*IR\text{-}S*FI*EF*ED*CF1}{BW*AT}$
				FI	Fraction Ingested	1	unitless	(2)	
				EF	Exposure Frequency	350	days/year	(5)	
				ED	Exposure Duration	6	years	(5)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(4)	
				BW	Body Weight	15	kg	(5)	
				AT-C	Averaging Time - Cancer	25,550	days	(3)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(3)	
Dermal Absorption	Resident	Adult	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3. 3CT or 3.5CT	mg/kg		DAD (mg/kg-day)=
			Cattaraugus Cutlery Area	CF	Conversion Factor	1.00E-006	kg/mg	(4)	$\frac{CS*CF*SA*AF*ABS\text{-}d*EF*ED}{BW*AT}$
				SA	Skin Surface Area Available for Contact	5,700	cm^2	(6)	
				AF	Soil to Skin Adherence Factor	0.01	mg/cm^2-event	(6)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	350	days/year	(5)	
				ED	Exposure Duration	9	years	(6)	

TABLE 4.2 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Populatio	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Resident	Adult	Bush Industries Area	BW	Body Weight	70	kg	(1)	DAD (mg/kg-day)=
			Cattaraugus Cutlery Area	AT-C	Averaging Time - Cancer	25,550	days	(3)	$\frac{CS*CF*SA*AF*ABS-d*EF*ED}{BW*AT}$
				AT-N	Averaging Time - Non-Cancer	3,285	days	(3)	
		Child	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3. 3CT or 3.5CT	mg/kg		DAD (mg/kg-day)=
			Cattaraugus Cutlery Area	CF	Conversion Factor	1.00E-006	kg/mg	(4)	$\frac{CS*CF*SA*AF*ABS-d*EF*ED}{BW*AT}$
				SA	Skin Surface Area Available for Contact	2,800	cm^2	(6)	
				AF	Soil to Skin Adherance Factor	0.04	mg/cm^2-event	(6)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	350	days/year	(5)	
				ED	Exposure Duration	6	years	(5)	
				BW	Body Weight	15	kg	(5)	
				AT-C	Averaging Time - Cancer	25,550	days	(3)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(3)	
Inhalation	Resident	Adult	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3. 3CT or 3.5CT	mg/kg		Intake (mg/kg-day) =
			Cattaraugus Cutlery Area	IR	Inhalation Rate	0.83	m^3/hour	(7)	$\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
				PEF	Particulate Emission Factor	Calculated	m^3/kg	See Tables 4.7 and 4.8	
				VF	Volatilization Factor	Calculated	m^3/kg	See Table 4.24RME	
				ET	Exposure Time	16	hours/day	(10)	
				EF	Exposure Frequency	350	days/year	(5)	
				ED	Exposure Duration	9	years	(6)	
				BW	Body Weight	70	kg	(1)	
				AT-C	Averaging Time - Cancer	25,550	days	(3)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(3)	

TABLE 4.2 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Future
Medium:	Soil
Exposure Medium:	Surface Soil

Exposure Route	Receptor Populatio	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Resident	Child	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3. 3CT or 3.5CT	mg/kg		Intake (mg/kg-day) =
			Cattaraugus Cutlery Area	IR	Inhalation Rate	0.42	m^3/hour	(9)	$\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
				PEF	Particulate Emission Factor	Calculated	m^3/kg	See Tables 4.7 and 4.8	
				VF	Volatilization Factor	Calculated	m^3/kg	See Table 4.26	
				ET	Exposure Time	16	hours/day	(10)	
				EF	Exposure Frequency	350	days/year	(5)	
				ED	Exposure Duration	6	years	(5)	
				BW	Body Weight	15	kg	(5)	
				AT-C	Averaging Time - Cancer	25,550	days	(3)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(3)	

Footnotes:

(1) EPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors." OSWER Directive 9285.6-03. March 25.

(2) EPA, 1989. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part A). EPA/540/1-89/002. Section 6.6.2 Conservative assumption that all soil or dust contacted is contaminated.

(3) EPA, 1989. Value for non-carcinogenic effects is the ED converted to days, and the value for carcinogenic effects is based on a 70 year lifetime.

(4) Required for proper units conversion.

(5) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit 1-2, default value for On-site Resident.

(6) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Interim, EPA/540/R/99/005, OSWER 9285.7-02EP, September. Exhibit 3-5. CT value for residential scenario.

(7) EPA, 2002. December. Exhibit 1-2, default value for On-site Resident, 20 m^3/day. An hourly rate was calculated by: 20m^3/day/24 hours/day.

(8) Site-specific assumption.

(9) EPA, 1997. August. Hourly value shown is based on 10 m^3/day for 24 hours/day.

(20) Assumes 8 hours are away from the residence.

TABLE 4.3 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Future
Medium:	Soil
Exposure Medium:	All Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Construction Worker	Adult	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.4 RME, 3.6 RME, or 3.8 RME	mg/kg		CDI (mg/kg-day) =
			Cattaraugus Cutlery Area	IR-S	Ingestion Rate of Soil	330	mg/day	(4)	$\frac{CS*IR\text{-}S*FI*EF*ED*CF1}{BW*AT}$
			Railroad Avenue Area	FI	Fraction Ingested	1	unitless	(2)	
				EF	Exposure Frequency	180	days/year	(5)	
				ED	Exposure Duration	1	year	(5)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(1)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(3)	
				AT-N	Averaging Time - Non-Cancer	365	days	(3)	
Dermal Absorption	Construction Worker	Adult	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.4 RME, 3.6 RME, or 3.8 RME	mg/kg		DAD (mg/kg-day)=
			Cattaraugus Cutlery Area	CF	Conversion Factor	1.00E-006	kg/mg	(1)	$\frac{CS*CF*SA*AF*ABS\text{-}d*EF*ED}{BW*AT}$
			Railroad Avenue Area	SA	Skin Surface Area Available for Contact	3,300	cm^2	(4)	
				AF	Soil to Skin Adherence Factor	0.3	mg/cm^2-event	(4)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	180	days/year	(5)	
				ED	Exposure Duration	1	year	(5)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(3)	
				AT-N	Averaging Time - Non-Cancer	365	days	(3)	

TABLE 4.3 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Future
Medium:	Soil
Exposure Medium:	All Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Construction Worker	Adult	Bush Industries Area	CS	Chemical Concentration in Soil	See Tables 3.4 RME, 3.6 RME, or 3.8 RME	mg/kg		Inkake (mg/kg-day) = $\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
			Cattaraugus Cutlery Area	IR	Inhalation Rate	2.5	m^3/hour	(4), (7)	
			Railroad Avenue Area	PEF	Particulate Emission Factor	Calculated	m^3/kg	See Tables 4.10, 4.11, and 4.12	
				VF	Volatilization Factor	Calculated	m^3/kg	See Tables 4.27, 4.28, and 4.29	
				ET	Exposure Time	8	hours/day	(8)	
				EF	Exposure Frequency	180	days/year	(5)	
				ED	Exposure Duration	1	year	(5)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(3)	
				AT-N	Averaging Time - Non-Cancer	365	days	(3)	

Footnotes:

(1) EPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors." OSWER Directive 9285.6-03. March 25.

(2) EPA, 1989. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part A). EPA/540/1-89/002. Section 6.6.2 Conservative assumption that all soil or dust contacted is contaminated.

(3) EPA, 1989. Value for non-carcinogenic effects is based on the ED (rounded up to one full year) and the value for carcinogenic effects is based on a 70 year lifetime.

(4) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit 1-2 Default value for Construction Worker.

(5) Site-specific assumption associated with construction of a new facility at the site (work every day for 6 months during one year)

(6) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Interim, EPA/540/R/99/005, OSWER 9285.7-02EP, September. Exhibit 3-5.

(7) Value shown for IR and ET reflect that the product of IR*ET is 20 m3/day.

(8) Assumes a standard 8 hour work day.

TABLE 4.3 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Future
Medium:	Soil
Exposure Medium:	All Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Construction Worker	Adult	Cattaraugus Cutlery Area	CS	Chemical Concentration in Soil	See Tables 3.4CT, 3.6CT, or 3.8CT	mg/kg		DAD (mg/kg-day)=
			Bush Industries Area	CF	Conversion Factor	1.00E-006	kg/mg	(1)	$\frac{CS*CF*SA*AF*ABS\text{-}d*EF*ED}{BW*AT}$
			Railroad Avenue Area	SA	Skin Surface Area Available for Contact	3,300	cm^2	(4)	
				AF	Soil to Skin Adherence Factor	0.3	mg/cm^2-event	(4)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	180	days/year	(5)	
				ED	Exposure Duration	1	year	(5)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(3)	
				AT-N	Averaging Time - Non-Cancer	365	days	(3)	
Inhalation	Construction Worker	Adult	Cattaraugus Cutlery Area	CS	Chemical Concentration in Soil	See Tables 3.4CT, 3.6CT, or 3.8CT	mg/kg		Inkake (mg/kg-day) =
			Bush Industries Area	IR	Inhalation Rate	1.5	m^3/hour	(7)	$\frac{CS*IR*((1/PEF)+(1/VF))*ET*EF*ED}{BW*AT}$
			Railroad Avenue Area	PEF	Particulate Emission Factor	Calculated	m^3/kg	See Tables 4.10, 4.11, and 4.12	
				VF	Volatilization Factor	Calculated	m^3/kg	See Tables 4.27, 4.28, and 4.29	
				ET	Exposure Time	8	hours/day	(8)	
				EF	Exposure Frequency	180	days/year	(5)	
				ED	Exposure Duration	1	year	(5)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(3)	
				AT-N	Averaging Time - Non-Cancer	365	days	(3)	

Footnotes:

(1) EPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors." OSWER Directive 9285.6-03. March 25.

(2) EPA, 1989. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part A). EPA/540/1-89/002. Section 6.6.2 Conservative assumption that all soil or dust contacted is contaminated.

(3) EPA, 1989. Value for non-carcinogenic effects is based on the ED (rounded up to one full year) and the value for carcinogenic effects is based on a 70 year lifetime.

(4) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit 1-2 Default value for Construction Worker.

(5) Site-specific assumption associated with construction of a new facility at the site (work every day for 6 months during one year)

(6) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Interim, EPA/540/R/99/005, OSWER 9285.7-02EP, September. Exhibit 3-5.

(7) EPA, 1997. Exposure Factors Handbook. Office of Research and Development. EPA/600/P-95/002Fa. Table 5-23 - Values represent moderate activity levels for short term exposures for outdoor workers.

(8) Assumes a standard 8 hour work day.

TABLE 4.4 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Shoreline Resident	Adult	Little Valley Creek and Tributaries	CW	Chemical Concentration in Surface Water	See Table 3.1 RME	ug/l		CDI (mg/kg-day) =
				CF1	Conversion Factor 1	0.001	mg/ug	(7)	$\frac{CW*CF1*IR-W*EF*ED}{BW*AT}$
				IR-W	Ingestion Rate of Surface Water	0.1	L/day	(1)	
				EF	Exposure Frequency	104	days/year	(3)	
				ED	Exposure Duration	30	years	(4)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	10,950	days	(5)	
		Child (0 - 6 years)	Little Valley Creek and Tributaries	CW	Chemical Concentration in Surface Water	See Table 3.1 RME	ug/l		CDI (mg/kg-day) =
				CF1	Conversion Factor 1	0.001	mg/ug	(7)	$\frac{CW*CF1*IR-W*EF*ED}{BW*AT}$
				IR-W	Ingestion Rate of Surface Water	0.1	L/day	(1)	
				EF	Exposure Frequency	104	days/year	(3)	
				ED	Exposure Duration	6	years	(6)	
				BW	Body Weight	15	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(5)	
Dermal Absorption	Shoreline Resident	Adult	Little Valley Creek and Tributaries	CW	Chemical Concentration in Surface Water	See Table 3.1 RME	ug/l		DAD (mg/kg-day)=
				DAevent	Absorbed Dose per Event	Calculated	mg/cm^2-event	See Next Column	$\frac{DAevent*SA*EV*EF*ED}{BW*AT}$
				FA	Fraction Absorbed Water	Chemical-Specific	unitless	See Table 4.41	
				SA	Skin Surface Area Available for Contact	5,700	cm^2	(4)	
				Kp	Permeability Constant	Chemical-Specific	cm/hr	See Table 4.41	
				tau-event	Lag Time per Event	Chemical-Specific	hours/event	See Table 4.41	

TABLE 4.4 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Shoreline Resident	Adult	Little Valley Creek and Tributaries	tevent	Event Duration	2	hours/event	(2)	Where DAevent=
				tau*	Time to Reach Steady-State	Calculated	hour	2.4*tau-event	organic compounds:
				B	Ratio of permeability coefficient of a compound through the stratum corneum relative to its permeability across the viable epidermis	Calculated	unitless	Kp*SQRT(MW)/2.6	
				MW	Molecular Weight	Chemical-Specific	g/mol	See Table 4.21	if tevent<tau* : CW*2*FA*Kp*CF2*SQRT(6*tau-event*tevent/PI)
				EV	Exposure Time	1	events/day	(2)	
				EF	Exposure Frequency	104	days/year	(3)	if tevent>tau* : CW*2*FA*Kp*CF2*[tevent/(1+B) + 2*tau-event*(1+3B+3B^2)/(1+B)^2]
				ED	Exposure Duration	30	years	(4)	inorganic compounds:
				CF2	Conversion Factor 2	0.001	L/cm^3	(7)	CW*Kp*CF2*tevent
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	10,950	days	(5)	
		Child (0 - 6 years)	Little Valley Creek and Tributaries	CW	Chemical Concentration in Surface Water	See Table 3.1 RME	ug/l		DAD (mg/kg-day)=
				DAevent	Absorbed Dose per Event	Calculated	mg/cm^2-event	See Next Column	DAevent*SA*EV*EF*ED / BW*AT
				FA	Fraction Absorbed Water	Chemical-Specific	unitless	See Table 4.41	
				SA	Skin Surface Area Available for Contact	2,800	cm^2	(4)	
				Kp	Permeability Constant	Chemical-Specific	cm/hr	See Table 4.41	
				tau-event	Lag Time per Event	Chemical-Specific	hours/event	See Table 4.41	
				tevent	Event Duration	2	hours/event	(2)	Where DAevent=
				tau*	Time to Reach Steady-State	Calculated	hour	2.4*tau-event	organic compounds:
				B	compound through the stratum corneum relative to its permeability	Calculated	unitless	Kp*SQRT(MW)/2.6	if tevent<tau* :
				MW	Molecular Weight	Chemical-Specific	g/mol	See Table 4.21	CW*2*FA*Kp*CF2*SQRT(6*tau-event*tevent/PI)

TABLE 4.4 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Shoreline Resident	Child (0 - 6 years)	Little Valley Creek and Tributaries	EV	Exposure Time	1	events/day	(8)	if tevent>tau* : CW*2*FA*Kp*CF2*[tevent/(1+B) + 2*tau-event*(1+3B+3B^2)/(1+B)^2]
				EF	Exposure Frequency	104	days/year	(3)	
				ED	Exposure Duration	6	years	(6)	inorganic compounds: CW*Kp*CF2*tevent
				CF2	Conversion Factor 2	0.001	L/cm^3	(7)	
				BW	Body Weight	15	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(5)	

Footnotes:

(1) EPA, 1989. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part A). EPA/540/1-89/002. Use of conservative Exhibit 6-12 incidental ingestion rate of 50 mL/hour for 2 hours (associated with swimming) while performing activities along the Creek.

(2) Site-specific assumption of 2 hours per event and 1 event per day.

(3) Site-specific assumption of 4 days per week for half of the year (26 weeks).

(4) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit 1-2, default value for On-site Resident.

(5) EPA, 1989. Value for non-carcinogenic effects is the ED converted to days, and the value for carcinogenic effects is based on a 70 year lifetime.

(6) Consistent with the age range of the child resident living along the creek.

(7) Required for proper units conversion.

TABLE 4.4 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Shoreline Resident	Adult	Little Valley Creek and Tributaries	CW	Chemical Concentration in Surface Water	See Table 3.1 CT	ug/l		CDI (mg/kg-day) =
				CF1	Conversion Factor 1	0.001	mg/ug	(9)	$\frac{CW*CF1*IR\text{-}W*EF*ED}{BW*AT}$
				IR-W	Ingestion Rate of Surface Water	0.1	L/day	(1)	
				EF	Exposure Frequency	52	days/year	(3)	
				ED	Exposure Duration	9	years	(2)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(5)	
		Child (0 - 6 years)	Little Valley Creek and Tributaries	CW	Chemical Concentration in Surface Water	See Table 3.1 CT	ug/l		CDI (mg/kg-day) =
				CF1	Conversion Factor 1	0.001	mg/ug	(9)	$\frac{CW*CF1*IR\text{-}W*EF*ED}{BW*AT}$
				IR-W	Ingestion Rate of Surface Water	0.1	L/day	(1)	
				EF	Exposure Frequency	52	days/year	(3)	
				ED	Exposure Duration	6	years	(6)	
				BW	Body Weight	15	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(5)	
Dermal Absorption	Shoreline Resident	Adult	Little Valley Creek and Tributaries	CW	Chemical Concentration in Surface Water	See Table 3.1 CT	ug/l		DAD (mg/kg-day)=
				DAevent	Absorbed Dose per Event	Calculated	mg/cm^2-event	See Next Column	$\frac{DAevent*SA*EV*EF*ED}{BW*AT}$
				FA	Fraction Absorbed Water	Chemical-Specific	unitless	See Table 4.41	
				SA	Skin Surface Area Available for Contact	5,700	cm^2	(2)	
				Kp	Permeability Constant	Chemical-Specific	cm/hr	See Table 4.41	
				tau-event	Lag Time per Event	Chemical-Specific	hours/event	See Table 4.41	

TABLE 4.4 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Shoreline Resident	Adult	Little Valley Creek and Tributaries	tevent	Event Duration	2	hours/event	(8)	Where DAevent=
				tau*	Time to Reach Steady-State	Calculated	hour	2.4*tau-event	organic compounds:
				B	Ratio of permeability coefficient of a compound through the stratum corneum relative to its permeability across the viable epidermis	Calculated	unitless	Kp*SQRT(MW)/2.6	if tevent<tau* : CW*2*FA*Kp*CF2*SQRT(6*tau-event*tevent/PI)
				MW	Molecular Weight	Chemical-Specific	g/mol	See Table 4.21	
				EV	Exposure Time	1	events/day	(8)	if tevent>tau* : CW*2*FA*Kp*CF2*[tevent/(1+B) + 2*tau-event*(1+3B+3B^2)/(1+B)^2]
				EF	Exposure Frequency	52	days/year	(3)	
				ED	Exposure Duration	9	years	(2)	inorganic compounds: CW*Kp*CF2*tevent
				CF2	Conversion Factor 2	0.001	L/cm^3	(9)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(5)	
		Child (0 - 6 years)	Little Valley Creek and Tributaries	CW	Chemical Concentration in Surface Water	See Table 3.1 CT	ug/l		DAD (mg/kg-day)= DAevent*SA*EV*EF*ED / BW*AT
				DAevent	Absorbed Dose per Event	Calculated	mg/cm^2-event	See Next Column	
				FA	Fraction Absorbed Water	Chemical-Specific	unitless	See Table 4.41	
				SA	Skin Surface Area Available for Contact	2,800	cm^2	(7)	
				Kp	Permeability Constant	Chemical-Specific	cm/hr	See Table 4.41	
				tau-event	Lag Time per Event	Chemical-Specific	hours/event	See Table 4.41	
				tevent	Event Duration	2	hours/event	(8)	Where DAevent=
				tau*	Time to Reach Steady-State	Calculated	hour	2.4*tau-event	organic compounds:
				B	Ratio of permeability coefficient of a compound through the stratum corneum relative to its permeability across the viable epidermis	Calculated	unitless	Kp*SQRT(MW)/2.6	if tevent<tau* : CW*2*FA*Kp*CF2*SQRT(6*tau-event*tevent/PI)
				MW	Molecular Weight	Chemical-Specific	g/mol	See Table 4.21	

TABLE 4.4 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium:	Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Shoreline Resident	Child (0 - 6 years)	Little Valley Creek and Tributaries	EV	Exposure Time	1	events/day	(8)	if tevent>tau* : CW*2*FA*Kp*CF2*[tevent/(1+B) + 2*tau-event*(1+3B+3B^2)/(1+B)^2]
				EF	Exposure Frequency	52	days/year	(3)	
				ED	Exposure Duration	6	years	(6)	Inorganic compounds: CW*Kp*CF2*tevent
				CF2	Conversion Factor 2	0.001	L/cm^3	(9)	
				BW	Body Weight	15	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(5)	

Footnotes:

(1) EPA, 1989. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part A). EPA/540/1-89/002. Use of conservative Exhibit 6-12 incidental ingestion rate of 50 mL/hour for 2 hours (associated with swimming) while performing activities along the Creek.

(2) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Interim, EPA/540/R/99/005, OSWER 9285.7-02EP, September. Exhibit 3-5. CT value for residential scenario.

(3) Assumes 1/2 RME value.

(4) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit 1-2, default value for On-site Resident.

(5) EPA, 1989. Value for non-carcinogenic effects is the ED converted to days, and the value for carcinogenic effects is based on a 70 year lifetime.

(6) Consistant with the age range of the child resident living along the creek.

(7) EPA, 2001. September. Value corrresponds to exposed head, hands, forearms, legs and feet for a child >1 and <6 years old.

(8) Site-specific assumption of 2 hours per event and 1 event per day.

(9) Required for proper units conversion.

TABLE 4.5 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium:	Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Shoreline Resident	Adult	Little Valley Creek and Tributaries	CS	Chemical Concentration in Sediment	See Table 3.2 RME	mg/kg		CDI (mg/kg-day) =
				IR-S	Ingestion Rate of Sediment	100	mg/day	(1)	CS*IR-S*FI*EF*ED*CF1 / BW*AT
				FI	Fraction Ingested	1	unitless	(2)	
				EF	Exposure Frequency	104	days/year	(3)	
				ED	Exposure Duration	30	years	(1)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(4)	
				BW	Body Weight	70	kg	(9)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	10,950	days	(5)	
		Child (0 - 6 years)	Little Valley Creek and Tributaries	CS	Chemical Concentration in Sediment	See Table 3.2 RME	mg/kg		CDI (mg/kg-day) =
				IR-S	Ingestion Rate of Sediment	200	mg/day	(1)	CS*IR-S*FI*EF*ED*CF1 / BW*AT
				FI	Fraction Ingested	1	unitless	(2)	
				EF	Exposure Frequency	104	days/year	(3)	
				ED	Exposure Duration	6	years	(6)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(4)	
				BW	Body Weight	15	kg	(9)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(5)	
Dermal Absorption	Shoreline Resident	Adult	Little Valley Creek and Tributaries	CS	Chemical Concentration in Sediment	See Table 3.2 RME	mg/kg		DAD (mg/kg-day)=
				CF	Conversion Factor	1.00E-006	kg/mg	(4)	CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				SA	Skin Surface Area Available for Contact	5,700	cm^2	(9)	
				AF	Sediment to Skin Adherence Factor	0.07	mg/cm^2-event	(8), (9)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	104	days/year	(3)	
				ED	Exposure Duration	30	years	(1)	

TABLE 4.5 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium:	Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Shoreline Resident	Adult	Little Valley Creek and Tributaries	BW	Body Weight	70	kg	(9)	DAD (mg/kg-day)=
				AT-C	Averaging Time - Cancer	25,550	days	(5)	$\frac{CS*CF*SA*AF*ABS-d*EF*ED}{BW*AT}$
				AT-N	Averaging Time - Non-Cancer	10,950	days	(5)	
		Child (0 - 6 years)	Little Valley Creek and Tributaries	CS	Chemical Concentration in Sediment	See Table 3.2 RME	mg/kg		DAD (mg/kg-day)=
				CF	Conversion Factor	1.00E-006	kg/mg	(4)	$\frac{CS*CF*SA*AF*ABS-d*EF*ED}{BW*AT}$
				SA	Skin Surface Area Available for Contact	2,800	cm^2	(9)	
				AF	Sediment to Skin Adherence Factor	0.2	mg/cm^2-event	(8), (9)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	104	days/year	(3)	
				ED	Exposure Duration	6	years	(6)	
				BW	Body Weight	15	kg	(9)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(5)	

Footnotes:

(1) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit 1-2, default value for residential soil ingestion

(2) EPA, 1989. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part A). EPA/540/1-89/002. Section 6.6.2 Conservative assumption that all sediement contacted is contaminated.

(3) Site-specific assumption of 4 days per week for half of the year (26 weeks).

(4) Required for proper units conversion.

(5) EPA, 1989. Value for non-carcinogenic effects is the ED converted to days, and the value for carcinogenic effects is based on a 70 year lifetime.

(6) Consistent with the age range of the child resident living along the creek.

(7) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Interim, EPA/540/R/99/005, OSWER 9285.7-02EP, September. Exhibit 3-5.

(8) Value for soils used for sediment.

(9) EPA, 2002. December. Exhibit 1-2, default value for On-site Resident.

TABLE 4.5 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium:	Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Shoreline Resident	Adult	Little Valley Creek and Tributaries	CS	Chemical Concentration in Sediment	See Table 3.2 CT	mg/kg		CDI (mg/kg-day) =
				IR-S	Ingestion Rate of Sediment	100	mg/day	(1)	CS*IR-S*FI*EF*ED*CF1 / BW*AT
				FI	Fraction Ingested	1	unitless	(2)	
				EF	Exposure Frequency	52	days/year	(3)	
				ED	Exposure Duration	9	years	(10)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(4)	
				BW	Body Weight	70	kg	(9)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(5)	
		Child (0 - 6 years)	Little Valley Creek and Tributaries	CS	Chemical Concentration in Sediment	See Table 3.2 CT	mg/kg		CDI (mg/kg-day) =
				IR-S	Ingestion Rate of Sediment	200	mg/day	(1)	CS*IR-S*FI*EF*ED*CF1 / BW*AT
				FI	Fraction Ingested	1	unitless	(2)	
				EF	Exposure Frequency	52	days/year	(3)	
				ED	Exposure Duration	6	years	(6)	
				CF1	Conversion Factor 1	1.00E-006	kg/mg	(4)	
				BW	Body Weight	15	kg	(9)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(5)	
Dermal Absorption	Shoreline Resident	Adult	Little Valley Creek and Tributaries	CS	Chemical Concentration in Sediment	See Table 3.2 CT	mg/kg		DAD (mg/kg-day)=
				CF	Conversion Factor	1.00E-006	kg/mg	(4)	CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				SA	Skin Surface Area Available for Contact	5,700	cm^2	(10)	
				AF	Sediment to Skin Adherence Factor	0.01	mg/cm^2-event	(7), (8)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	52	days/year	(3)	

TABLE 4.5 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Current/Future
Medium:	Sediment
Exposure Medium:	Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Shoreline Resident	Adult	Little Valley Creek and Tributaries	ED	Exposure Duration	9	years	(12)	DAD (mg/kg-day)= CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				BW	Body Weight	70	kg	(9)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(5)	
		Child (0 - 6 years)	Little Valley Creek and Tributaries	CS	Chemical Concentration in Sediment	See Table 3.2 CT	mg/kg		DAD (mg/kg-day)= CS*CF*SA*AF*ABS-d*EF*ED / BW*AT
				CF	Conversion Factor	1.00E-006	kg/mg	(4)	
				SA	Skin Surface Area Available for Contact	2,800	cm^2	(7), (9)	
				AF	Sediment to Skin Adherence Factor	0.04	mg/cm^2-event	(7), (8)	
				ABS-d	Dermal Absorption Factor	Chemical-Specific	unitless	See Table 4.21	
				EF	Exposure Frequency	52	days/year	(3)	
				ED	Exposure Duration	6	years	(6)	
				BW	Body Weight	15	kg	(9)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	2,190	days	(5)	

Footnotes:

(1) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit 1-2, default value for residential soil ingestion.

(2) EPA, 1989. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part A). EPA/540/1-89/002. Section 6.6.2 Conservative assumption that all sediement contacted is contaminated.

(3) Assumes 1/2 RME value.

(4) Required for proper units conversion.

(5) EPA, 1989. Value for non-carcinogenic effects is the ED converted to days, and the value for carcinogenic effects is based on a 70 year lifetime.

(6) Consistent with the age range of the child resident living along the creek.

(7) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Interim, EPA/540/R/99/005, OSWER 9285.7-02EP, September. Exhibit 3-5. CT value for residential scenario. Values corresponds to exposed hands, forearms, lower legs and feet.

(8) Value for soils used for sediment.

(9) EPA, 2002. December. Exhibit 1-2, default value for On-site Resident.

(10) EPA, 2001. September. Exhibit 3-5. CT value for residential scenario.

TABLE 4.6 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Commercial Worker	Adult	Process Water	CGW	Chemical Concentration in Groundwater	See Table 3.9 RME	ug/l		CDI (mg/kg-day) =
	(Washdown Scenario)			CF1	Conversion Factor 1	0.001	mg/ug	(8)	$\frac{CGW*CF1*IR\text{-}GW*FI*EF*ED}{BW*AT}$
				IR-GW	Ingestion Rate of Groundwater	0.025	L/day	(1)	
				FI	Fraction Ingested	1	unitless	(2)	
				EF	Exposure Frequency	250	days/year	(3)	
				ED	Exposure Duration	25	years	(3)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	9,125	days	(5)	
	Commercial Worker	Adult	Process Water	CGW	Chemical Concentration in Groundwater	See Table 3.9 RME	ug/l		CDI (mg/kg-day) =
	(Car Wash Scenario)			CF1	Conversion Factor 1	0.001	mg/ug	(8)	$\frac{CGW*CF1*IR\text{-}GW*FI*EF*ED}{BW*AT}$
				IR-GW	Ingestion Rate of Groundwater	0.2	L/day	(15)	
				FI	Fraction Ingested	1	unitless	(2)	
				EF	Exposure Frequency	250	days/year	(3)	
				ED	Exposure Duration	25	years	(3)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	9,125	days	(5)	
Dermal Absorption	Commercial Worker	Adult	Process Water	CGW	Chemical Concentration in Groundwater	See Table 3.9 RME	ug/l		DAD (mg/kg-day)=
	(Washdown Scenario)			DAevent	Absorbed Dose per Event	Calculated	mg/cm^2-event	See Next Column	$\frac{DAevent*SA*EV*EF*ED}{BW*AT}$
				FA	Fraction Absorbed Water	Chemical-Specific	unitless	See Table 4.39	
				SA	Skin Surface Area Available for Contact	3,300	cm^2	(9)	
				Kp	Permeability Constant	Chemical-Specific	cm/hr	See Table 4.39	
				tau-event	Lag Time per Event	Chemical-Specific	hours/event	See Table 4.39	

TABLE 4.6 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Commercial Worker (Washdown Scenario)	Adult	Process Water	tevent	Event Duration	1	hours/event	(8)	Where DAevent=
				tau*	Time to Reach Steady-State	Calculated	hour	2.4*tau-event	organic compounds:
				B	Ratio of permeability coefficient of a compound through the stratum corneum relative to its permeability across the viable epidermis	Calculated	unitless	Kp*SQRT(MW)/2.6	if tevent<tau* : CW*2*FA*Kp*CF2*SQRT(6*tau-event*tevent/PI)
				MW	Molecular Weight	Chemical-Specific	g/mol	See Table 4.21	
				EV	Exposure Time	1	events/day	(7)	if tevent>tau* : CW*2*FA*Kp*CF2*[tevent/(1+B) + 2*tau-event*(1+3B+3B^2)/(1+B)^2]
				EF	Exposure Frequency	250	days/year	(3)	
				ED	Exposure Duration	25	years	(3)	inorganic compounds: CW*Kp*CF2*tevent
				CF2	Conversion Factor 2	0.001	L/cm^3	(8)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	9,125	days	(5)	
	Commercial Worker (Car Wash Scenario)	Adult	Process Water	CGW	Chemical Concentration in Groundwater	See Table 3.9 RME	ug/l		DAD (mg/kg-day)= DAevent*SA*EV*EF*ED / BW*AT
				DAevent	Absorbed Dose per Event	Calculated	mg/cm^2-event	See Next Column	
				FA	Fraction Absorbed Water	Chemical-Specific	unitless	See Table 4.40	
				SA	Skin Surface Area Available for Contact	6,074	cm^2	(6)	
				Kp	Permeability Constant	Chemical-Specific	cm/hr	See Table 4.40	
				tau-event	Lag Time per Event	Chemical-Specific	hours/event	See Table 4.40	
				tevent	Event Duration	4	hours/event	(16)	Where DAevent=
				tau*	Time to Reach Steady-State	Calculated	hour	2.4*tau-event	organic compounds:
				B	Ratio of permeability coefficient of a compound through the stratum corneum relative to its permeability across the viable epidermis	Calculated	unitless	Kp*SQRT(MW)/2.6	if tevent<tau* : CW*2*FA*Kp*CF2*SQRT(6*tau-event*tevent/PI)
				MW	Molecular Weight	Chemical-Specific	g/mol	See Table 4.21	

TABLE 4.6 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Commercial Worker (Car Wash Scenario)	Adult	Process Water	EV	Exposure Time	2	events/day	(16)	if tevent>tau* : CW*2*FA*Kp*CF2*[tevent/(1+B) + 2*tau-event*(1 +3 +3 A2W/1+ \A2]
				EF	Exposure Frequency	250	days/year	(3)	
				ED	Exposure Duration	25	years	(3)	inorganic compounds:
				CF2	Conversion Factor 2	0.001	L/cm^3	(8)	CW*Kp*CF2*tevent
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	9,125	days	(5)	
Inhalation	Commercial Worker (Washdown Scenario)	Adult	Process Water	CGW	Chemical Concentration in Groundwater	See Table 3.9 RME	ug/l		Intake (mg/kg-day) = Cair*IR*ET*EF*ED / BW*AT
				Cair	Chemical Concentration in Indoor Air	Calculated	mg/m^3	See Table 3.10	
				CF1	Conversion Factor 1	0.001	mg/ug	(8)	
				t1	Duration of Spraying	0.75	hours	(11)	
				t2	Duration in Sprayed Area After Spraying	0.25	hours	(11)	
				f	Fraction of Dissolved Chemical Volatilized	0.9	unitless	(12)	
				Fw	Wash Water Flow Rate	1000	L/hour	(13)	
				Vair	Room Volume	210	m^3	(14)	
				IR	Inhalation Rate	2.5	m^3/hour	(9), (10)	
				ET	Exposure Time	1	hour/day	(7)	Where:
				EF	Exposure Frequency	250	days/year	(3)	Cair = [(CairMax/2)*t1 + CairMax*t2] / [t1+t2]
				ED	Exposure Duration	25	years	(3)	CairMax = CGW*CF1*f*Fw*t1/Vair
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	9,125	days	(5)	

TABLE 4.6 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Commercial Worker	Adult	Process Water	CGW	Chemical Concentration in Groundwater	See Table 3.9 RME	ug/l		Intake (mg/kg-day) =
	(Car Wash Scenario)			Cair	Chemical Concentration in Indoor Air	Calculated	mg/m^3	See Table 3.11	$\frac{Cair*IR*ET*EF*ED}{BW*AT}$
				CF1	Conversion Factor 1	0.001	mg/ug	(8)	
				t1	Duration of Spraying	0.083	hours	(17)	
				t2	Duration in Sprayed Area After Spraying	0.033	hours	(17)	
				f	Fraction of Dissolved Chemical Volatilized	0.9	unitless	(12)	
				Fw	Wash Water Flow Rate	5000	L/hour	(18)	
				Vair	Room Volume	100	m^3	(19)	
				IR	Inhalation Rate	2.5	m^3/hour	(9), (10)	
				ET	Exposure Time	8	hour/day	(20)	Where:
				EF	Exposure Frequency	250	days/year	(3)	Cair = [(CairMax/2)*t1 + CairMax*t2] / [t1+t2]
				ED	Exposure Duration	25	years	(3)	CairMax = CGW*CF1*f*Fw*t1/Vair
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	9,125	days	(5)	

Footnotes:

(1) EPA, 1989. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part A). EPA/540/1-89/002. Site-specific assumption of one half the incidental ingestion rate of 50 mL/hour (associated with swimming) for a 1 hour spraying perio

(2) Assumption that all groundwater utilized and contacted is contaminated.

(3) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit 1-2, default value for Non-Residential (Commercial/Industrial) Indoor Worker.

(4) EPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors." OSWER Directive 9285.6-03. March 25. - Default values for the commercial/industrial worker scenario

(5) EPA, 1989. Value for non-carcinogenic effects is the ED converted to days, and the value for carcinogenic effects is based on a 70 year lifetime.

(6) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Interim, EPA/540/R/99/005, OSWER 9285.7-02EP, September. Values corresponds to exposed face, hands, forearms, lower legs and feet for an adult (average male and female).

(7) Site-specific assumption of 1 hour per event and 1 event per day.

(8) Required for proper units conversion.

(9) EPA, 2002. December. Exhibit 1-2, default value for Non-Residential (Commercial/Industrial) Indoor Worker.

(10) Value shown for IR and ET reflect that the product of IR*ET is 20 m3/day.

(11) Site-specific assumption of 45 minutes of sparying during the washdown scenario and 15 minutes of follow-on time in the area being cleaned.

(12) Estimating Dermal and Inhalation Exposure to Volatile Chemicals in Domestic Water (Chapter 12 in "Drinking Water Contamination and Health"), Schaum, et al., USEPA, April 2, 1992, From Andleman range of 0.5 to 0.9 based on experimental tests with trichloroethylene and chloroform. Conservative selection based on the experimental data.

TABLE 4.6 RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name

(13) Professional judgment. Equivalent to 4.40 gallons per minute (4.4 gpm).

(14) Professional judgment. Approximates a 2-stall garage with dimensions 10m x 7m x 3m.

(15) EPA, 1989. Site-specific assumption of one half the incidental ingestion rate of 50 mL/hour (associated with swimming) for an 8 hour work day.

(16) Based on a scenario of an 8 hour work day, comprised of two 4 hour periods of being wet.

(17) Based on a cyle of 5 minutes of spraying with an additional 2 minutes of presence in the area before the cycle repeats.

(18) Professional judgment. Equivalent to 22 gallons per minute (22 gpm).

(19) Professional judgment. Approximates a 1 lane wash area with dimensions 10m x 4m x 2.5m.

(20) Site-specific assumption of typical 8 hour work day.

TABLE 4.6 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Incidental Ingestion	Commercial Worker (Washdown Scenario)	Adult	Indoors	CGW	Chemical Concentration in Groundwater	See Table 3. 9CT	ug/l		CDI (mg/kg-day) = CGW*CF1*IR-GW*EF*ED / BW*AT
				CF1	Conversion Factor 1	0.001	mg/ug	(8)	
				IR-GW	Ingestion Rate of Groundwater	0.025	L/day	(1)	
				EF	Exposure Frequency	219	days/year	(3)	
				ED	Exposure Duration	9	years	(3)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(5)	
	Commercial Worker (Car Wash Scenario)	Adult	Indoors	CGW	Chemical Concentration in Groundwater	See Table 3. 9CT	ug/l		CDI (mg/kg-day) = CGW*CF1*IR-GW*EF*ED / BW*AT
				CF1	Conversion Factor 1	0.001	mg/ug	(8)	
				IR-GW	Ingestion Rate of Groundwater	0.2	L/day	(15)	
				EF	Exposure Frequency	219	days/year	(3)	
				ED	Exposure Duration	9	years	(3)	
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(5)	
Dermal Absorption	Commercial Worker (Washdown Scenario)	Adult	Indoors	CGW	Chemical Concentration in Groundwater	See Table 3. 9CT	ug/l		DAD (mg/kg-day)= DAevent*SA*EV*EF*ED / BW*AT
				DAevent	Absorbed Dose per Event	Calculated	mg/cm^2-event	See Next Column	
				FA	Fraction Absorbed Water	Chemical-Specific	unitless	See Table 4.39	
				SA	Skin Surface Area Available for Contact	3,300	cm^2	(3), (6)	
				Kp	Permeability Constant	Chemical-Specific	cm/hr	See Table 4.39	
				tau-event	Lag Time per Event	Chemical-Specific	hours/event	See Table 4.39	

TABLE 4.6 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Commercial Worker (Washdown Scenario)	Adult	Indoors	tevent	Event Duration	1	hours/event	(1)	Where DAevent=
				tau*	Time to Reach Steady-State	Calculated	hour	2.4*tau-event	organic compounds:
				B	Ratio of permeability coefficient of a compound through the stratum corneum relative to its permeability across the viable epidermis	Calculated	unitless	Kp*SQRT(MW)/2.6	if tevent<tau* :
				MW	Molecular Weight	Chemical-Specific	g/mol	See Table 4.21	CW*2*FA*Kp*CF2*SQRT(6*tau-event*tevent/PI)
				EV	Exposure Time	1	events/day	(1)	if tevent>tau* :
				EF	Exposure Frequency	219	days/year	(3)	CW*2*FA*Kp*CF2*[tevent/(1+B) + 2*tau-event*(1+3B+3B^2)/(1+B)^2]
				ED	Exposure Duration	9	years	(3)	inorganic compounds:
				CF2	Conversion Factor 2	0.001	L/cm^3	(8)	CW*Kp*CF2*tevent
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(5)	
	Commercial Worker (Car Wash Scenario)	Adult	Indoors	CGW	Chemical Concentration in Groundwater	See Table 3.9CT	ug/l		DAD (mg/kg-day)=
				DAevent	Absorbed Dose per Event	Calculated	mg/cm^2-event	See Next Column	$\frac{DAevent*SA*EV*EF*ED}{BW*AT}$
				FA	Fraction Absorbed Water	Chemical-Specific	unitless	See Table 4.40	
				SA	Skin Surface Area Available for Contact	6,074	cm^2	(2)	
				Kp	Permeability Constant	Chemical-Specific	cm/hr	See Table 4.40	
				tau-event	Lag Time per Event	Chemical-Specific	hours/event	See Table 4.40	
				tevent	Event Duration	4	hours/event	(16)	Where DAevent=
				tau*	Time to Reach Steady-State	Calculated	hour	2.4*tau-event	organic compounds:
				B	Ratio of permeability coefficient of a compound through the stratum corneum relative to its permeability across the viable epidermis	Calculated	unitless	Kp*SQRT(MW)/2.6	if tevent<tau* :
				MW	Molecular Weight	Chemical-Specific	g/mol	See Table 4.21	CW*2*FA*Kp*CF2*SQRT(6*tau-event*tevent/PI)

TABLE 4.6 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal Absorption	Commercial Worker	Adult	Indoors	EV	Exposure Time	2	events/day	(16)	if tevent>tau* : CW*2*FA*Kp*CF2*[tevent/(1+B) + 2*tau-event*(1+3B+3B^2)/(1+B)^2]
	(Car Wash Scenario)			EF	Exposure Frequency	219	days/year	(3)	
				ED	Exposure Duration	9	years	(3)	inorganic compounds:
				CF2	Conversion Factor 2	0.001	L/cm^3	(8)	CW*Kp*CF2*tevent
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(5)	
Inhalation	Commercial Worker	Adult	Indoors	CGW	Chemical Concentration in Groundwater	See Table 3. 9CT	ug/l		Intake (mg/kg-day) =
	(Washdown Scenario)			Cair	Chemical Concentration in Indoor Air	Calculated	mg/m^3	See Table 3.10	Cair*IR*ET*EF*ED / BW*AT
				t1	Duration of Spraying	0.75	hours	(11)	
				t2	Duration in Sprayed Area After Spraying	0.25	hours	(11)	
				f	Fraction of Dissolved Chemical Volatilized	0.9	unitless	(12)	
				Fw	Wash Water Flow Rate	1000	L/hour	(13)	
				Vair	Room Volume	210	m^3	(14)	
				IR	Inhalation Rate	1.5	m^3/hour	(10)	
				ET	Exposure Time	1	hour/day	(1)	Where:
				EF	Exposure Frequency	219	days/year	(3)	Cair = [(CairMax/2)*t1 + CairMax*t2] / [t1+t2]
				ED	Exposure Duration	9	years	(3)	CairMax = CGW*f*Fw*t1/Vair
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(5)	
	Commercial Worker	Adult	Indoors	CGW	Chemical Concentration in Groundwater	See Table 3. 9CT	ug/l		Intake (mg/kg-day) =
	(Car Wash Scenario)			Cair	Chemical Concentration in Indoor Air	Calculated	mg/m^3	See Table 3.11	Cair*IR*ET*EF*ED / BW*AT
				t1	Duration of Spraying	0.083	hours	(17)	
				t2	Duration in Sprayed Area After Spraying	0.033	hours	(17)	
				f	Fraction of Dissolved Chemical Volatilized	0.9	unitless	(12)	

TABLE 4.6 CT

VALUES USED FOR DAILY INTAKE CALCULATIONS

CENTRAL TENDENCY

LITTLE VALLEY SUPERFUND SITE

Scenario Timeframe:	Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Commercial Worker (Car Wash Scenario)	Adult	Indoors	Fw	Wash Water Flow Rate	5000	L/hour	(18)	
				Vair	Room Volume	100	m^3	(9)	
				IR	Inhalation Rate	1.5	m^3/hour	(10)	
				ET	Exposure Time	8	hour/day	(7)	Where:
				EF	Exposure Frequency	219	days/year	(3)	Cair = [(CairMax/2)*t1 + CairMax*t2] / (t1+t2)
				ED	Exposure Duration	9	years	(3)	CairMax = CGW*f*Fw*t1/Vair
				BW	Body Weight	70	kg	(4)	
				AT-C	Averaging Time - Cancer	25,550	days	(5)	
				AT-N	Averaging Time - Non-Cancer	3,285	days	(5)	

Footnotes:

(1) EPA, 1989. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part A). EPA/540/1-89/002. Site-specific assumption of one half the incidental ingestion rate of 50 mL/hour (associated with swimming) for a 1 hour spraying period.

(2) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Interim, EPA/540/R/99/005, OSWER 9285.7-02EP, September. Values corresponds to exposed face, hands, forearms, lower legs and feet for an adult (average male and female).

(3) EPA, 2001. September. Exhibit 3-5 recommended CT value for an industrial worker.

(4) EPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors." OSWER Directive 9285.6-03. March 25. - Default values for the Commercial/Industrial Worker scenario

(5) EPA, 1989. Value for non-carcinogenic effects is the ED converted to days, and the value for carcinogenic effects is based on a 70 year lifetime.

(6) Commercial Workers are assumed to have their head, neck, forearms and hands exposed.

(7) Site-specific assumption of typical 8 hour work day.

(8) Required for proper units conversion.

(9) Professional judgment. Approximates a 1 lane wash area with dimensions 10m x 4m x 2.5m.

(10) EPA, 1997. Exposure Factors Handbook. EPA/600/P-95/002Fa. August. Table 5-23. Value represents moderate activity levels for an outdoor worker.

(11) Site-specific assumption of 45 minutes of sparying during the washdown scenario and 15 minutes of follow-on time in the area being cleaned.

(12) EPA, 1992. Estimating Dermal and Inhalation Exposure to Volatile Chemicals in Domestic Water (Chapter 12 in "Drinking Water Contamination and Health"), Schaum, et al. April. From Andleman range of 0.5 to 0.9 based on experimental tests with trichloroethylene and chloroform. Conservative assumption based on the published data.

(13) Professional judgment. Equivatent to 4.40 gallons per minute (4.4 gpm).

(14) Professional judgment. Approximates a 2-stall garage with dimensions 10m x 7m x 3m.

(15) EPA, 1989. Use of one half the incidental ingestion rate of 50 mL/hour (associated with swimming) for an 8 hour work day.

(16) Based on a scenario of an 8 hour work day, comprised of two 4 hour periods of being wet.

(17) Based on a cyle of 5 minutes of spraying with an additional 2 minutes of presence in the area before the cycle repeats.

(18) Professional judgment. Equivalent to 22 gallons per minute (22 gpm).

TABLE 4.7

PARTICULATE EMISSION FACTOR DEVELOPMENT FOR WIND RESUSPENSION AT THE BUSH INDUSTRIES AREA

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference	Equation/ Model Name
PEFwind	Wind Generated Dust Particulate Emission Factor	m^3/kg	6.02E+006	(1)	See Note (1)
Q/Cwind	Inverse of the Ratio of the Geometric Mean Air Concentration to the Emission Flux at the Center of a Square Source	g/m^2-s per kg/m^3	52.74	(2)	See Note (2)
Asite	Areal Extent of Site Soil Contamination	acres	9.18	(3)	
A	First Constant in the Q/Cwind Equation	unitless	12.8612	(4)	
B	Second Constant in the Q/Cwind Equation	unitless	20.5164	(4)	
C	Third Constant in the Q/Cwind Equation	unitless	237.2798	(4)	
V	Fraction of Vegetative Cover	unitless	0.5	(5)	
Um	Mean Annual Wind Speed	m/s	4.80	(6)	
Zo	Roughness Height for Surface	cm	4.0	(7)	
Ut/U*	Ratio of Wind Speed at 7 m to Friction Velocity	unitless	12.91	(8)	
Psize	Particle Size Distribution Mode for Medium Grade Sand	mm	0.25	(9)	
U*	Minimum Threshold Friction Velocity	m/s	0.37	(10)	
Ut	Equivalent Threshold Value of Wind Speed at 7 m	m/s	4.78	(11)	
x	0.866 Ut/Um	unitless	0.862	(12)	
F(x)	Function Dependent on x	unitless	1.73	(13)	

Footnotes:

(1) The equation used to calculate the particulate emission factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 4-5).

$$PEF_{wind} = \frac{Q}{Cwind} \cdot \frac{3{,}600\ s/hr}{0.036 \cdot (1-V) \cdot \left(U_m / U_t\right)^3 \cdot F(x)}$$

(2) The equation used to calculate the Q/Cwind factor is Q/Cwind=A x exp [(lnAsite - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit D-2).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaragus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) EPA, 2002. Exhibit D-2. Used constants for Zone 7, Cleveland, OH as the closest similar listed city to the Site.

(5) Estimate based on site reconnaissance by Project Team members.

(6) EPA, 1985. Cowherd et al. Table 4-1. Average Mean Wind Speed for Cleveland, OH (the closest similar listed city to the Site).

(7) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Site Vegetation was established by TtFW Site Personnel. The value corresponding to the surface was obtained from Figure 3-6, p. 27 - Value corresponds to a small scale commercial building in a typically grass covered area.

(8) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Ratio of Windspeed at 7 m to Friction Velocity, dependent on a minimum site-wide vegetative roughness height (Zo). Um/U* = (1/0.4)*ln (Height above surface (cm) / Roughness Height of Vegetation (cm)), Equation 4-3, p. 30.

(9) Particle size was determined using the grain-size scales with medium grade sand (American Geologists, Modified Wentworth scale--after Lane et al, 1947, Trans American Geophysical Union v.28, p. 936-938).

(10) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Figure 3-4, p. 24, interpolation using Particle Size Distribution Mode for Medium Grade Sand (d = 0.25 mm).

(11) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Value based on Minimum Threshold Friction Velocity * Ratio of Wind Speed at 7 m to Friction Velocity ((Ut/U*)*U*).

(12) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Value based on Ut and Um.

(13) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Figure 4-3, p. 36, interpolation based on the value of x.

TABLE 4.8

PARTICULATE EMISSION FACTOR DEVELOPMENT FOR WIND RESUSPENSION AT THE CATTARAUGUS CUTLERY AREA

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference	Equation/ Model Name
PEFwind	Wind Generated Dust Particulate Emission Factor	m^3/kg	7.11E+006	(1)	See Note (1)
Q/Cwind	Inverse of the Ratio of the Geometric Mean Air Concentration to the Emission Flux at the Center of a Square Source	g/m^2-s per kg/m^3	62.30	(2)	See Note (2)
Asite	Areal Extent of Site Soil Contamination	acres	3.21	(3)	
A	First Constant in the Q/Cwind Equation	unitless	12.8612	(4)	
B	Second Constant in the Q/Cwind Equation	unitless	20.5164	(4)	
C	Third Constant in the Q/Cwind Equation	unitless	237.2798	(4)	
V	Fraction of Vegetative Cover	unitless	0.5	(5)	
Um	Mean Annual Wind Speed	m/s	4.80	(6)	
Zo	Roughness Height for Surface	cm	4.0	(7)	
Ut/U*	Ratio of Wind Speed at 7 m to Friction Velocity	unitless	12.91	(8)	
Psize	Particle Size Distribution Mode for Medium Grade Sand	mm	0.25	(9)	
U*	Minimum Threshold Friction Velocity	m/s	0.37	(10)	
Ut	Equivalent Threshold Value of Wind Speed at 7 m	m/s	4.78	(11)	
x	0.866 Ut/Um	unitless	0.862	(12)	
F(x)	Function Dependent on x	unitless	1.73	(13)	

Footnotes:

(1) The equation used to calculate the particulate emission factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 4-5).

$$PEF_{wind} = \frac{Q}{Cwind} \cdot \frac{3{,}600\ s/hr}{0.036 \cdot (1-V) \cdot \left(U_m / U_t\right)^3 \cdot F(x)}$$

(2) The equation used to calculate the Q/Cwind factor is Q/Cwind=A x exp [(lnAsite - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit D-2).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaraugus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) EPA, 2002. Exhibit D-2. Used constants for Zone 7, Cleveland, OH as the closest similar listed city to the Site.

(5) Estimate based on site reconnaissance by Project Team members.

(6) EPA, 1985. Cowherd et al. Table 4-1. Average Mean Wind Speed for Cleveland, OH (the closest similar listed city to the Site).

(7) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Site Vegetation was established by TtFW Site Personnel. The value corresponding to the surface was obtained from Figure 3-6, p. 27 - Value corresponds to a small scale commercial building in a typically grass covered area.

(8) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Ratio of Windspeed at 7 m to Friction Velocity, dependent on a minimum site-wide vegetative roughness height (Zo). Um/U* = (1/0.4)*ln (Height above surface (cm) / Roughness Height of Vegetation (cm)), Equation 4-3, p. 30.

(9) Particle size was determined using the grain-size scales with medium grade sand (American Geologists, Modified Wentworth scale--after Lane et al, 1947, Trans American Geophysical Union v.28, p. 936-938).

(10) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Figure 3-4, p. 24, interpolation using Particle Size Distribution Mode for Medium Grade Sand (d = 0.25 mm).

(11) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Value based on Minimum Threshold Friction Velocity * Ratio of Wind Speed at 7 m to Friction Velocity ((Ut/U*)*U*).

(12) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Value based on Ut and Um.

(13) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Figure 4-3, p. 36, interpolation based on the value of x.

TABLE 4.9

PARTICULATE EMISSION FACTOR DEVELOPMENT FOR WIND RESUSPENSION AT THE RAILROAD AVENUE AREA

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference	Equation/ Model Name
PEFwind	Wind Generated Dust Particulate Emission Factor	m^3/kg	1.84E+007	(1)	See Note (1)
Q/Cwind	Inverse of the Ratio of the Geometric Mean Air Concentration to the Emission Flux at the Center of a Square Source	g/m^2-s per kg/m^3	80.53	(2)	See Note (2)
Asite	Areal Extent of Site Soil Contamination	acres	0.71	(3)	
A	First Constant in the Q/Cwind Equation	unitless	12.8612	(4)	
B	Second Constant in the Q/Cwind Equation	unitless	20.5164	(4)	
C	Third Constant in the Q/Cwind Equation	unitless	237.2798	(4)	
V	Fraction of Vegetative Cover	unitless	0.75	(5)	
Um	Mean Annual Wind Speed	m/s	4.80	(6)	
Zo	Roughness Height for Surface	cm	4.0	(7)	
Ut/U*	Ratio of Wind Speed at 7 m to Friction Velocity	unitless	12.91	(8)	
Psize	Particle Size Distribution Mode for Medium Grade Sand	mm	0.25	(9)	
U*	Minimum Threshold Friction Velocity	m/s	0.37	(10)	
Ut	Equivalent Threshold Value of Wind Speed at 7 m	m/s	4.78	(11)	
x	0.866 Ut/Um	unitless	0.862	(12)	
F(x)	Function Dependent on x	unitless	1.73	(13)	

Footnotes:

(1) The equation used to calculate the particulate emission factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 4-5).

$$PEF_{wind} = \frac{Q}{Cwind} \cdot \frac{3{,}600\ s/hr}{0.036 \cdot (1-V) \cdot \left(U_m / U_t\right)^3 \cdot F(x)}$$

(2) The equation used to calculate the Q/Cwind factor is Q/Cwind=A x exp [(lnAsite - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit D-2).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaragus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) EPA, 2002. Exhibit D-2. Used constants for Zone 7, Cleveland, OH as the closest similar listed city to the Site.

(5) Estimate based on site reconnaissance by Project Team members.

(6) EPA, 1985. Cowherd et al. Table 4-1. Average Mean Wind Speed for Cleveland, OH (the closest similar listed city to the Site).

(7) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Site Vegetation was established by TtFW Site Personnel. The value corresponding to the surface was obtained from Figure 3-6, p. 27 - Value corresponds to a small scale commercial building in a typically grass covered area.

(8) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Ratio of Windspeed at 7 m to Friction Velocity, dependent on a minimum site-wide vegetative roughness height (Zo). Um/U* = (1/0.4)*ln (Height above surface (cm) / Roughness Height of Vegetation (cm)), Equation 4-3, p. 30.

(9) Particle size was determined using the grain-size scales with medium grade sand (American Geologists, Modified Wentworth scale--after Lane et al, 1947, Trans American Geophysical Union v.28, p. 936-938).

(10) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Figure 3-4, p. 24, interpolation using Particle Size Distribution Mode for Medium Grade Sand (d = 0.25 mm).

(11) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Value based on Minimum Threshold Friction Velocity * Ratio of Wind Speed at 7 m to Friction Velocity ((Ut/U*)*U*).

(12) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Value based on Ut and Um.

(13) EPA, 1985. Cowherd et al. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination Sites. Figure 4-3, p. 36, interpolation based on the value of x.

TABLE 4.10

PARTICULATE EMISSION FACTOR DEVELOPMENT FOR FUGITIVE DUST FROM CONSTRUCTION AT THE BUSH INDUSTRIES AREA

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference	Equation/ Model Name
PEFsc	Subchronic Road Particulate Emission Factor	m^3/kg	2.06E+005	(1)	See Note (1)
Q/Csr	Inverse of the Ratio of the 1-Hour Geometric Mean Air Concentration to the Emission Flux Along a Straight Road Segment Bisecting a Square Site	g/m^2-s per kg/m^3	15.37	(2)	See Note (2)
As	Areal Extent of Site Soil Contamination	acres	9.18	(3)	
A	First Constant in the Q/Csr Equation	unitless	12.94	(2)	
B	Second Constant in the Q/Csr Equation	unitless	5.74	(2)	
C	Third Constant in the Q/Csr Equation	unitless	71.77	(2)	
Fd	Dispersion Correction Factor	unitless	0.19	(5)	See Note (4)
T	Total Time Over Which Construction Occurs	seconds	1.56E+007	(4) and (5)	
tc	Total Time Over Which Construction Occurs	hours	4,320	(4) and (5)	
Ar	Surface Area of Contaminated Road Segment	m^2	163		See Note (6)
Lr	Length of Road Segment	m	288	(7)	
Wr	Width of Road Segment	m	6.10	(8)	
W	Mean Construction Vehicle Weight	tons	8	(9)	
p	Number of Days with at Least 0.01 inches of Precipitation	days/year	165	(10)	
SumVKT	Sum of Fleet Kilometers Traveled During the Construction Exposure Duration	km	2,243	(11)	

Footnotes:

(1) The equation used to calculate the road particulate emission factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 5-5).

$$PEF_{sc} = \frac{Q}{Csr} \cdot x \frac{1}{Fd} x \frac{T \; x \; Ar}{556x \; (W/3)^{0.4} \; x \; \frac{(365-p)}{365} \; x \; SumVKT}$$

(2) The equation used to calculate the Q/Csr factor is Q/Csr = A x exp [(lnAs - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 5-6).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaragus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) The equation used to calculate the Fd factor is Fd = 0.1852 + (5.3537/tc) + (-9.6318/tc^2) (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation E-16).

(5) Based on 6 months of disturbed soil.

(6) The equation used to calculate the Ar factor is Ar = Lr x Wr x 0.092903m^2/Ft^2 (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 5-5).

(7) Assumed construction road length equals the largest diagonal through the area.

(8) Assumed construction road 20 feet wide.

(9) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December, Page 5-12. Based on assumption of 20 cars @ 2 tons/car and 10 trucks @ 20 tons/truck

(10) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December, Exhibit 5-2.

(11) Based on 30 vehicle fleet, 2*Lr distance per vehicle trip, 5 days/week, and 6 month duration.

TABLE 4.11

PARTICULATE EMISSION FACTOR DEVELOPMENT FOR FUGITIVE DUST FROM CONSTRUCTION AT THE CATTARAUGUS CUTLERY AREA

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference	Equation/ Model Name
PEFsc	Subchronic Road Particulate Emission Factor	m^3/kg	2.32E+005	(1)	See Note (1)
Q/Csr	Inverse of the Ratio of the 1-Hour Geometric Mean Air Concentration to the Emission Flux Along a Straight Road Segment Bisecting a Square Site	g/m^2-s per kg/m^3	17.31	(2)	See Note (2)
As	Areal Extent of Site Soil Contamination	acres	3.21	(3)	
A	First Constant in the Q/Csr Equation	unitless	12.94	(2)	
B	Second Constant in the Q/Csr Equation	unitless	5.74	(2)	
C	Third Constant in the Q/Csr Equation	unitless	71.77	(2)	
Fd	Dispersion Correction Factor	unitless	0.19	(5)	See Note (4)
T	Total Time Over Which Construction Occurs	seconds	1.56E+007	(4) and (5)	
tc	Total Time Over Which Construction Occurs	hours	4,320	(4) and (5)	
Ar	Surface Area of Contaminated Road Segment	m^2	91.75		See Note (6)
Lr	Length of Road Segment	m	162	(7)	
Wr	Width of Road Segment	m	6.10	(8)	
W	Mean Construction Vehicle Weight	tons	8	(9)	
p	Number of Days with at Least 0.01 inches of Precipitation	days/year	165	(10)	
SumVKT	Sum of Fleet Kilometers Traveled During the Construction Exposure Duration	km	1,264	(11)	

Footnotes:

(1) The equation used to calculate the road particulate emission factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 5-5).

$$PEF_{sc} = \frac{Q}{Csr} \cdot x \frac{1}{Fd} x \frac{T \; x \; Ar}{556x \; (W/3)^{0.4} \; x \; \frac{(365-p)}{365} \; x \; SumVKT}$$

(2) The equation used to calculate the Q/Csr factor is Q/Csr = A x exp [(lnAs - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 5-6).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaraugus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) The equation used to calculate the Fd factor is Fd = 0.1852 + (5.3537/tc) + (-9.6318/tc^2) (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation E-16).

(5) Based on 6 months of disturbed soil.

(6) The equation used to calculate the Ar factor is Ar = Lr x Wr x 0.092903m^2/Ft^2 (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 5-5).

(7) Assumed construction road length equals the largest diagonal through the area.

(8) Assumed construction road 20 feet wide.

(9) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December, Page 5-12. Based on assumption of 20 cars @ 2 tons/car and 10 trucks @ 20 tons/truck

(10) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December, Exhibit 5-2.

(11) Based on 30 vehicle fleet, 2*Lr distance per vehicle trip, 5 days/week, and 6 month duration.

TABLE 4.12

PARTICULATE EMISSION FACTOR DEVELOPMENT FOR FUGITIVE DUST FROM CONSTRUCTION AT THE RAILROAD AVENUE AREA

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference	Equation/ Model Name
PEFsc	Subchronic Road Particulate Emission Factor	m^3/kg	2.91E+005	(1)	See Note (1)
Q/Csr	Inverse of the Ratio of the 1-Hour Geometric Mean Air Concentration to the Emission Flux Along a Straight Road Segment Bisecting a Square Site	g/m^2-s per kg/m^3	21.67	(2)	See Note (2)
As	Areal Extent of Site Soil Contamination	acres	0.71	(3)	
A	First Constant in the Q/Csr Equation	unitless	12.94	(2)	
B	Second Constant in the Q/Csr Equation	unitless	5.74	(2)	
C	Third Constant in the Q/Csr Equation	unitless	71.77	(2)	
Fd	Dispersion Correction Factor	unitless	0.186	(5)	See Note (4)
T	Total Time Over Which Construction Occurs	seconds	1.56E+007	(4) and (5)	
tc	Total Time Over Which Construction Occurs	hours	4,320	(4) and (5)	
Ar	Surface Area of Contaminated Road Segment	m^2	46.20		See Note (6)
Lr	Length of Road Segment	m	81.57	(7)	
Wr	Width of Road Segment	m	6.10	(8)	
W	Mean Construction Vehicle Weight	tons	8	(9)	
p	Number of Days with at Least 0.01 inches of Precipitation	days/year	165	(10)	
SumVKT	Sum of Fleet Kilometers Traveled During the Construction Exposure Duration	km	636	(11)	

Footnotes:

(1) The equation used to calculate the road particulate emission factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 5-5).

$$PEF_{sc} = \frac{Q}{Csr} \cdot x \frac{1}{Fd} x \frac{T \; x \; Ar}{556 \; x \; (W/3)^{0.4} \; x \; \frac{(365-p)}{365} \; x \; SumVKT}$$

(2) The equation used to calculate the Q/Csr factor is Q/Csr = A x exp [(lnAs - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 5-6).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaraugus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) The equation used to calculate the Fd factor is Fd = 0.1852 + (5.3537/tc) + (-9.6318/tc^2) (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation E-16).

(5) Based on 6 months of disturbed soil.

(6) The equation used to calculate the Ar factor is Ar = Lr x Wr x 0.092903m^2/Ft^2 (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 5-5).

(7) Assumed construction road length equals the largest diagonal through the area.

(8) Assumed construction road 20 feet wide.

(9) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December, Page 5-12. Based on assumption of 20 cars @ 2 tons/car and 10 trucks @ 20 tons/truck

(10) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December, Exhibit 5-2.

(11) Based on 30 vehicle fleet, 2*Lr distance per vehicle trip, 5 days/week, and 6 month duration.

TABLE 4.13

VOLATILIZATION FACTOR DEVELOPMENT FOR THE CATTARAUGUS CUTLERY AREA FOR THE COMMERCIAL WORKER

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference
VF	Volatilization Factor	m3/kg	Calculated	See Note (1)
Q/Cvol	Inverse of the Ratio of the Geometric Mean Air Concentration to the Volatilization Flux at the Center of Square Source	g/m2-s per kg/m3	62.30	See Note (2)
Asite	Areal Extent of Site Soil Contamination	acres	3.21	(3)
A	First Constant in the Q/Cvol Equation	unitless	12.8612	(4)
B	Second Constant in the Q/Cvol Equation	unitless	20.5164	(4)
C	Third Constant in the Q/Cvol Equation	unitless	237.2798	(4)
DA	Apparent Diffusivity	cm2/s	Calculated	See Note (1)
T	Exposure Interval for the Commercial Worker	seconds	7.88E+08 / 2.84E+08	(5)
RhoB	Dry Soil Bulk Density	g/cm3	1.5	(6)
ThetaA	Air-Filled Soil Porosity	LAir/LSoil	0.28	(7)
Eta	Total Soil Porosity	LPore/LSoil	0.43	(8)
ThetaW	Water-Filled Soil Porosity	LWater/LSoil	0.15	(9)
RhoS	Soil Particle Density	g/cm3	2.65	(10)
Di	Diffusivity in Air	cm2/s	Chemical-Specific	(11)
H'	Dimensionless Henry's Law Constant	unitless	Chemical-Specific	(11)
Dw	Diffusivity in Water	cm2/s	Chemical-Specific	(11)
Kd	Soil-Water Partition Coefficient	cm3/g	Calculated	(12)
Koc	Soil Organic Carbon-Water Partition Coefficient	cm3/g	Chemical-Specific	(11)
foc	Fraction of Organic Carbon in Soil	gCarbon/gSoil	0.005	(13)

Footnotes:

(1) The equation used to calculate the soil-to-air volatilization factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 4-8). Conservatively assumes entire area is contaminated.

$$VF = \frac{Q}{C_{vol}} \times \frac{(3.14 \times D_A \times T)^{1/2}}{(2 \times RhoB \times D_A)} \times 10^{-4} \ (m^2 / cm^2)$$

$$D_A = \frac{\left[\frac{(ThetaA^{10/3} \times D_i \times H') + (ThetaW^{10/3} \times D_w)}{Eta^2}\right]}{(Rho_B \times K_d) + ThetaW + (ThetaA \times H')}$$

(2) The equation used to calculate the Q/Cvol factor is Q/Cvol = A x exp [(lnAsite - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit D-3).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaraugus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) EPA, 2002. Exhibit D-2. Used constants for Zone 7, Cleveland, OH as the closest similar listed city to the Site.

(5) Values reflect exposure durations of 25 years (RME) and 9 years (CT), converted to seconds.

(6) EPA, 2002. Equation 4-8. Default. Typical of sandy soil.

(7) EPA, 2002. Equation 4-8. Calculated using the equation ThetaA = Eta - ThetaW.

(8) EPA, 2002. Equation 4-8. Calculated using the equation Eta = 1-(RhoB/RhoS).

(9) Corresponds to an average annual soil water content of 10 weight percent.

(10) EPA, 1988. Superfund Exposure Assessment Manual. Mode of the range given for U.S. soils. Default value for most soil mineral material.

(11) Chemical-specific parameters are shown in Table 4.9.

(12) EPA, 2002. Calculated using the equation Kd = Koc x foc for organic chemicals and tabulated for inorganic chemicals (See Table 4-9).

(13) Site-specific value.

TABLE 4.14

VOLATILIZATION FACTOR DEVELOPMENT FOR THE RAILROAD AVENUE AREA FOR THE ADULT RESIDENT

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference
VF	Volatilization Factor	m3/kg	Calculated	See Note (1)
Q/Cvol	Inverse of the Ratio of the Geometric Mean Air Concentration to the Volatilization Flux at the Center of Square Source	g/m2-s per kg/m3	80.53	See Note (2)
Asite	Areal Extent of Site Soil Contamination	acres	0.71	(3)
A	First Constant in the Q/Cvol Equation	unitless	12.8612	(4)
B	Second Constant in the Q/Cvol Equation	unitless	20.5164	(4)
C	Third Constant in the Q/Cvol Equation	unitless	237.2798	(4)
DA	Apparent Diffusivity	cm2/s	Calculated	See Note (1)
T	Exposure Interval for the Adult Resident	seconds	9.46E+08 / 2.84E+08	(5)
RhoB	Dry Soil Bulk Density	g/cm3	1.5	(6)
ThetaA	Air-Filled Soil Porosity	LAir/LSoil	0.28	(7)
Eta	Total Soil Porosity	LPore/LSoil	0.43	(8)
ThetaW	Water-Filled Soil Porosity	LWater/LSoil	0.15	(9)
RhoS	Soil Particle Density	g/cm3	2.65	(10)
Di	Diffusivity in Air	cm2/s	Chemical-Specific	(11)
H'	Dimensionless Henry's Law Constant	unitless	Chemical-Specific	(11)
Dw	Diffusivity in Water	cm2/s	Chemical-Specific	(11)
Kd	Soil-Water Partition Coefficient	cm3/g	Calculated	(12)
Koc	Soil Organic Carbon-Water Partition Coefficient	cm3/g	Chemical-Specific	(11)
foc	Fraction of Organic Carbon in Soil	gCarbon/gSoil	0.005	(13)

Footnotes:

(1) The equation used to calculate the soil-to-air volatilization factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 4-8). Conservatively assumes entire area is contaminated.

$$VF = \frac{Q}{C_{vol}} \times \frac{(3.14 \times D_A \times T)^{1/2}}{(2 \times RhoB \times D_A)} \times 10^{-4} \ (m^2 / cm^2)$$

$$D_A = \frac{\left[\frac{(ThetaA^{10/3} \times D_i \times H') + (ThetaW^{10/3} \times D_w)}{Eta^2}\right]}{(Rho_B \times K_d) + ThetaW + (ThetaA \times H')}$$

(2) The equation used to calculate the Q/Cvol factor is Q/Cvol = A x exp [(lnAsite - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developin Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit D-3).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaragus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) EPA, 2002. Exhibit D-2. Used constants for Zone 7, Cleveland, OH as the closest similar listed city to the Site.

(5) Values reflect exposure durations of 30 years (RME) and 9 years (CT), converted to seconds.

(6) EPA, 2002. Equation 4-8. Default. Typical of sandy soil.

(7) EPA, 2002. Equation 4-8. Calculated using the equation ThetaA = Eta - ThetaW.

(8) EPA, 2002. Equation 4-8. Calculated using the equation Eta = 1-(RhoB/RhoS).

(9) Corresponds to an average annual soil water content of 10 weight percent.

(10) EPA, 1988. Superfund Exposure Assessment Manual. Mode of the range given for U.S. soils. Default value for most soil mineral material.

(11) Chemical-specific parameters are shown in Table 4.9.

(12) EPA, 2002. Calculated using the equation Kd = Koc x foc for organic chemicals and tabulated for inorganic chemicals (See Table 4-9).

(13) Site-specific value.

TABLE 4.15

VOLATILIZATION FACTOR DEVELOPMENT FOR THE CATTARAUGUS CUTLERY AREA FOR THE ADULT RESIDENT

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference
VF	Volatilization Factor	m3/kg	Calculated	See Note (1)
Q/Cvol	Inverse of the Ratio of the Geometric Mean Air Concentration to the Volatilization Flux at the Center of Square Source	g/m2-s per kg/m3	62.30	See Note (2)
Asite	Areal Extent of Site Soil Contamination	acres	3.21	(3)
A	First Constant in the Q/Cvol Equation	unitless	12.8612	(4)
B	Second Constant in the Q/Cvol Equation	unitless	20.5164	(4)
C	Third Constant in the Q/Cvol Equation	unitless	237.2798	(4)
DA	Apparent Diffusivity	cm2/s	Calculated	See Note (1)
T	Exposure Interval for the Adult Resident	seconds	9.46E+08 / 2.84E+08	(5)
RhoB	Dry Soil Bulk Density	g/cm3	1.5	(6)
ThetaA	Air-Filled Soil Porosity	LAir/LSoil	0.28	(7)
Eta	Total Soil Porosity	LPore/LSoil	0.43	(8)
ThetaW	Water-Filled Soil Porosity	LWater/LSoil	0.15	(9)
RhoS	Soil Particle Density	g/cm3	2.65	(10)
Di	Diffusivity in Air	cm2/s	Chemical-Specific	(11)
H'	Dimensionless Henry's Law Constant	unitless	Chemical-Specific	(11)
Dw	Diffusivity in Water	cm2/s	Chemical-Specific	(11)
Kd	Soil-Water Partition Coefficient	cm3/g	Calculated	(12)
Koc	Soil Organic Carbon-Water Partition Coefficient	cm3/g	Chemical-Specific	(11)
foc	Fraction of Organic Carbon in Soil	gCarbon/gSoil	0.005	(13)

Footnotes:

(1) The equation used to calculate the soil-to-air volatilization factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 4-8). Conservatively assumes entire area is contaminated.

$$VF = \frac{Q}{C_{vol}} \times \frac{(3.14 \times D_A \times T)^{1/2}}{(2 \times RhoB \times D_A)} \times 10^{-4} \ (m^2 / cm^2)$$

$$D_A = \frac{\left[\frac{(ThetaA^{10/3} \times D_i \times H') + (ThetaW^{10/3} \times D_w)}{Eta^2}\right]}{(Rho_B \times K_d) + ThetaW + (ThetaA \times H')}$$

(2) The equation used to calculate the Q/Cvol factor is Q/Cvol = A x exp [(lnAsite - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developin Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit D-3).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaraugus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) EPA, 2002. Exhibit D-2. Used constants for Zone 7, Cleveland, OH as the closest similar listed city to the Site.

(5) Values reflect exposure durations of 30 years (RME) and 9 years (CT), converted to seconds.

(6) EPA, 2002. Equation 4-8. Default. Typical of sandy soil.

(7) EPA, 2002. Equation 4-8. Calculated using the equation ThetaA = Eta - ThetaW.

(8) EPA, 2002. Equation 4-8. Calculated using the equation Eta = 1-(RhoB/RhoS).

(9) Corresponds to an average annual soil water content of 10 weight percent.

(10) EPA, 1988. Superfund Exposure Assessment Manual. Mode of the range given for U.S. soils. Default value for most soil mineral material.

(11) Chemical-specific parameters are shown in Table 4.9.

(12) EPA, 2002. Calculated using the equation Kd = Koc x foc for organic chemicals and tabulated for inorganic chemicals (See Table 4-9).

(13) Site-specific value.

TABLE 4.16

VOLATILIZATION FACTOR DEVELOPMENT FOR THE RAILROAD AVENUE AREA FOR THE CHILD RESIDENT

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference
VF	Volatilization Factor	m3/kg	Calculated	See Note (1)
Q/Cvol	Inverse of the Ratio of the Geometric Mean Air Concentration to the Volatilization Flux at the Center of Square Source	g/m2-s per kg/m3	80.53	See Note (2)
Asite	Areal Extent of Site Soil Contamination	acres	0.71	(3)
A	First Constant in the Q/Cvol Equation	unitless	12.8612	(4)
B	Second Constant in the Q/Cvol Equation	unitless	20.5164	(4)
C	Third Constant in the Q/Cvol Equation	unitless	237.2798	(4)
DA	Apparent Diffusivity	cm2/s	Calculated	See Note (1)
T	Exposure Interval for the Child Resident	seconds	1.89E+08	(5)
RhoB	Dry Soil Bulk Density	g/cm3	1.5	(6)
ThetaA	Air-Filled Soil Porosity	LAir/LSoil	0.28	(7)
Eta	Total Soil Porosity	LPore/LSoil	0.43	(8)
ThetaW	Water-Filled Soil Porosity	LWater/LSoil	0.15	(9)
RhoS	Soil Particle Density	g/cm3	2.65	(10)
Di	Diffusivity in Air	cm2/s	Chemical-Specific	(11)
H'	Dimensionless Henry's Law Constant	unitless	Chemical-Specific	(11)
Dw	Diffusivity in Water	cm2/s	Chemical-Specific	(11)
Kd	Soil-Water Partition Coefficient	cm3/g	Calculated	(12)
Koc	Soil Organic Carbon-Water Partition Coefficient	cm3/g	Chemical-Specific	(11)
foc	Fraction of Organic Carbon in Soil	gCarbon/gSoil	0.005	(13)

Footnotes:

(1) The equation used to calculate the soil-to-air volatilization factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 4-8). Conservatively assumes entire area is contaminated.

$$VF = \frac{Q}{C_{vol}} \times \frac{(3.14 \times D_A \times T)^{1/2}}{(2 \times RhoB \times D_A)} \times 10^{-4} \ (m^2 / cm^2)$$

$$D_A = \frac{\left[\frac{(ThetaA^{10/3} \times D_i \times H') + (ThetaW^{10/3} \times D_w)}{Eta^2}\right]}{(Rho_B \times K_d) + ThetaW + (ThetaA \times H')}$$

(2) The equation used to calculate the Q/Cvol factor is Q/Cvol = A x exp [(lnAsite - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developin Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit D-3).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaraugus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) EPA, 2002. Exhibit D-2. Used constants for Zone 7, Cleveland, OH as the closest similar listed city to the Site.

(5) Value reflects an exposure duration of 6 years (RME and CT), converted to seconds.

(6) EPA, 2002. Equation 4-8. Default. Typical of sandy soil.

(7) EPA, 2002. Equation 4-8. Calculated using the equation ThetaA = Eta - ThetaW.

(8) EPA, 2002. Equation 4-8. Calculated using the equation Eta = 1-(RhoB/RhoS).

(9) Corresponds to an average annual soil water content of 10 weight percent.

(10) EPA, 1988. Superfund Exposure Assessment Manual. Mode of the range given for U.S. soils. Default value for most soil mineral material.

(11) Chemical-specific parameters are shown in Table 4.9.

(12) EPA, 2002. Calculated using the equation Kd = Koc x foc for organic chemicals and tabulated for inorganic chemicals (See Table 4-9).

(13) Site-specific value.

TABLE 4.17

VOLATILIZATION FACTOR DEVELOPMENT FOR THE CATTARAUGUS CUTLERY AREA FOR THE CHILD RESIDENT AND TRESPASSER

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference
VF	Volatilization Factor	m3/kg	Calculated	See Note (1)
Q/Cvol	Inverse of the Ratio of the Geometric Mean Air Concentration to the Volatilization Flux at the Center of Square Source	g/m2-s per kg/m3	62.30	See Note (2)
Asite	Areal Extent of Site Soil Contamination	acres	3.21	(3)
A	First Constant in the Q/Cvol Equation	unitless	12.8612	(4)
B	Second Constant in the Q/Cvol Equation	unitless	20.5164	(4)
C	Third Constant in the Q/Cvol Equation	unitless	237.2798	(4)
DA	Apparent Diffusivity	cm2/s	Calculated	See Note (1)
T	Exposure Interval for the Child Resident	seconds	1.89E+08	(5)
RhoB	Dry Soil Bulk Density	g/cm3	1.5	(6)
ThetaA	Air-Filled Soil Porosity	LAir/LSoil	0.28	(7)
Eta	Total Soil Porosity	LPore/LSoil	0.43	(8)
ThetaW	Water-Filled Soil Porosity	LWater/LSoil	0.15	(9)
RhoS	Soil Particle Density	g/cm3	2.65	(10)
Di	Diffusivity in Air	cm2/s	Chemical-Specific	(11)
H'	Dimensionless Henry's Law Constant	unitless	Chemical-Specific	(11)
Dw	Diffusivity in Water	cm2/s	Chemical-Specific	(11)
Kd	Soil-Water Partition Coefficient	cm3/g	Calculated	(12)
Koc	Soil Organic Carbon-Water Partition Coefficient	cm3/g	Chemical-Specific	(11)
foc	Fraction of Organic Carbon in Soil	gCarbon/gSoil	0.005	(13)

Footnotes:

(1) The equation used to calculate the soil-to-air volatilization factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 4-8). Conservatively assumes entire area is contaminated.

$$VF = \frac{Q}{C_{vol}} \times \frac{(3.14 \times D_A \times T)^{1/2}}{(2 \times RhoB \times D_A)} \times 10^{-4} \ (m^2 / cm^2)$$

$$D_A = \frac{\left[\frac{(ThetaA^{10/3} \times D_i \times H') + (ThetaW^{10/3} \times D_w)}{Eta^2}\right]}{(Rho_B \times K_d) + ThetaW + (ThetaA \times H')}$$

(2) The equation used to calculate the Q/Cvol factor is Q/Cvol = A x exp [(lnAsite - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit D-3).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaraugus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) EPA, 2002. Exhibit D-2. Used constants for Zone 7, Cleveland, OH as the closest similar listed city to the Site.

(5) Value reflects an exposure duration of 6 years (RME and CT), converted to seconds.

(6) EPA, 2002. Equation 4-8. Default. Typical of sandy soil.

(7) EPA, 2002. Equation 4-8. Calculated using the equation ThetaA = Eta - ThetaW.

(8) EPA, 2002. Equation 4-8. Calculated using the equation Eta = 1-(RhoB/RhoS).

(9) Corresponds to an average annual soil water content of 10 weight percent.

(10) EPA, 1988. Superfund Exposure Assessment Manual. Mode of the range given for U.S. soils. Default value for most soil mineral material.

(11) Chemical-specific parameters are shown in Table 4.9.

(12) EPA, 2002. Calculated using the equation Kd = Koc x foc for organic chemicals and tabulated for inorganic chemicals (See Table 4-9).

(13) Site-specific value.

TABLE 4.18

VOLATILIZATION FACTOR DEVELOPMENT FOR THE BUSH INDUSTRIES AREA FOR THE CONSTRUCTION WORKER

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference
VF	Volatilization Factor	m3/kg	Calculated	See Note (1)
Q/Cvol	Inverse of the Ratio of the Geometric Mean Air Concentration to the Volatilization Flux at the Center of Square Source	g/m2-s per kg/m3	52.74	See Note (2)
Asite	Areal Extent of Site Soil Contamination	acres	9.18	(3)
A	First Constant in the Q/Cvol Equation	unitless	12.8612	(4)
B	Second Constant in the Q/Cvol Equation	unitless	20.5164	(4)
C	Third Constant in the Q/Cvol Equation	unitless	237.2798	(4)
DA	Apparent Diffusivity	cm2/s	Calculated	See Note (1)
T	Exposure Interval for the Construction Worker	seconds	3.15E+07	(5)
RhoB	Dry Soil Bulk Density	g/cm3	1.5	(6)
ThetaA	Air-Filled Soil Porosity	LAir/LSoil	0.28	(7)
Eta	Total Soil Porosity	LPore/LSoil	0.43	(8)
ThetaW	Water-Filled Soil Porosity	LWater/LSoil	0.15	(9)
RhoS	Soil Particle Density	g/cm3	2.65	(10)
Di	Diffusivity in Air	cm2/s	Chemical-Specific	(11)
H'	Dimensionless Henry's Law Constant	unitless	Chemical-Specific	(11)
Dw	Diffusivity in Water	cm2/s	Chemical-Specific	(11)
Kd	Soil-Water Partition Coefficient	cm3/g	Calculated	(12)
Koc	Soil Organic Carbon-Water Partition Coefficient	cm3/g	Chemical-Specific	(11)
foc	Fraction of Organic Carbon in Soil	gCarbon/gSoil	0.005	(13)

Footnotes:

(1) The equation used to calculate the soil-to-air volatilization factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 4-8). Conservatively assumes entire area is contaminated.

$$VF = \frac{Q}{C_{vol}} \times \frac{(3.14 \times D_A \times T)^{1/2}}{(2 \times RhoB \times D_A)} \times 10^{-4} \ (m^2 / cm^2)$$

$$D_A = \frac{\left[\frac{(ThetaA^{10/3} \times D_i \times H') + (ThetaW^{10/3} \times D_w)}{Eta^2}\right]}{(Rho_B \times K_d) + ThetaW + (ThetaA \times H')}$$

(2) The equation used to calculate the Q/Cvol factor is Q/Cvol = A x exp [(lnAsite - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developin Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit D-3).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaraugus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) EPA, 2002. Exhibit D-2. Used constants for Zone 7, Cleveland, OH as the closest similar listed city to the Site.

(5) Value reflects an exposure duration of 1 year (RME and CT), converted to seconds.

(6) EPA, 2002. Equation 4-8. Default. Typical of sandy soil.

(7) EPA, 2002. Equation 4-8. Calculated using the equation ThetaA = Eta - ThetaW.

(8) EPA, 2002. Equation 4-8. Calculated using the equation Eta = 1-(RhoB/RhoS).

(9) Corresponds to an average annual soil water content of 10 weight percent.

(10) EPA, 1988. Superfund Exposure Assessment Manual. Mode of the range given for U.S. soils. Default value for most soil mineral material.

(11) Chemical-specific parameters are shown in Table 4.9.

(12) EPA, 2002. Calculated using the equation Kd = Koc x foc for organic chemicals and tabulated for inorganic chemicals (See Table 4-9).

(13) Site-specific value.

TABLE 4.19

VOLATILIZATION FACTOR DEVELOPMENT FOR THE CATTARAUGUS CUTLERY AREA FOR THE CONSTRUCTION WORKER

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference
VF	Volatilization Factor	m3/kg	Calculated	See Note (1)
Q/Cvol	Inverse of the Ratio of the Geometric Mean Air Concentration to the Volatilization Flux at the Center of Square Source	g/m2-s per kg/m3	62.30	See Note (2)
Asite	Areal Extent of Site Soil Contamination	acres	3.21	(3)
A	First Constant in the Q/Cvol Equation	unitless	12.8612	(4)
B	Second Constant in the Q/Cvol Equation	unitless	20.5164	(4)
C	Third Constant in the Q/Cvol Equation	unitless	237.2798	(4)
DA	Apparent Diffusivity	cm2/s	Calculated	See Note (1)
T	Exposure Interval for the Construction Worker	seconds	3.15E+07	(5)
RhoB	Dry Soil Bulk Density	g/cm3	1.5	(6)
ThetaA	Air-Filled Soil Porosity	LAir/LSoil	0.28	(7)
Eta	Total Soil Porosity	LPore/LSoil	0.43	(8)
ThetaW	Water-Filled Soil Porosity	LWater/LSoil	0.15	(9)
RhoS	Soil Particle Density	g/cm3	2.65	(10)
Di	Diffusivity in Air	cm2/s	Chemical-Specific	(11)
H'	Dimensionless Henry's Law Constant	unitless	Chemical-Specific	(11)
Dw	Diffusivity in Water	cm2/s	Chemical-Specific	(11)
Kd	Soil-Water Partition Coefficient	cm3/g	Calculated	(12)
Koc	Soil Organic Carbon-Water Partition Coefficient	cm3/g	Chemical-Specific	(11)
foc	Fraction of Organic Carbon in Soil	gCarbon/gSoil	0.005	(13)

Footnotes:

(1) The equation used to calculate the soil-to-air volatilization factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 4-8). Conservatively assumes entire area is contaminated.

$$VF = \frac{Q}{C_{vol}} \times \frac{(3.14 \times D_A \times T)^{1/2}}{(2 \times RhoB \times D_A)} \times 10^{-4} \ (m^2 / cm^2)$$

$$D_A = \frac{\left[\frac{(ThetaA^{10/3} \times D_i \times H') + (ThetaW^{10/3} \times D_w)}{Eta^2}\right]}{(Rho_B \times K_d) + ThetaW + (ThetaA \times H')}$$

(2) The equation used to calculate the Q/Cvol factor is Q/Cvol = A x exp [(lnAsite - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developin Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit D-3).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaraugus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) EPA, 2002. Exhibit D-2. Used constants for Zone 7, Cleveland, OH as the closest similar listed city to the Site.

(5) Value reflects an exposure duration of 1 year (RME and CT), converted to seconds.

(6) EPA, 2002. Equation 4-8. Default. Typical of sandy soil.

(7) EPA, 2002. Equation 4-8. Calculated using the equation ThetaA = Eta - ThetaW.

(8) EPA, 2002. Equation 4-8. Calculated using the equation Eta = 1-(RhoB/RhoS).

(9) Corresponds to an average annual soil water content of 10 weight percent.

(10) EPA, 1988. Superfund Exposure Assessment Manual. Mode of the range given for U.S. soils. Default value for most soil mineral material.

(11) Chemical-specific parameters are shown in Table 4.9.

(12) EPA, 2002. Calculated using the equation Kd = Koc x foc for organic chemicals and tabulated for inorganic chemicals (See Table 4-9).

(13) Site-specific value.

TABLE 4.20

VOLATILIZATION FACTOR DEVELOPMENT FOR THE RAILROAD AVENUE AREA FOR THE CONSTRUCTION WORKER

Little Valley Superfund Site

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference
VF	Volatilization Factor	m3/kg	Calculated	See Note (1)
Q/Cvol	Inverse of the Ratio of the Geometric Mean Air Concentration to the Volatilization Flux at the Center of Square Source	g/m2-s per kg/m3	80.53	See Note (2)
Asite	Areal Extent of Site Soil Contamination	acres	0.71	(3)
A	First Constant in the Q/Cvol Equation	unitless	12.8612	(4)
B	Second Constant in the Q/Cvol Equation	unitless	20.5164	(4)
C	Third Constant in the Q/Cvol Equation	unitless	237.2798	(4)
DA	Apparent Diffusivity	cm2/s	Calculated	See Note (1)
T	Exposure Interval for the Construction Worker	seconds	3.15E+07	(5)
RhoB	Dry Soil Bulk Density	g/cm3	1.5	(6)
ThetaA	Air-Filled Soil Porosity	LAir/LSoil	0.28	(7)
Eta	Total Soil Porosity	LPore/LSoil	0.43	(8)
ThetaW	Water-Filled Soil Porosity	LWater/LSoil	0.15	(9)
RhoS	Soil Particle Density	g/cm3	2.65	(10)
DI	Diffusivity in Air	cm2/s	Chemical-Specific	(11)
H'	Dimensionless Henry's Law Constant	unitless	Chemical-Specific	(11)
Dw	Diffusivity in Water	cm2/s	Chemical-Specific	(11)
Kd	Soil-Water Partition Coefficient	cm3/g	Calculated	(12)
Koc	Soil Organic Carbon-Water Partition Coefficient	cm3/g	Chemical-Specific	(11)
foc	Fraction of Organic Carbon in Soil	gCarbon/gSoil	0.005	(13)

Footnotes:

(1) The equation used to calculate the soil-to-air volatilization factor is shown below. (EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Equation 4-8). Conservatively assumes entire area is contaminated.

$$VF = \frac{Q}{C_{vol}} \times \frac{(3.14 \times D_A \times T)^{1/2}}{(2 \times RhoB \times D_A)} \times 10^{-4} \ (m^2 / cm^2)$$

$$D_A = \frac{\left[\frac{(ThetaA^{10/3} \times D_i \times H') + (ThetaW^{10/3} \times D_w)}{Eta^2}\right]}{(Rho_B \times K_d) + ThetaW + (ThetaA \times H')}$$

(2) The equation used to calculate the Q/Cvol factor is Q/Cvol = A x exp [(lnAsite - B)^2)/C] (EPA, 2002. Supplemental Guidance for Developin Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit D-3).

(3) The Little Valley Superfund Site has three different areas of potential soil contamination: the Bush Industries Area (9.18 acres); the Cattaraugus Cutlery Area (3.21 acres); and the Railroad Avenue Area (0.71 acres).

(4) EPA, 2002. Exhibit D-2. Used constants for Zone 7, Cleveland, OH as the closest similar listed city to the Site.

(5) Value reflects an exposure duration of 1 year (RME and CT), converted to seconds.

(6) EPA, 2002. Equation 4-8. Default. Typical of sandy soil.

(7) EPA, 2002. Equation 4-8. Calculated using the equation ThetaA = Eta - ThetaW.

(8) EPA, 2002. Equation 4-8. Calculated using the equation Eta = 1-(RhoB/RhoS).

(9) Corresponds to an average annual soil water content of 10 weight percent.

(10) EPA, 1988. Superfund Exposure Assessment Manual. Mode of the range given for U.S. soils. Default value for most soil mineral material.

(11) Chemical-specific parameters are shown in Table 4.9.

(12) EPA, 2002. Calculated using the equation Kd = Koc x foc for organic chemicals and tabulated for inorganic chemicals (See Table 4-9).

(13) Site-specific value.

TABLE 4.21

CHEMICAL-SPECIFC VALUES

Little Valley Superfund Site

Chemical of Potential Concern	Soil Organic Carbon-Water Partition Coefficient (1,5) Koc cm^3/g	Diffusivity in Air (1, 5) Di cm^2/s	Diffusivity in Water (1, 5) Dw cm^2/s	Henry's Law Constant (1, 5) H' unitless	Dermal Absorption Fraction (2, 3) ABS-d unitless	Molecular Weight (4, 5) MW g/mol
Benzene	5.89E+001	8.80E-002	9.80E-006	2.28E-001	0.0005	78.1
1,2-Dichloroethane	1.74E+001	1.04E-001	9.90E-006	4.01E-002	0.0005	99
cis-1,2-Dichloroethylene	3.55E+001	7.36E-002	1.13E-005	1.67E-001	0.0005	96.9
Methyl chloride (chloromethane)	1.43E+001	1.26E-001	6.50E-006	3.61E-001	0.03	50.5
Methylcyclohexane	2.68E+002	9.86E-002	8.52E-006	1.76E+001	0.1	98.2
Tetrachloroethylene	1.55E+002	7.20E-002	8.20E-006	7.54E-001	0.03	165.8
Trichloroethylene	1.66E+002	7.90E-002	9.10E-006	4.22E-001	0.03	131.4
Acenaphthylene	6.12E+003	4.39E-002	7.53E-006	5.11E-003	0.13	152.2
Benzo(a)anthracene	3.98E+005	5.10E-002	9.00E-006	1.37E-004	0.13	228.3
Benzo(a)pyrene	1.02E+006	4.30E-002	9.00E-006	4.63E-005	0.13	252.3
Benzo(b)fluoranthene	1.23E+006	2.26E-002	5.56E-006	4.55E-003	0.13	252.3
Benzo(ghi)perylene	-	-	-	-	0.13	276.3
Benzo(k)fluoranthene	1.23E+006	2.26E-002	5.56E-006	3.4E-005	0.13	252.3
Bis(2-ethylhexyl)phthalate (BEHP)	1.51E+007	3.51E-002	3.66E-006	4.18E-006	0.10	391
Dibenz(a,h)anthracene	3.80E+006	2.02E-002	5.18E-006	6.03E-007	0.13	278.4
Indeno(1,2,3-cd)pyrene	3.47E+006	1.9E-002	5.66E-006	6.56E-005	0.13	276.3
2-Methylnaphthalene	2.98E+003	4.80E-002	7.84E-006	2.12E-002	0.13	142.2
Naphthalene	2.00E+003	5.90E-002	7.50E-006	1.98E-002	0.13	128.2
Phenanthrene	-	-	-	-	0.13	178.2
Aluminum	-	-	-	-	0.01	30
Antimony	-	-	-	-	0.01	124.8
Arsenic	-	-	-	-	0.03	77.9
Barium	-	-	-	-	0.01	137.3
Cadmium	-	-	-	-	0.01	112.4
Chromium (VI)	-	-	-	-	0.01	-
Copper	-	-	-	-	0.01	63.5
Iron	-	-	-	-	0.01	55.8
Lead	-	-	-	-	0.01	207.2

TABLE 4.21

CHEMICAL-SPECIFC VALUES

Little Valley Superfund Site

Chemical of Potential Concern	Soil Organic Carbon-Water Partition Coefficient (1,5) Koc cm^3/g	Diffusivity in Air (1, 5) Di cm^2/s	Diffusivity in Water (1, 5) Dw cm^2/s	Henry's Law Constant (1, 5) H' unitless	Dermal Absorption Fraction (2, 3) ABS-d unitless	Molecular Weight (4, 5) MW g/mol
Benzene	5.89E+001	8.80E-002	9.80E-006	2.28E-001	0.0005	78.1
1,2-Dichloroethane	1.74E+001	1.04E-001	9.90E-006	4.01E-002	0.0005	99
cis-1,2-Dichloroethylene	3.55E+001	7.36E-002	1.13E-005	1.67E-001	0.0005	96.9
Manganese	-	-	-	-	0.01	54.9
Mercury	-	-	-	-	0.01	200.6
Nickel	-	-	-	-	0.01	58.7
Thallium	-	-	-	-	0.01	204.4
Vanadium	-	-	-	-	0.01	181.9

Footnotes:

- = Not Applicable

Reference:

(1) EPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December. Exhibit C-1.

(2) EPA, 2003. Region 3 Technical Guidance Manual, Risk Assessment. Updated Dermal Exposure Assessment Guidance. June.

(3) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E - Supplemental Guidance for Dermal Risk Assessment). Interim. EPA/540/R/99/005.September. Exhibit 3-4

(4) EPA, 2001. September. Appendix B.

(5) http://risk.lsd.ornl.gov/cgi-bin/tox/TOX_select?select=csf

Table: 4.22 RME
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Commercial Woker
Media: CCA Surface Soil

$$\text{Volatilization Factor} = \left[\frac{\text{Inverse of Mean Concentration at Center of Square Source}}{1} \times \frac{3.14}{1} \times \frac{\text{Apparent Diffusivity}}{1} \times \frac{\text{Exposure Interval}}{1} \right]^{1/2} \times \frac{1}{2} \times \frac{1}{\text{Dry Soil Bulk Density}} \times \frac{1}{\text{Apparent Diffusivity}} \times \text{Conversion Factor}$$

[m^3/kg]

Variable Symbols =	Q/Cvol	Constant	DA	T	Constant	Rhob	DA	CF	VF
Parameter Values =	62.30	3.14	Calculated	Receptor-Specific	2	1.5	Calculated	1.00E-004	Chemical-Specific
Parameter Units =	[g/m^2-s per kg/m^3]	[unitless]	[cm^2/s]	[s]	[unitless]	[g/cm^3]	[cm^2/s]	[m^2/cm^2]	[m^3/kg]

Chemical Name	Inverse of Mean Concentration at Center of Square Source [g/m^2-s per kg/m^3]	3.14 [unitless]	Apparent Diffusivity [cm^2/s]	Exposure Interval [s]	2 [unitless]	Dry Soil Bulk Density [g/cm^3]	Apparent Diffusivity [cm^2/s]	Conversion Factor [m^2/cm^2]	Volatilizaton Factor [m^3/kg]
Trichloroethylene	62.30	3.14	1.76E-003	7.88E+008	2	1.5	1.76E-003	1.00E-004	2.46E+003
Acenaphthylene	62.30	3.14	3.90E-007	7.88E+008	2	1.5	3.90E-007	1.00E-004	1.65E+005
Benzo(a)anthracene	62.30	3.14	2.16E-010	7.88E+008	2	1.5	2.16E-010	1.00E-004	7.03E+006
Benzo(a)pyrene	62.30	3.14	3.20E-011	7.88E+008	2	1.5	3.20E-011	1.00E-004	1.83E+007
Benzo(b)fluoranthene	62.30	3.14	8.97E-010	7.88E+008	2	1.5	8.97E-010	1.00E-004	3.45E+006
Benzo(k)fluoranthene	62.30	3.14	1.24E-011	7.88E+008	2	1.5	1.24E-011	1.00E-004	2.93E+007
Dibenzo(a,h)anthracene	62.30	3.14	1.76E-012	7.88E+008	2	1.5	1.76E-012	1.00E-004	7.78E+007
Indeno(1,2,3-cd)pyrene	62.30	3.14	5.90E-012	7.88E+008	2	1.5	5.90E-012	1.00E-004	4.25E+007
2-Methylnaphthalene	62.30	3.14	3.62E-006	7.88E+008	2	1.5	3.62E-006	1.00E-004	5.43E+004
Naphthalene	62.30	3.14	6.16E-006	7.88E+008	2	1.5	6.16E-006	1.00E-004	4.16E+004

Table: 4.22 RME
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Commercial Woker
Media: CCA Surface Soil

$$\text{Apparent Diffusivity} = \left[\frac{\left[\frac{\text{Air-Filled Soil Porosity}^{10/3}}{\text{Total Soil Porosity}^{2}} \times \text{Diffusivity in Air} \times \text{Dimensionless Henry's Law Constant}\right] + \left[\frac{\text{Water-Filled Soil Porosity}^{10/3}}{\text{Total Soil Porosity}^{2}} \times \text{Diffusivity in Water}\right]}{\text{Total Soil Porosity}^{2}}\right] \times \left[\frac{1}{\text{Dry Soil Bulk Density} \times \text{Soil-Water Partition Coefficient} + \text{Water-Filled Soil Porosity} + \text{Air-Filled Soil Porosity} \times \text{Dimensionless Henry's Law Constant}}\right]$$

[cm^2/s]

Thetaa	Di	H'	Thetaw	Dw	Eta	Rhob	Kd	Thetaw	Thetaa	H'	DA
0.28	Chemical Specific	Chemical Specific	0.15	Chemical Specific	0.43	1.5	Chemical Specific	0.15	0.28	Chemical Specific	Chemical-Specific
[unitless]	[cm^2/s]	[unitless]	[unitless]	[cm^2/s]	[unitless]	[g/cm^3]	[cm^3/g]	[unitless]	[unitless]	[unitless]	[cm^2/s]

Chemical Name	Air-Filled Soil Porosity [unitless]	Diffusivity in Air [cm^2/s]	Dimensionless Henry's Law Constant [unitless]	Water-Filled Porosity [unitless]	Diffusivity in Water [cm^2/s]	Total Soil Porosity [unitless]	Dry Soil Bulk Density [g/cm^3]	Soil-Water Partition Coefficient [cm^3/g]	Water-Filled Porosity [unitless]	Air-Filled Soil Porosity [unitless]	Dimensionless Henry's Law Constant [unitless]	Apparent Diffusivity [cm^2/s]
Trichloroethylene	0.28	7.90E-002	4.22E-001	0.15	9.10E-006	0.43	1.5	8.30E-001	0.15	0.28	4.22E-001	1.76E-003
Acenaphthylene	0.28	4.39E-002	5.11E-003	0.15	7.53E-006	0.43	1.5	3.06E+001	0.15	0.28	5.11E-003	3.90E-007
Benzo(a)anthracene	0.28	5.10E-002	1.37E-004	0.15	9.00E-006	0.43	1.5	1.99E+003	0.15	0.28	1.37E-004	2.16E-010
Benzo(a)pyrene	0.28	4.30E-002	4.63E-005	0.15	9.00E-006	0.43	1.5	5.10E+003	0.15	0.28	4.63E-005	3.20E-011
Benzo(b)fluoranthene	0.28	2.26E-002	4.55E-003	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	4.55E-003	8.97E-010
Benzo(k)fluoranthene	0.28	2.26E-002	3.40E-005	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	3.40E-005	1.24E-011
Dibenzo(a,h)anthracene	0.28	2.02E-002	6.03E-007	0.15	5.18E-006	0.43	1.5	1.90E+004	0.15	0.28	6.03E-007	1.76E-012
Indeno(1,2,3-cd)pyrene	0.28	1.90E-002	6.56E-005	0.15	5.66E-006	0.43	1.5	1.74E+004	0.15	0.28	6.56E-005	5.90E-012
2-Methylnaphthalene	0.28	4.80E-002	2.12E-002	0.15	7.84E-006	0.43	1.5	1.49E+001	0.15	0.28	2.12E-002	3.62E-006
Naphthalene	0.28	5.90E-002	1.98E-002	0.15	7.50E-006	0.43	1.5	1.00E+001	0.15	0.28	1.98E-002	6.16E-006

Table: 4.22 RME
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Commercial Woker
Media: CCA Surface Soil

Soil-Water Partition Coefficient =	Soil Organic Carbon-Water Partition Coefficient	X	Fraction of Organic Carbon Content of Soil
[cm^3/g]	1	X	

	Koc	foc	Kd
	Chemical Specific	0.005	Chemical-Specific
	[cm^3/g]	[unitless]	[cm^3/g]

Chemical Name	Soil Organic Carbon-Water Partition Coefficient [cm^3/g]	Fraction of Organic Carbon Content of Soil [unitless]	Soil-Water Partition Coefficient [cm^3/g]
Trichloroethylene	1.66E+002	0.005	8.30E-001
Acenaphthylene	6.12E+003	0.005	3.06E+001
Benzo(a)anthracene	3.98E+005	0.005	1.99E+003
Benzo(a)pyrene	1.02E+006	0.005	5.10E+003
Benzo(b)fluoranthene	1.23E+006	0.005	6.15E+003
Benzo(k)fluoranthene	1.23E+006	0.005	6.15E+003
Dibenzo(a,h)anthracene	3.80E+006	0.005	1.90E+004
Indeno(1,2,3-cd)pyrene	3.47E+006	0.005	1.74E+004
2-Methylnaphthalene	2.98E+003	0.005	1.49E+001
Naphthalene	2.00E+003	0.005	1.00E+001

Table: 4.22 CT
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Commercial Woker
Media: CCA Surface Soil

$$\text{Volatilization Factor} = \left[\frac{\text{Inverse of Mean Concentration at Center of Square Source}}{1} \times \frac{3.14}{1} \times \frac{\text{Apparent Diffusivity}}{1} \times \frac{\text{Exposure Interval}}{1}\right]^{1/2} \times \frac{1}{2} \times \frac{1}{\text{Dry Soil Bulk Density}} \times \frac{1}{\text{Apparent Diffusivity}} \times \frac{\text{Conversion Factor}}{1}$$

[m^3/kg]

Variable Symbols =	Q/Cvol		Constant		DA	T		Constant		Rhob	DA		CF	VF
Parameter Values =	62.30		3.14		Calculated	Receptor-Specific		2		1.5	Calculated		1.00E-004	Chemical-Specific
Parameter Units =	[g/m^2-s per kg/m^3]		[unitless]		[cm^2/s]	[s]		[unitless]		[g/cm^3]	[cm^2/s]		[m^2/cm^2]	[m^3/kg]
Chemical Name	Inverse of Mean Concentration at Center of Square Source [g/m^2-s per kg/m^3]		3.14 [unitless]		Apparent Diffusivity [cm^2/s]	Exposure Interval [s]		2 [unitless]		Dry Soil Bulk Density [g/cm^3]	Apparent Diffusivity [cm^2/s]		Conversion Factor [m^2/cm^2]	Volatilizaton Factor [m^3/kg]
Trichloroethylene	62.30		3.14		1.76E-003	2.84E+008		2		1.5	1.76E-003		1.00E-004	1.48E+003
Acenaphthylene	62.30		3.14		3.90E-007	2.84E+008		2		1.5	3.90E-007		1.00E-004	9.93E+004
Benzo(a)anthracene	62.30		3.14		2.16E-010	2.84E+008		2		1.5	2.16E-010		1.00E-004	4.22E+006
Benzo(a)pyrene	62.30		3.14		3.20E-011	2.84E+008		2		1.5	3.20E-011		1.00E-004	1.10E+007
Benzo(b)fluoranthene	62.30		3.14		8.97E-010	2.84E+008		2		1.5	8.97E-010		1.00E-004	2.07E+006
Benzo(k)fluoranthene	62.30		3.14		1.24E-011	2.84E+008		2		1.5	1.24E-011		1.00E-004	1.76E+007
Dibenzo(a,h)anthracene	62.30		3.14		1.76E-012	2.84E+008		2		1.5	1.76E-012		1.00E-004	4.67E+007
Indeno(1,2,3-cd)pyrene	62.30		3.14		5.90E-012	2.84E+008		2		1.5	5.90E-012		1.00E-004	2.55E+007
2-Methylnaphthalene	62.30		3.14		3.62E-006	2.84E+008		2		1.5	3.62E-006		1.00E-004	3.26E+004
Naphthalene	62.30		3.14		6.16E-006	2.84E+008		2		1.5	6.16E-006		1.00E-004	2.50E+004

Table: 4.22 CT
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Commercial Worker
Media: CCA Surface Soil

$$\text{Apparent Diffusivity (cm}^2\text{/s)} = \left[\left[\frac{\text{Air-Filled Soil Porosity}^{10/3}}{\text{Total Soil Porosity}^2} \times \text{Diffusivity in Air} \times \text{Dimensionless Henry's Law Constant}\right] + \left[\frac{\text{Water-Filled Soil Porosity}^{10/3}}{\text{Total Soil Porosity}^2} \times \text{Diffusivity in Water}\right] \times \frac{1}{\text{Total Soil Porosity}^2}\right] \times \left[\frac{1}{\text{Dry Soil Bulk Density} \times \text{Soil-Water Partition Coefficient}} + \frac{\text{Water-Filled Soil Porosity}}{\text{Air-Filled Soil Porosity} \times \text{Dimensionless Henry's Law Constant}}\right]$$

	Thetaa	Di	H'	Thetaw	Dw	Eta	Rhob	Kd	Thetaw	Thetaa	H'	DA
	0.28	Chemical Specific	Chemical Specific	0.15	Chemical Specific	0.43	1.5	Chemical Specific	0.15	0.28	Chemical Specific	Chemical-Specific
	[unitless]	[cm^2/s]	[unitless]	[unitless]	[cm^2/s]	[unitless]	[g/cm^3]	[cm^3/g]	[unitless]	[unitless]	[unitless]	[cm^2/s]
Chemical Name	Air-Filled Soil Porosity [unitless]	Diffusivity in Air [cm^2/s]	Dimensionless Henry's Law Constant [unitless]	Water-Filled Porosity [unitless]	Diffusivity in Water [cm^2/s]	Total Soil Porosity [unitless]	Dry Soil Bulk Density [g/cm^3]	Soil-Water Partition Coefficient [cm^3/g]	Water-Filled Porosity [unitless]	Air-Filled Soil Porosity [unitless]	Dimensionless Henry's Law Constant [unitless]	Apparent Diffusivity [cm^2/s]
Trichloroethylene	0.28	7.90E-002	4.22E-001	0.15	9.10E-006	0.43	1.5	8.30E-001	0.15	0.28	4.22E-001	1.76E-003
Acenaphthylene	0.28	4.39E-002	5.11E-003	0.15	7.53E-006	0.43	1.5	3.06E+001	0.15	0.28	5.11E-003	3.90E-007
Benzo(a)anthracene	0.28	5.10E-002	1.37E-004	0.15	9.00E-006	0.43	1.5	1.99E+003	0.15	0.28	1.37E-004	2.16E-010
Benzo(a)pyrene	0.28	4.30E-002	4.63E-005	0.15	9.00E-006	0.43	1.5	5.10E+003	0.15	0.28	4.63E-005	3.20E-011
Benzo(b)fluoranthene	0.28	2.26E-002	4.55E-003	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	4.55E-003	8.97E-010
Benzo(k)fluoranthene	0.28	2.28E-002	3.40E-005	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	3.40E-005	1.24E-011
Dibenzo(a,h)anthracene	0.28	2.02E-002	6.03E-007	0.15	5.18E-006	0.43	1.5	1.90E+004	0.15	0.28	6.03E-007	1.76E-012
Indeno(1,2,3-cd)pyrene	0.28	1.90E-002	6.56E-005	0.15	5.66E-006	0.43	1.5	1.74E+004	0.15	0.28	6.56E-005	5.90E-012
2-Methylnaphthalene	0.28	4.86E-002	2.12E-002	0.15	7.84E-006	0.43	1.5	1.49E+001	0.15	0.28	2.12E-002	3.62E-006
Naphthalene	0.28	5.90E-002	1.98E-002	0.15	7.50E-006	0.43	1.5	1.00E+001	0.15	0.28	1.98E-002	6.16E-006

Table: 4.22 CT
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Commercial Woker
Media: CCA Surface Soil

Soil-Water Partition Coefficient = [cm^3/g]	Soil Organic Carbon-Water Partition Coefficient	X	Fraction of Organic Carbon Content of Soil
	1	X	

	Koc	foc	Kd
	Chemical Specific	0.005	Chemical-Specific
	[cm^3/g]	[unitless]	[cm^3/g]

Chemical Name	Soil Organic Carbon-Water Partition Coefficient [cm^3/g]	Fraction of Organic Carbon Content of Soil [unitless]	Soil-Water Partition Coefficient [cm^3/g]
Trichloroethylene	1.66E+002	0.005	8.30E-001
Acenaphthylene	6.12E+003	0.005	3.06E+001
Benzo(a)anthracene	3.98E+005	0.005	1.99E+003
Benzo(a)pyrene	1.02E+006	0.005	5.10E+003
Benzo(b)fluoranthene	1.23E+006	0.005	6.15E+003
Benzo(k)fluoranthene	1.23E+006	0.005	6.15E+003
Dibenzo(a,h)anthracene	3.80E+006	0.005	1.90E+004
Indeno(1,2,3-cd)pyrene	3.47E+006	0.005	1.74E+004
2-Methylnaphthalene	2.86E+003	0.005	1.43E+001
Naphthalene	2.00E+003	0.005	1.00E+001

Table: 4.23 RME
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Adult Resident
Media: RRAA Surface Soil

$$\text{Volatilization Factor} = \frac{\text{Inverse of Mean Concentration at Center of Square Source}}{1} \times \left[\frac{3.14}{1} \times \frac{\text{Apparent Diffusivity}}{1} \times \frac{\text{Exposure Interval}}{1} \right]^{1/2} \times \frac{1}{2} \times \frac{1}{\text{Dry Soil Bulk Density}} \times \frac{1}{\text{Apparent Diffusivity}} \times \frac{\text{Conversion Factor}}{1}$$

[m^3/kg]

Variable Symbols =	Q/Cvol	Constant	DA	T	Constant	Rhob	DA	CF	VF
Parameter Values =	80.53	3.14	Calculated	Receptor-Specifc	2	1.5	Calculated	1.00E-004	Chemical-Specific
Parameter Units =	[g/m^2-s per kg/m^3]	[unitless]	[cm^2/s]	[s]	[unitless]	[g/cm^3]	[cm^2/s]	[m^2/cm^2]	[m^3/kg]

Chemical Name	Inverse of Mean Concentration at Center of Square Source [g/m^2-s per kg/m^3]	3.14 [unitless]	Apparent Diffusivity [cm^2/s]	Exposure Interval [s]	2 [unitless]	Dry Soil Bulk Density [g/cm^3]	Apparent Diffusivity [cm^2/s]	Conversion Factor [m^2/cm^2]	Volatilizaton Factor [m^3/kg]
Acenaphthylene	80.53	3.14	3.90E-007	9.46E+008	2	1.5	3.90E-007	1.00E-004	2.34E+005
Benzo(a)anthracene	80.53	3.14	2.16E-010	9.46E+008	2	1.5	2.16E-010	1.00E-004	9.96E+006
Benzo(a)pyrene	80.53	3.14	3.20E-011	9.46E+008	2	1.5	3.20E-011	1.00E-004	2.59E+007
Benzo(b)fluoranthene	80.53	3.14	8.97E-010	9.46E+008	2	1.5	8.97E-010	1.00E-004	4.89E+006
Benzo(k)fluoranthene	80.53	3.14	1.17E-011	9.46E+008	2	1.5	1.17E-011	1.00E-004	4.28E+007
Dibenzo(a,h)anthracene	80.53	3.14	1.76E-012	9.46E+008	2	1.5	1.76E-012	1.00E-004	1.10E+008
Indeno(1,2,3-cd)pyrene	80.53	3.14	1.17E-011	9.46E+008	2	1.5	1.17E-011	1.00E-004	4.27E+007
2-Methylnaphthalene	80.53	3.14	3.62E-006	9.46E+008	2	1.5	3.62E-006	1.00E-004	7.69E+004

Table: 4.23 RME
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Adult Resident
Media: RRAA Surface Soil

$$\text{Apparent Diffusivity} = \left[\left[\frac{\text{Air-Filled Soil Porosity}^{10/3}}{1} \times \text{Diffusivity in Air} \times \text{Dimensionless Henry's Law Constant} + \frac{\text{Water-Filled Soil Porosity}^{10/3}}{1} \times \text{Diffusivity in Water} \times 1\right] \times \frac{1}{\text{Total Soil Porosity}}\right] \times \left[1 \times 1 + 1 + 1 \times 1\right]$$

$$\text{Dry Soil Bulk Density} \times \text{Soil-Water Partition Coefficient} + \text{Water-Filled Soil Porosity} + \text{Air-Filled Soil Porosity} \times \text{Dimensionless Henry's Law Constant}$$

Thetaa	Di	H'	Thetaw	Dw	Eta	Rhob	Kd	Thetaw	Thetaa	H'	DA
0.28	Chemical Specific	Chemical Specific	0.15	Chemical Specific	0.43	1.5	Chemical Specific	0.15	0.28	Chemical Specific	Chemical-Specfic
[unitless]	[cm^2/s]	[unitless]	[unitless]	[cm^2/s]	[unitless]	[g/cm^3]	[cm^3/g]	[unitless]	[unitless]	[unitless]	[cm^2/s]

Chemical Name	Air-Filled Soil Porosity [unitless]	Diffusivity in Air [cm^2/s]	Dimensionless Henry's Law Constant [unitless]	Water-Filled Porosity [unitless]	Diffusivity in Water [cm^2/s]	Total Soil Porosity [unitless]	Dry Soil Bulk Density [g/cm^3]	Soil-Water Partition Coefficient [cm^3/g]	Water-Filled Porosity [unitless]	Air-Filled Soil Porosity [unitless]	Dimensionless Henry's Law Constant [unitless]	Apparent Diffusivity [cm^2/s]
Acenaphthylene	0.28	4.39E-002	5.11E-003	0.15	7.53E-006	0.43	1.5	3.06E+001	0.15	0.28	5.11E-003	3.90E-007
Benzo(a)anthracene	0.28	5.10E-002	1.37E-004	0.15	9.00E-006	0.43	1.5	1.99E+003	0.15	0.28	1.37E-004	2.16E-010
Benzo(a)pyrene	0.28	4.30E-002	4.63E-005	0.15	9.00E-006	0.43	1.5	5.10E+003	0.15	0.28	4.63E-005	3.20E-011
Benzo(b)fluoranthene	0.28	2.26E-002	4.55E-003	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	4.55E-003	8.97E-010
Benzo(k)fluoranthene	0.28	2.02E-002	3.40E-005	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	3.40E-005	1.17E-011
Dibenzo(a,h)anthracene	0.28	1.90E-002	6.03E-007	0.15	5.18E-006	0.43	1.5	1.90E+004	0.15	0.28	6.03E-007	1.76E-012
Indeno(1,2,3-cd)pyrene	0.28	4.80E-002	6.56E-005	0.15	5.66E-006	0.43	1.5	1.74E+004	0.15	0.28	6.56E-005	1.17E-011
2-Methylnaphthalene	0.28	4.80E-002	2.12E-002	0.15	7.84E-006	0.43	1.5	1.49E+001	0.15	0.28	2.12E-002	3.62E-006

Table: 4.23 RME
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Adult Resident
Media: RRAA Surface Soil

Soil-Water Partition Coefficient = [cm^3/g] = (Soil Organic Carbon-Water Partition Coefficient / 1) X (Fraction of Organic Carbon Content of Soil / X)

	Koc	foc	Kd
	Chemical Specific	0.005	Chemical-Specific
	[cm^3/g]	[unitless]	[cm^3/g]

Chemical Name	Soil Organic Carbon-Water Partition Coefficient [cm^3/g]	Fraction of Organic Carbon Content of Soil [unitless]	Soil-Water Partition Coefficient [cm^3/g]
Acenaphthylene	6.12E+003	0.005	3.06E+001
Benzo(a)anthracene	3.98E+005	0.005	1.99E+003
Benzo(a)pyrene	1.02E+006	0.005	5.10E+003
Benzo(b)fluoranthene	1.23E+006	0.005	6.15E+003
Benzo(k)fluoranthene	1.23E+006	0.005	6.15E+003
Dibenzo(a,h)anthracene	3.80E+006	0.005	1.90E+004
Indeno(1,2,3-cd)pyrene	3.47E+006	0.005	1.74E+004
2-Methylnaphthalene	2.98E+003	0.005	1.49E+001

Table: 4.23 CT
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Adult Resident
Media: RRAA Surface Soil

Volatilization Factor = [m^3/kg] = (Inverse of Mean Concentration at Center of Square Source / 1) X [(3.14 / 1) X (Apparent Diffusivity / 1) X (Exposure Interval / 1)]^1/2 X (1 / 2) X (1 / Dry Soil Bulk Density) X (1 / Apparent Diffusivity) X (Conversion Factor / 1)

Variable Symbols =	Q/Cvol	Constant	DA	T	Constant	Rhob	DA	CF	VF
Parameter Values =	80.53	3.14	Calculated	Receptor-Specific	2	1.5	Calculated	1.00E-004	Chemical-Specific
Parameter Units =	[g/m^2-s per kg/m^3]	[unitless]	[cm^2/s]	[s]	[unitless]	[g/cm^3]	[cm^2/s]	[m^2/cm^2]	[m^3/kg]

Chemical Name	Inverse of Mean Concentration at Center of Square Source [g/m^2-s per kg/m^3]	3.14 [unitless]	Apparent Diffusivity [cm^2/s]	Exposure Interval [s]	2 [unitless]	Dry Soil Bulk Density [g/cm^3]	Apparent Diffusivity [cm^2/s]	Conversion Factor [m^2/cm^2]	Volatilization Factor [m^3/kg]
Acenaphthylene	80.53	3.14	3.90E-007	2.84E+008	2	1.5	3.90E-007	1.00E-004	1.28E+005
Benzo(a)anthracene	80.53	3.14	2.16E-010	2.84E+008	2	1.5	2.16E-010	1.00E-004	5.46E+006
Benzo(a)pyrene	80.53	3.14	3.20E-011	2.84E+008	2	1.5	3.20E-011	1.00E-004	1.42E+007
Benzo(b)fluoranthene	80.53	3.14	8.97E-010	2.84E+008	2	1.5	8.97E-010	1.00E-004	2.68E+006
Dibenzo(a,h)anthracene	80.53	3.14	1.76E-012	2.84E+008	2	1.5	1.76E-012	1.00E-004	6.03E+007
Indeno(1,2,3-cd)pyrene	80.53	3.14	5.90E-012	2.84E+008	2	1.5	5.90E-012	1.00E-004	3.30E+007
2-Methylnaphthalene	80.53	3.14	3.62E-006	2.84E+008	2	1.5	3.62E-006	1.00E-004	4.21E+004

Table: 4.23 CT
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Adult Resident
Media: RRAA Surface Soil

$$\text{Apparent Diffusivity} = \left[\left[\frac{\text{Air-Filled Soil Porosity}^{10/3}}{\text{Total Soil Porosity}^{2}} \times \text{Diffusivity in Air} \times \text{Dimensionless Henry's Law Constant}\right] + \left[\frac{\text{Water-Filled Soil Porosity}^{10/3}}{\text{Total Soil Porosity}^{2}} \times \text{Diffusivity in Water}\right]\right] \times \frac{1}{\left[\text{Dry Soil Bulk Density} \times \text{Soil-Water Partition Coefficient} + \text{Water-Filled Soil Porosity} + \text{Air-Filled Soil Porosity} \times \text{Dimensionless Henry's Law Constant}\right]}$$

[cm^2/s]

	Thetaa	Di	H'	Thetaw	Dw	Eta	Rhob	Kd	Thetaw	Thetaa	H'	DA
	0.28	Chemical Specific	Chemical Specific	0.15	Chemical Specific	0.43	1.5	Chemical Specific	0.15	0.28	Chemical Specific	Chemical-Specfic
	[unitless]	[cm^2/s]	[unitless]	[unitless]	[cm^2/s]	[unitless]	[g/cm^3]	[cm^3/g]	[unitless]	[unitless]	[unitless]	[cm^2/s]
Chemical Name	Air-Filled Soil Porosity [unitless]	Diffusivity in Air [cm^2/s]	Dimensionless Henry's Law Constant [unitless]	Water-Filled Porosity [unitless]	Diffusivity in Water [cm^2/s]	Total Soil Porosity [unitless]	Dry Soil Bulk Density [g/cm^3]	Soil-Water Partition Coefficient [cm^3/g]	Water-Filled Porosity [unitless]	Air-Filled Soil Porosity [unitless]	Dimensionless Henry's Law Constant [unitless]	Apparent Diffusivity [cm^2/s]
Acenaphthylene	0.28	4.39E-002	5.11E-003	0.15	7.53E-006	0.43	1.5	3.06E+001	0.15	0.28	5.11E-003	3.90E-007
Benzo(a)anthracene	0.28	5.10E-002	1.37E-004	0.15	9.00E-006	0.43	1.5	1.99E+003	0.15	0.28	1.37E-004	2.16E-010
Benzo(a)pyrene	0.28	4.30E-002	4.63E-005	0.15	9.00E-006	0.43	1.5	5.10E+003	0.15	0.28	4.63E-005	3.20E-011
Benzo(b)fluoranthene	0.28	2.26E-002	4.55E-003	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	4.55E-003	8.97E-010
Dibenzo(a,h)anthracene	0.28	2.02E-002	6.03E-007	0.15	5.18E-006	0.43	1.5	1.90E+004	0.15	0.28	6.03E-007	1.76E-012
Indeno(1,2,3-cd)pyrene	0.28	1.90E-002	6.56E-005	0.15	5.66E-006	0.43	1.5	1.74E+004	0.15	0.28	6.56E-005	5.90E-012
2-Methylnaphthalene	0.28	4.80E-002	2.12E-002	0.15	7.84E-006	0.43	1.5	1.49E+001	0.15	0.28	2.12E-002	3.62E-006

Table: 4.23 CT
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Adult Resident
Media: RRAA Surface Soil

	Soil Organic Carbon-Water	X	Fraction of Organic
Soil-Water Partition Coefficient =	Partition Coefficient		Carbon Content of Soil
[cm^3/g]	1	X	

	Koc	foc	Kd
	Chemical Specific	0.005	Chemical-Specific
	[cm^3/g]	[unitless]	[cm^3/g]

Chemical Name	Soil Organic Carbon-Water Partition Coefficient [cm^3/g]	Fraction of Organic Carbon Content of Soil [unitless]	Soil-Water Partition Coefficient [cm^3/g]
Acenaphthylene	6.12E+003	0.005	3.06E+001
Benzo(a)anthracene	3.98E+005	0.005	1.99E+003
Benzo(a)pyrene	1.02E+006	0.005	5.10E+003
Benzo(b)fluoranthene	1.23E+006	0.005	6.15E+003
Dibenzo(a,h)anthracene	3.80E+006	0.005	1.90E+004
Indeno(1,2,3-cd)pyrene	3.47E+006	0.005	1.74E+004
2-Methylnaphthalene	2.98E+003	0.005	1.49E+001

Table: 4.24 RME
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Adult Resident
Media: CCA Surface Soil

$$\text{Volatilization Factor} = \left[\frac{\text{Inverse of Mean Concentration at Center of Square Source}}{1} \times \frac{3.14}{1} \times \frac{\text{Apparent Diffusivity}}{1} \times \frac{\text{Exposure Interval}}{1}\right]^{1/2} \times \frac{1}{2} \times \frac{1}{\text{Dry Soil Bulk Density}} \times \frac{1}{\text{Apparent Diffusivity}} \times \frac{\text{Conversion Factor}}{1}$$

[m^3/kg]

Variable Symbols =	Q/Cvol		Constant		DA	T		Constant		Rhob		DA		CF	VF
Parameter Values =	62.30		3.14		Calculated	Receptor-Specific		2		1.5		Calculated		1.00E-004	Chemical-Specific
Parameter Units =	[g/m^2-s per kg/m^3]		[unitless]		[cm^2/s]	[s]		[unitless]		[g/cm^3]		[cm^2/s]		[m^2/cm^2]	[m^3/kg]

Chemical Name	Inverse of Mean Concentration at Center of Square Source [g/m^2-s per kg/m^3]		3.14 [unitless]		Apparent Diffusivity [cm^2/s]	Exposure Interval [s]		2 [unitless]		Dry Soil Bulk Density [g/cm^3]		Apparent Diffusivity [cm^2/s]		Conversion Factor [m^2/cm^2]	Volatilization Factor [m^3/kg]
Trichloroethylene	62.30		3.14		1.76E-003	9.46E+008		2		1.5		1.76E-003		1.00E-004	2.70E+003
Acenaphthylene	62.30		3.14		3.90E-007	9.46E+008		2		1.5		3.90E-007		1.00E-004	1.81E+005
Benzo(a)anthracene	62.30		3.14		2.16E-010	9.46E+008		2		1.5		2.16E-010		1.00E-004	7.71E+006
Benzo(a)pyrene	62.30		3.14		3.20E-011	9.46E+008		2		1.5		3.20E-011		1.00E-004	2.00E+007
Benzo(b)fluoranthene	62.30		3.14		8.97E-010	9.46E+008		2		1.5		8.97E-010		1.00E-004	3.78E+006
Benzo(k)fluoranthene	62.30		3.14		1.24E-011	9.46E+008		2		1.5		1.24E-011		1.00E-004	3.21E+007
Dibenzo(a,h)anthracene	62.30		3.14		1.76E-012	9.46E+008		2		1.5		1.76E-012		1.00E-004	8.52E+007
Indeno(1,2,3-cd)pyrene	62.30		3.14		5.90E-012	9.46E+008		2		1.5		5.90E-012		1.00E-004	4.66E+007
2-Methylnaphthalene	62.30		3.14		3.62E-006	9.46E+008		2		1.5		3.62E-006		1.00E-004	5.95E+004
Naphthalene	62.30		3.14		6.16E-006	9.46E+008		2		1.5		6.16E-006		1.00E-004	4.56E+004

Table: 4.24 RME
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Adult Resident
Media: CCA Surface Soil

$$\text{Apparent Diffusivity} = \left[\left[\frac{\text{Air-Filled Soil Porosity}^{10/3}}{\text{Total Soil Porosity}^2} \times \text{Diffusivity in Air} \times \text{Dimensionless Henry's Law Constant} + \frac{\text{Water-Filled Soil Porosity}^{10/3}}{\text{Total Soil Porosity}^2} \times \text{Diffusivity in Water} \right] \times \frac{1}{\text{Total Soil Porosity}} \right] \times \left[\text{Dry Soil Bulk Density} \times \text{Soil-Water Partition Coefficient} + \text{Water-Filled Soil Porosity} + \text{Air-Filled Soil Porosity} \times \text{Dimensionless Henry's Law Constant} \right]$$

[cm^2/s]

Thetaa	Dl	H'	Thetaw	Dw	Eta	Rhob	Kd	Thetaw	Thetaa	H'	DA
0.28	Chemical Specific	Chemical Specific	0.15	Chemical Specific	0.43	1.5	Chemical Specific	0.15	0.28	Chemical Specific	Chemical-Specific
[unitless]	[cm^2/s]	[unitless]	[unitless]	[cm^2/s]	[unitless]	[g/cm^3]	[cm^3/g]	[unitless]	[unitless]	[unitless]	[cm^2/s]

Chemical Name	Air-Filled Soil Porosity [unitless]	Diffusivity in Air [cm^2/s]	Dimensionless Henry's Law Constant [unitless]	Water-Filled Porosity [unitless]	Diffusivity in Water [cm^2/s]	Total Soil Porosity [unitless]	Dry Soil Bulk Density [g/cm^3]	Soil-Water Partition Coefficient [cm^3/g]	Water-Filled Porosity [unitless]	Air-Filled Soil Porosity [unitless]	Dimensionless Henry's Law Constant [unitless]	Apparent Diffusivity [cm^2/s]
Trichloroethylene	0.28	7.90E-002	4.22E-001	0.15	9.10E-006	0.43	1.5	8.30E-001	0.15	0.28	4.22E-001	1.76E-003
Acenaphthylene	0.28	4.39E-002	5.11E-003	0.15	7.53E-006	0.43	1.5	3.06E+001	0.15	0.28	5.11E-003	3.90E-007
Benzo(a)anthracene	0.28	5.10E-002	1.37E-004	0.15	9.00E-006	0.43	1.5	1.99E+003	0.15	0.28	1.37E-004	2.16E-010
Benzo(a)pyrene	0.28	4.30E-002	4.63E-005	0.15	9.00E-006	0.43	1.5	5.10E+003	0.15	0.28	4.63E-005	3.20E-011
Benzo(b)fluoranthene	0.28	2.26E-002	4.55E-003	0.15	5.58E-006	0.43	1.5	6.15E+003	0.15	0.28	4.55E-003	8.97E-010
Benzo(k)fluoranthene	0.28	2.26E-002	3.40E-005	0.15	5.58E-006	0.43	1.5	6.15E+003	0.15	0.28	3.40E-005	1.24E-011
Dibenzo(a,h)anthracene	0.28	2.02E-002	6.03E-007	0.15	5.18E-006	0.43	1.5	1.90E+004	0.15	0.28	6.03E-007	1.76E-012
Indeno(1,2,3-cd)pyrene	0.28	1.90E-002	6.56E-005	0.15	5.66E-006	0.43	1.5	1.74E+004	0.15	0.28	6.56E-005	5.90E-012
2-Methylnaphthalene	0.28	4.80E-002	2.12E-002	0.15	7.84E-006	0.43	1.5	1.49E+001	0.15	0.28	2.12E-002	3.62E-006
Naphthalene	0.28	5.9E-002	1.98E-002	0.15	7.50E-006	0.43	1.5	1.00E+001	0.15	0.28	1.98E-002	6.16E-006

Table: 4.24 RME
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Adult Resident
Media: CCA Surface Soil

Soil-Water Partition Coefficient = Soil Organic Carbon-Water Partition Coefficient / Fraction of Organic Carbon Content of Soil
[cm^3/g] = 1 / X

	Koc	foc	Kd
	Chemical Specific	0.005	Chemical-Specific
	[cm^3/g]	[unitless]	[cm^3/g]

Chemical Name	Soil Organic Carbon-Water Partition Coefficient [cm^3/g]	Fraction of Organic Carbon Content of Soil [unitless]	Soil-Water Partition Coefficient [cm^3/g]
Trichloroethylene	1.66E+002	0.005	8.30E-001
Acenaphthylene	6.12E+003	0.005	3.06E+001
Benzo(a)anthracene	3.98E+005	0.005	1.99E+003
Benzo(a)pyrene	1.02E+006	0.005	5.10E+003
Benzo(b)fluoranthene	1.23E+006	0.005	6.15E+003
Benzo(k)fluoranthene	1.23E+006	0.005	6.15E+003
Dibenzo(a,h)anthracene	3.80E+006	0.005	1.90E+004
Indeno(1,2,3-cd)pyrene	3.47E+006	0.005	1.74E+004
2-Methylnaphthalene	2.98E+003	0.005	1.49E+001
Naphthalene	2.00E+003	0.005	1.00E+001

Table: 4.24 CT
Site: Little Valley Superfund Site
Scenario: Future
Receptor: Adult Resident
Media: CCA Surface Soil

$$\text{Volatilization Factor} = \left[\frac{\text{Inverse of Mean Concentration at Center of Square Source}}{1} \times \frac{3.14}{1} \times \frac{\text{Apparent Diffusivity}}{1} \times \frac{\text{Exposure Interval}}{1}\right]^{1/2} \times \frac{1}{2} \times \frac{1}{\text{Dry Soil Bulk Density}} \times \frac{1}{\text{Apparent Diffusivity}} \times \text{Conversion Factor}$$

[m^3/kg]

Variable Symbols =	Q/Cvol	Constant	DA	T	Constant	Rhob	DA	CF	VF
Parameter Values =	62.30	3.14	Calculated	Receptor-Specifc	2	1.5	Calculated	1.00E-004	Chemical-Specific
Parameter Units =	[g/m^2-s per kg/m^3]	[unitless]	[cm^2/s]	[s]	[unitless]	[g/cm^3]	[cm^2/s]	[m^2/cm^2]	[m^3/kg]

Chemical Name	Inverse of Mean Concentration at Center of Square Source [g/m^2-s per kg/m^3]	3.14 [unitless]	Apparent Diffusivity [cm^2/s]	Exposure Interval [s]	2 [unitless]	Dry Soil Bulk Density [g/cm^3]	Apparent Diffusivity [cm^2/s]	Conversion Factor [m^2/cm^2]	Volatilizaton Factor [m^3/kg]
Trichloroethylene	62.30	3.14	1.76E-003	2.84E+008	2	1.5	1.76E-003	1.00E-004	1.48E+003
Acenaphthylene	62.30	3.14	3.90E-007	2.84E+008	2	1.5	3.90E-007	1.00E-004	9.93E+004
Benzo(a)anthracene	62.30	3.14	2.16E-010	2.84E+008	2	1.5	2.16E-010	1.00E-004	4.22E+006
Benzo(a)pyrene	62.30	3.14	3.20E-011	2.84E+008	2	1.5	3.20E-011	1.00E-004	1.10E+007
Benzo(b)fluoranthene	62.30	3.14	8.97E-010	2.84E+008	2	1.5	8.97E-010	1.00E-004	2.07E+006
Benzo(k)fluoranthene	62.30	3.14	1.17E-011	2.84E+008	2	1.5	1.17E-011	1.00E-004	1.81E+007
Dibenzo(a,h)anthracene	62.30	3.14	1.76E-012	2.84E+008	2	1.5	1.76E-012	1.00E-004	4.67E+007
Indeno(1,2,3-cd)pyrene	62.30	3.14	1.17E-011	2.84E+008	2	1.5	1.17E-011	1.00E-004	1.81E+007
2-Methylnaphthalene	62.30	3.14	4.45E-006	2.84E+008	2	1.5	4.45E-006	1.00E-004	2.94E+004
Naphthalene	62.30	3.14	6.16E-006	2.84E+008	2	1.5	6.16E-006	1.00E-004	2.50E+004

Table: 4.24 CT
Site: Little Valley Superfund Site
Scenario: Future
Receptor: Adult Resident
Media: CCA Surface Soil

$$\text{Apparent Diffusivity} = \left[\frac{\left[\frac{\text{Air-Filled Soil Porosity}}{1} \right]^{10/3} \times \text{Diffusivity in Air} \times \text{Dimensionless Henry's Law Constant}}{\left[\frac{\text{Air-Filled Soil Porosity}}{1} \right]^{10/3} + \left[\frac{\text{Water-Filled Soil Porosity}}{1} \right]^{10/3} \times \text{Diffusivity in Water}} \times 1 \times \left(\frac{\text{Total Soil Porosity}}{1} \right)^{} \right] \times \left[\frac{1}{\text{Dry Soil Bulk Density}} \times \text{Soil-Water Partition Coefficient} + \text{Water-Filled Soil Porosity} + \text{Air-Filled Soil Porosity} \times \text{Dimensionless Henry's Law Constant} \right]$$

[cm^2/s]

Thetaa	Di	H'	Thetaw	Dw	Eta	Rhob	Kd	Thetaw	Thetaa	H'	DA
0.28	Chemical Specific	Chemical Specific	0.15	Chemical Specific	0.43	1.5	Chemical Specific	0.15	0.28	Chemical Specific	Chemical-Specific
[unitless]	[cm^2/s]	[unitless]	[unitless]	[cm^2/s]	[unitless]	[g/cm^3]	[cm^3/g]	[unitless]	[unitless]	[unitless]	[cm^2/s]

Chemical Name	Air-Filled Soil Porosity [unitless]	Diffusivity in Air [cm^2/s]	Dimensionless Henry's Law Constant [unitless]	Water-Filled Porosity [unitless]	Diffusivity in Water [cm^2/s]	Total Soil Porosity [unitless]	Dry Soil Bulk Density [g/cm^3]	Soil-Water Partition Coefficient [cm^3/g]	Water-Filled Porosity [unitless]	Air-Filled Soil Porosity [unitless]	Dimensionless Henry's Law Constant [unitless]	Apparent Diffusivity [cm^2/s]
Trichloroethylene	0.28	7.90E-002	4.22E-001	0.15	9.10E-006	0.43	1.5	8.30E-001	0.15	0.28	4.22E-001	1.76E-003
Acenaphthylene	0.28	4.39E-002	5.11E-003	0.15	7.53E-006	0.43	1.5	3.06E+001	0.15	0.28	5.11E-003	3.90E-007
Benzo(a)anthracene	0.28	5.10E-002	1.37E-004	0.15	9.00E-006	0.43	1.5	1.99E+003	0.15	0.28	1.37E-004	2.16E-010
Benzo(a)pyrene	0.28	4.30E-002	4.63E-005	0.15	9.00E-006	0.43	1.5	5.10E+003	0.15	0.28	4.63E-005	3.20E-011
Benzo(b)fluoranthene	0.28	2.26E-002	4.55E-003	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	4.55E-003	8.97E-010
Benzo(k)fluoranthene	0.28	2.26E-002	3.40E-005	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	3.40E-005	1.17E-011
Dibenzo(a,h)anthracene	0.28	2.02E-002	6.03E-007	0.15	5.18E-006	0.43	1.5	1.90E+004	0.15	0.28	6.03E-007	1.76E-012
Indeno(1,2,3-cd)pyrene	0.28	1.90E-002	6.56E-005	0.15	5.66E-006	0.43	1.5	1.74E+004	0.15	0.28	6.56E-005	1.17E-011
2-Methylnaphthalene	0.28	4.80E-002	2.12E-002	0.15	7.84E-006	0.43	1.5	1.49E+001	0.15	0.28	2.12E-002	4.45E-006
Naphthalene	0.28	5.9E-002	1.98E-002	0.15	7.50E-006	0.43	1.5	1.00E+001	0.15	0.28	1.98E-002	6.16E-006

Table: 4.24 CT
Site: Little Valley Superfund Site
Scenario: Future
Receptor: Adult Resident
Media: CCA Surface Soil

Soil-Water Partition Coefficient =	Soil Organic Carbon-Water Partition Coefficient	X	Fraction of Organic Carbon Content of Soil
[cm^3/g]	1	X	

	Koc	foc	Kd
	Chemical Specific	0.005	Chemical-Specific
	[cm^3/g]	[unitless]	[cm^3/g]

Chemical Name	Soil Organic Carbon-Water Partition Coefficient [cm^3/g]	Fraction of Organic Carbon Content of Soil [unitless]	Soil-Water Partition Coefficient [cm^3/g]
Trichloroethylene	1.66E+002	0.005	8.30E-001
Acenaphthylene	6.12E+003	0.005	3.06E+001
Benzo(a)anthracene	3.98E+005	0.005	1.99E+003
Benzo(a)pyrene	1.02E+006	0.005	5.10E+003
Benzo(b)fluoranthene	1.23E+006	0.005	6.15E+003
Benzo(k)fluoranthene	1.23E+006	0.005	6.15E+003
Dibenzo(a,h)anthracene	3.80E+006	0.005	1.90E+004
Indeno(1,2,3-cd)pyrene	3.47E+006	0.005	1.74E+004
2-Methylnaphthalene	2.98E+003	0.005	1.49E+001
Naphthalene	2.00E+003	0.005	1.00E+001

Table: 4.25
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Child Resident
Media: RRAA Surface Soil

$$\text{Volatilization Factor [m^3/kg]} = \text{Inverse of Mean Concentration at Center of Square Source} \times \left[\frac{3.14}{1} \times \frac{\text{Apparent Diffusivity}}{1} \times \frac{\text{Exposure Interval}}{1} \right]^{1/2} \times \frac{1}{2} \times \frac{1}{\text{Dry Soil Bulk Density}} \times \frac{1}{\text{Apparent Diffusivity}} \times \text{Conversion Factor}$$

Variable Symbols =	Q/Cvol		Constant		DA		T		Constant		Rhob		DA		CF	VF
Parameter Values =	80.53		3.14		Calculated		Receptor-Specific		2		1.5		Calculated		1.00E-004	Chemical-Specific
Parameter Units =	[g/m^2-s per kg/m^3]		[unitless]		[cm^2/s]		[s]		[unitless]		[g/cm^3]		[cm^2/s]		[m^2/cm^2]	[m^3/kg]

Chemical Name	Inverse of Mean Concentration at Center of Square Source [g/m^2-s per kg/m^3]	3.14 [unitless]	Apparent Diffusivity [cm^2/s]	Exposure Interval [s]	2 [unitless]	Dry Soil Bulk Density [g/cm^3]	Apparent Diffusivity [cm^2/s]	Conversion Factor [m^2/cm^2]	Volatilizaton Factor [m^3/kg]
Acenaphthylene	80.53	3.14	3.90E-007	1.89E+008	2	1.5	3.90E-007	1.00E-004	1.05E+005
Benzo(a)anthracene	80.53	3.14	2.16E-010	1.89E+008	2	1.5	2.16E-010	1.00E-004	4.45E+006
Benzo(a)pyrene	80.53	3.14	3.20E-011	1.89E+008	2	1.5	3.20E-011	1.00E-004	1.16E+007
Benzo(b)fluoranthene	80.53	3.14	8.97E-010	1.89E+008	2	1.5	8.97E-010	1.00E-004	2.18E+006
Benzo(k)fluoranthene	80.53	3.14	1.17E-011	1.89E+008	2	1.5	1.17E-011	1.00E-004	1.91E+007
Dibenzo(a,h)anthracene	80.53	3.14	1.76E-012	1.89E+008	2	1.5	1.76E-012	1.00E-004	4.93E+007
Indeno(1,2,3-cd)pyrene	80.53	3.14	1.17E-011	1.89E+008	2	1.5	1.17E-011	1.00E-004	1.91E+007
2-Methylnaphthalene	80.53	3.14	3.62E-006	1.89E+008	2	1.5	3.62E-006	1.00E-004	3.44E+004

Table: 4.25
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Child Resident
Media: RRAA Surface Soil

$$\text{Apparent Diffusivity (cm}^2\text{/s)} = \left[\left[\frac{\text{Air-Filled Soil Porosity}^{10/3} \times \text{Diffusivity in Air} \times \text{Dimensionless Henry's Law Constant}}{1 \times 1 \times 1} + \frac{\text{Water-Filled Soil Porosity}^{10/3} \times \text{Diffusivity in Water}}{1 \times 1} \right] \times \frac{1}{\text{Total Soil Porosity}^2} \right] \times \left[\frac{1 \times 1}{\text{Dry Soil Bulk Density} \times \text{Soil-Water Partition Coefficient}} + 1 + \frac{1 \times 1}{\text{Air-Filled Soil Porosity} \times \text{Dimensionless Henry's Law Constant}} \right]$$

Thetaa	Di	H'	Thetaw	Dw	Eta	Rhob	Kd	Thetaw	Thetaa	H'	DA
0.28	Chemical Specific	Chemical Specific	0.15	Chemical Specific	0.43	1.5	Chemical Specific	0.15	0.28	Chemical Specific	Chemical-Specific
[unitless]	[cm^2/s]	[unitless]	[unitless]	[cm^2/s]	[unitless]	[g/cm^3]	[cm^3/g]	[unitless]	[unitless]	[unitless]	[cm^2/s]

Chemical Name	Air-Filled Soil Porosity [unitless]	Diffusivity in Air [cm^2/s]	Dimensionless Henry's Law Constant [unitless]	Water-Filled Porosity [unitless]	Diffusivity in Water [cm^2/s]	Total Soil Porosity [unitless]	Dry Soil Bulk Density [g/cm^3]	Soil-Water Partition Coefficient [cm^3/g]	Water-Filled Porosity [unitless]	Air-Filled Soil Porosity [unitless]	Dimensionless Henry's Law Constant [unitless]	Apparent Diffusivity [cm^2/s]
Acenaphthylene	0.28	4.39E-002	5.11E-003	0.15	7.53E-006	0.43	1.5	3.06E+001	0.15	0.28	5.11E-003	3.90E-007
Benzo(a)anthracene	0.28	5.10E-002	1.37E-004	0.15	9.00E-006	0.43	1.5	1.99E+003	0.15	0.28	1.37E-004	2.16E-010
Benzo(a)pyrene	0.28	4.30E-002	4.63E-005	0.15	9.00E-006	0.43	1.5	5.10E+003	0.15	0.28	4.63E-005	3.20E-011
Benzo(b)fluoranthene	0.28	2.26E-002	4.55E-003	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	4.55E-003	8.97E-010
Benzo(k)fluoranthene	0.28	2.02E-002	3.40E-005	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	3.40E-005	1.17E-011
Dibenzo(a,h)anthracene	0.28	1.90E-002	6.03E-007	0.15	5.18E-006	0.43	1.5	1.90E+004	0.15	0.28	6.03E-007	1.76E-012
Indeno(1,2,3-cd)pyrene	0.28	4.80E-002	6.56E-005	0.15	5.68E-006	0.43	1.5	1.74E+004	0.15	0.28	6.56E-005	1.17E-011
2-Methylnaphthalene	0.28	4.80E-002	2.12E-002	0.15	7.84E-006	0.43	1.5	1.49E+001	0.15	0.28	2.12E-002	3.62E-006

Table: 4.25
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Child Resident
Media: RRAA Surface Soil

Soil-Water Partition Coefficient = [cm^3/g]	Soil Organic Carbon-Water Partition Coefficient	X	Fraction of Organic Carbon Content of Soil
	1	X	

	Koc	foc	Kd
	Chemical Specific [cm^3/g]	0.005 [unitless]	Chemical-Specific [cm^3/g]

Chemical Name	Soil Organic Carbon-Water Partition Coefficient [cm^3/g]	Fraction of Organic Carbon Content of Soil [unitless]	Soil-Water Partition Coefficient [cm^3/g]
Acenaphthylene	6.12E+003	0.005	3.06E+001
Benzo(a)anthracene	3.98E+005	0.005	1.99E+003
Benzo(a)pyrene	1.02E+006	0.005	5.10E+003
Benzo(b)fluoranthene	1.23E+006	0.005	6.15E+003
Benzo(k)fluoranthene	1.23E+006	0.005	6.15E+003
Dibenzo(a,h)anthracene	3.80E+006	0.005	1.90E+004
Indeno(1,2,3-cd)pyrene	3.47E+006	0.005	1.74E+004
2-Methylnaphthalene	2.98E+003	0.005	1.49E+001

Table: 4.26
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Child Resident and Trespasser
Media: CCA Surface Soil

$$\text{Volatilization Factor} = \left[\frac{\text{Inverse of Mean Concentration at Center of Square Source}}{1} \times \frac{3.14}{1} \times \frac{\text{Apparent Diffusivity}}{1} \times \frac{\text{Exposure Interval}}{1}\right]^{1/2} \times \frac{1}{2} \times \frac{1}{\text{Dry Soil Bulk Density}} \times \frac{1}{\text{Apparent Diffusivity}} \times \frac{\text{Conversion Factor}}{1}$$

[m^3/kg]

Variable Symbols =	Q/Cvol	Constant	DA	T	Constant	Rhob	DA	CF	VF
Parameter Values =	62.30	3.14	Calculated	Receptor-Specific	2	1.5	Calculated	1.00E-004	Chemical-Specific
Parameter Units =	[g/m^2-s per kg/m^3]	[unitless]	[cm^2/s]	[s]	[unitless]	[g/cm^3]	[cm^2/s]	[m^2/cm^2]	[m^3/kg]

Chemical Name	Inverse of Mean Concentration at Center of Square Source [g/m^2-s per kg/m^3]	3.14 [unitless]	Apparent Diffusivity [cm^2/s]	Exposure Interval [s]	2 [unitless]	Dry Soil Bulk Density [g/cm^3]	Apparent Diffusivity [cm^2/s]	Conversion Factor [m^2/cm^2]	Volatilizaton Factor [m^3/kg]
Trichloroethylene	62.30	3.14	2.96E-003	1.89E+008	2	1.5	2.96E-003	1.00E-004	9.30E+002
Acenaphthylene	62.30	3.14	3.90E-007	7.88E+008	2	1.5	3.90E-007	1.00E-004	1.65E+005
Benzo(a)anthracene	62.30	3.14	2.16E-010	1.89E+008	2	1.5	2.16E-010	1.00E-004	3.44E+006
Benzo(a)pyrene	62.30	3.14	3.20E-011	1.89E+008	2	1.5	3.20E-011	1.00E-004	8.94E+006
Benzo(b)fluoranthene	62.30	3.14	8.97E-010	1.89E+008	2	1.5	8.97E-010	1.00E-004	1.69E+006
Benzo(k)fluoranthene	62.30	3.14	1.24E-011	1.89E+008	2	1.5	1.24E-011	1.00E-004	1.44E+007
Dibenzo(a,h)anthracene	62.30	3.14	1.76E-012	1.89E+008	2	1.5	1.76E-012	1.00E-004	3.81E+007
Indeno(1,2,3-cd)pyrene	62.30	3.14	5.90E-012	1.89E+008	2	1.5	5.90E-012	1.00E-004	2.08E+007
2-Methylnaphthalene	62.30	3.14	3.62E-006	7.88E+008	2	1.5	3.62E-006	1.00E-004	5.43E+004
Naphthalene	62.30	3.14	6.16E-006	1.89E+008	2	1.5	6.16E-006	1.00E-004	2.04E+004

Table: 4.26
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Child Resident and Trespasser
Media: CCA Surface Soil

$$\text{Apparent Diffusivity [cm^2/s]} = \left[\frac{\left[\frac{\text{Air-Filled Soil Porosity}^{10/3}}{\text{Total Soil Porosity}^{2}} \times \text{Diffusivity in Air} \times \text{Dimensionless Henry's Law Constant} \right] + \left[\frac{\text{Water-Filled Soil Porosity}^{10/3}}{\text{Total Soil Porosity}^{2}} \times \text{Diffusivity in Water} \right]}{\left[\text{Dry Soil Bulk Density} \times \text{Soil-Water Partition Coefficient} \right] + \text{Water-Filled Soil Porosity} + \left[\text{Air-Filled Soil Porosity} \times \text{Dimensionless Henry's Law Constant} \right]} \right]$$

	Thetaa	Di	H'	Thetaw	Dw	Eta	Rhob	Kd	Thetaw	Thetaa	H'	DA
	0.28	Chemical Specific	Chemical Specific	0.15	Chemical Specific	0.43	1.5	Chemical Specific	0.15	0.28	Chemical Specific	Chemical-Specfic
	[unitless]	[cm^2/s]	[unitless]	[unitless]	[cm^2/s]	[unitless]	[g/cm^3]	[cm^3/g]	[unitless]	[unitless]	[unitless]	[cm^2/s]
Chemical Name	Air-Filled Soil Porosity [unitless]	Diffusivity in Air [cm^2/s]	Dimensionless Henry's Law Constant [unitless]	Water-Filled Porosity [unitless]	Diffusivity in Water [cm^2/s]	Total Soil Porosity [unitless]	Dry Soil Bulk Density [g/cm^3]	Soil-Water Partition Coefficient [cm^3/g]	Water-Filled Porosity [unitless]	Air-Filled Soil Porosity [unitless]	Dimensionless Henry's Law Constant [unitless]	Apparent Diffusivity [cm^2/s]
Trichloroethylene	0.28	7.90E-002	7.54E-001	0.15	9.10E-006	0.43	1.5	8.30E-001	0.15	0.28	7.54E-001	2.96E-003
Acenaphthylene	0.28	4.39E-002	5.11E-003	0.15	7.53E-006	0.43	1.5	3.06E+001	0.15	0.28	5.11E-003	3.90E-007
Benzo(a)anthracene	0.28	5.10E-002	1.37E-004	0.15	9.00E-006	0.43	1.5	1.99E+003	0.15	0.28	1.37E-004	2.16E-010
Benzo(a)pyrene	0.28	4.30E-002	4.63E-005	0.15	9.00E-006	0.43	1.5	5.10E+003	0.15	0.28	4.63E-005	3.20E-011
Benzo(b)fluoranthene	0.28	2.26E-002	4.55E-003	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	4.55E-003	8.97E-010
Benzo(k)fluoranthene	0.28	2.26E-002	3.40E-005	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	3.40E-005	1.24E-011
Dibenzo(a,h)anthracene	0.28	2.02E-002	6.03E-007	0.15	5.18E-006	0.43	1.5	1.90E+004	0.15	0.28	6.03E-007	1.76E-012
Indeno(1,2,3-cd)pyrene	0.28	1.90E-002	6.56E-005	0.15	5.66E-006	0.43	1.5	1.74E+004	0.15	0.28	6.56E-005	5.90E-012
2-Methylnaphthalene	0.28	4.80E-002	2.12E-002	0.15	7.84E-006	0.43	1.5	1.49E+001	0.15	0.28	2.12E-002	3.62E-006
Naphthalene	0.28	5.9E-002	1.98E-002	0.15	7.50E-006	0.43	1.5	1.00E+001	0.15	0.28	1.98E-002	6.16E-006

Table: 4.26
Site: Little Valley Superfund Site
Scenario: Current/Future
Receptor: Child Resident and Trespasser
Media: CCA Surface Soil

Soil-Water Partition Coefficient = [cm^3/g] = (Soil Organic Carbon-Water Partition Coefficient / 1) X (Fraction of Organic Carbon Content of Soil / X)

Chemical Name	Koc Chemical Specific [cm^3/g] Soil Organic Carbon-Water Partition Coefficient [cm^3/g]	foc 0.005 [unitless] Fraction of Organic Carbon Content of Soil [unitless]	Kd Chemical-Specific [cm^3/g] Soil-Water Partition Coefficient [cm^3/g]
Trichloroethylene	1.66E+002	0.005	8.30E-001
Acenaphthylene	6.12E+003	0.005	3.06E+001
Benzo(a)anthracene	3.98E+005	0.005	1.99E+003
Benzo(a)pyrene	1.02E+006	0.005	5.10E+003
Benzo(b)fluoranthene	1.23E+006	0.005	6.15E+003
Benzo(k)fluoranthene	1.23E+006	0.005	6.15E+003
Dibenzo(a,h)anthracene	3.80E+006	0.005	1.90E+004
Indeno(1,2,3-cd)pyrene	3.47E+006	0.005	1.74E+004
2-Methylnaphthalene	2.98E+003	0.005	1.49E+001
Naphthalene	2.00E+003	0.005	1.00E+001

Table: 4.27
Site: Little Valley Superfund Site
Scenario: Future
Receptor: Construction Worker
Media: BIA All Soil

$$\text{Volatilization Factor} = \frac{\text{Inverse of Mean Concentration at Center of Square Source}}{1} \times \left[\frac{3.14}{1} \times \frac{\text{Apparent Diffusivity}}{1} \times \frac{\text{Exposure Interval}}{1} \right]^{1/2} \times \frac{1}{2} \times \frac{1}{\text{Dry Soil Bulk Density}} \times \frac{1}{\text{Apparent Diffusivity}} \times \frac{\text{Conversion Factor}}{1}$$

[m^3/kg]

Variable Symbols =	Q/Cvol		Constant		DA		T		Constant		Rhob		DA		CF	VF
Parameter Values =	52.74		3.14		Calculated		Receptor-Specific		2		1.5		Calculated		1.00E-004	Chemical-Specific
Parameter Units =	[g/m^2-s per kg/m^3]		[unitless]		[cm^2/s]		[s]		[unitless]		[g/cm^3]		[cm^2/s]		[m^2/cm^2]	[m^3/kg]

Chemical Name	Inverse of Mean Concentration at Center of Square Source [g/m^2-s per kg/m^3]		3.14 [unitless]		Apparent Diffusivity [cm^2/s]		Exposure Interval [s]		2 [unitless]		Dry Soil Bulk Density [g/cm^3]		Apparent Diffusivity [cm^2/s]		Conversion Factor [m^2/cm^2]	Volatilizaton Factor [m^3/kg]
Benzene	52.74		3.14		2.44E-003		3.15E+007		2		1.5		2.44E-003		1.00E-004	3.54E+002
Trichloroethylene	52.74		3.14		1.76E-003		3.15E+007		2		1.5		1.76E-003		1.00E-004	4.17E+002
Benzo(a)pyrene	52.74		3.14		3.20E-011		3.15E+007		2		1.5		3.20E-011		1.00E-004	3.09E+006

Table: 4.27
Site: Little Valley Superfund Site
Scenario: Future
Receptor: Construction Worker
Media: BIA All Soil

$$\text{Apparent Diffusivity} = \left[\left[\frac{\text{Air-Filled Soil Porosity}^{10/3}}{\text{1}} \times \text{Diffusivity in Air} \times \text{Dimensionless Henry's Law Constant} + \frac{\text{Water-Filled Soil Porosity}^{10/3}}{\text{1}} \times \text{Diffusivity in Water} \right] \times \frac{\text{1}}{\text{Total Soil Porosity}^{\wedge}} \right] \times \left[\text{Dry Soil Bulk Density} \times \text{Soil-Water Partition Coefficient} + \text{Water-Filled Soil Porosity} + \text{Air-Filled Soil Porosity} \times \text{Dimensionless Henry's Law Constant} \right]$$

[cm^2/s]

	Thetaa	Di	H'	Thetaw	Dw	Eta	Rhob	Kd	Thetaw	Thetaa	H'	DA
	0.28	Chemical Specific	Chemical Specific	0.15	Chemical Specific	0.43	1.5	Chemical Specific	0.15	0.28	Chemical Specific	Chemical-Specific
	[unitless]	[cm^2/s]	[unitless]	[unitless]	[cm^2/s]	[unitless]	[g/cm^3]	[cm^3/g]	[unitless]	[unitless]	[unitless]	[cm^2/s]
Chemical Name	Air-Filled Soil Porosity [unitless]	Diffusivity in Air [cm^2/s]	Dimensionless Henry's Law Constant [unitless]	Water-Filled Porosity [unitless]	Diffusivity in Water [cm^2/s]	Total Soil Porosity [unitless]	Dry Soil Bulk Density [g/cm^3]	Soil-Water Partition Coefficient [cm^3/g]	Water-Filled Porosity [unitless]	Air-Filled Soil Porosity [unitless]	Dimensionless Henry's Law Constant [unitless]	Apparent Diffusivity [cm^2/s]
Benzene	0.28	8.80E-002	2.28E-001	0.15	9.80E-006	0.43	1.5	2.95E-001	0.15	0.28	2.28E-001	2.44E-003
Trichloroethylene	0.28	7.90E-002	4.22E-001	0.15	9.10E-006	0.43	1.5	8.30E-001	0.15	0.28	4.22E-001	1.76E-003
Benzo(a)pyrene	0.28	4.30E-002	4.63E-005	0.15	9.00E-006	0.43	1.5	5.10E+003	0.15	0.28	4.63E-005	3.20E-011

Table: 4.27
Site: Little Valley Superfund Site
Scenario: Future
Receptor: Construction Worker
Media: BIA All Soil

Soil-Water Partition Coefficient (Kd) [cm^3/g]	=	Soil Organic Carbon-Water Partition Coefficient	X	Fraction of Organic Carbon Content of Soil
		1	X	

	Koc	foc	Kd
	Chemical Specific	0.005	Chemical-Specific
	[cm^3/g]	[unitless]	[cm^3/g]

Chemical Name	Soil Organic Carbon-Water Partition Coefficient [cm^3/g]	Fraction of Organic Carbon Content of Soil [unitless]	Soil-Water Partition Coefficient [cm^3/g]
Benzene	5.89E+001	0.005	2.95E-001
Trichloroethylene	1.66E+002	0.005	8.30E-001
Benzo(a)pyrene	1.02E+006	0.005	5.10E+003

Table: 4.28
Site: Little Valley Superfund Site
Scenario: Future
Receptor: Construction Worker
Media: CCA All Soil

$$\text{Volatilization Factor} = \frac{\text{Inverse of Mean Concentration at Center of Square Source}}{1} \times \left[\frac{3.14}{1} \times \frac{\text{Apparent Diffusivity}}{1} \times \frac{\text{Exposure Interval}}{1} \right]^{1/2} \times \frac{1}{2} \times \frac{1}{\text{Dry Soil Bulk Density}} \times \frac{1}{\text{Apparent Diffusivity}} \times \frac{\text{Conversion Factor}}{1}$$

[m^3/kg]

Variable Symbols =	Q/Cvol		Constant		DA		T		Constant		Rhob		DA	CF	VF
Parameter Values =	62.30		3.14		Calculated		Receptor-Specifc		2		1.5		Calculated	1.00E-004	Chemical-Specific
Parameter Units =	[g/m^2-s per kg/m^3]		[unitless]		[cm^2/s]		[s]		[unitless]		[g/cm^3]		[cm^2/s]	[m^2/cm^2]	[m^3/kg]
Chemical Name	Inverse of Mean Concentration at Center of Square Source [g/m^2-s per kg/m^3]		3.14 [unitless]		Apparent Diffusivity [cm^2/s]		Exposure Interval [s]		2 [unitless]		Dry Soil Bulk Density [g/cm^3]		Apparent Diffusivity [cm^2/s]	Conversion Factor [m^2/cm^2]	Volatilizaton Factor [m^3/kg]
Benzene	62.30		3.14		2.44E-003		3.15E+007		2		1.5		2.44E-003	1.00E-004	4.18E+002
Methylcyclohexane	62.30		3.14		1.94E-002		3.15E+007		2		1.5		1.94E-002	1.00E-004	1.48E+002
Trichloroethylene	62.30		3.14		1.76E-003		3.15E+007		2		1.5		1.76E-003	1.00E-004	4.92E+002
Acenaphthylene	62.30		3.14		3.90E-007		3.15E+007		2		1.5		3.90E-007	1.00E-004	3.31E+004
Benzo(a)anthracene	62.30		3.14		2.16E-010		3.15E+007		2		1.5		2.16E-010	1.00E-004	1.41E+006
Benzo(a)pyrene	62.30		3.14		3.20E-011		3.15E+007		2		1.5		3.20E-011	1.00E-004	3.65E+006
Benzo(b)fluoranthene	62.30		3.14		8.97E-010		3.15E+007		2		1.5		8.97E-010	1.00E-004	8.90E+005
Benzo(k)fluoranthene	62.30		3.14		1.24E-011		3.15E+007		2		1.5		1.24E-011	1.00E-004	5.87E+006
Dibenzo(a,h)anthracene	62.30		3.14		1.78E-012		3.15E+007		2		1.5		1.78E-012	1.00E-004	1.55E+007
Indeno(1,2,3-cd)pyrene	62.30		3.14		5.90E-012		3.15E+007		2		1.5		5.90E-012	1.00E-004	8.50E+006
2-Methylnaphthalene	62.30		3.14		3.62E-006		3.15E+007		2		1.5		3.62E-006	1.00E-004	1.09E+004
Naphthalene	62.30		3.14		6.16E-006		3.15E+007		2		1.5		6.16E-006	1.00E-004	8.32E+003

Table: 4.28
Site: Little Valley Superfund Site
Scenario: Future
Receptor: Construction Worker
Media: CCA All Soil

$$\text{Apparent Diffusivity [cm}^2\text{/s]} = \left[\left[\frac{\text{Air-Filled Soil Porosity}^{10/3}}{\text{1}} \times \text{Diffusivity in Air} \times \text{Dimensionless Henry's Law Constant}\right] + \left[\frac{\text{Water-Filled Soil Porosity}^{10/3}}{\text{1}} \times \text{Diffusivity in Water}\right] \times \frac{1}{\text{Total Soil Porosity}^2}\right] \times \left[\text{Dry Soil Bulk Density} \times \text{Soil-Water Partition Coefficient} + \text{Water-Filled Soil Porosity} + \text{Air-Filled Soil Porosity} \times \text{Dimensionless Henry's Law Constant}\right]$$

	Thetaa	Di	H'	Thetaw	Dw	Eta	Rhob	Kd	Thetaw	Thetaa	H'	DA
	0.28	Chemical Specific	Chemical Specific	0.15	Chemical Specific	0.43	1.5	Chemical Specific	0.15	0.28	Chemical Specific	Chemical-Specific
	[unitless]	[cm^2/s]	[unitless]	[unitless]	[cm^2/s]	[unitless]	[g/cm^3]	[cm^3/g]	[unitless]	[unitless]	[unitless]	[cm^2/s]
Chemical Name	Air-Filled Soil Porosity [unitless]	Diffusivity in Air [cm^2/s]	Dimensionless Henry's Law Constant [unitless]	Water-Filled Porosity [unitless]	Diffusivity in Water [cm^2/s]	Total Soil Porosity [unitless]	Dry Soil Bulk Density [g/cm^3]	Soil-Water Partition Coefficient [cm^3/g]	Water-Filled Porosity [unitless]	Air-Filled Soil Porosity [unitless]	Dimensionless Henry's Law Constant [unitless]	Apparent Diffusivity [cm^2/s]
Benzene	0.28	8.8E-002	2.28E-001	0.15	9.80E-006	0.43	1.5	2.95E-001	0.15	0.28	2.28E-001	2.44E-003
Methylcyclohexane	0.28	9.86E-002	1.76E+001	0.15	8.52E-006	0.43	1.5	1.34E+000	0.15	0.28	1.76E+001	1.94E-002
Trichloroethylene	0.28	7.90E-002	4.22E-001	0.15	9.10E-006	0.43	1.5	8.30E-001	0.15	0.28	4.22E-001	1.76E-003
Acenaphthylene	0.28	4.39E-002	5.11E-003	0.15	7.53E-006	0.43	1.5	3.06E+001	0.15	0.28	5.11E-003	3.90E-007
Benzo(a)anthracene	0.28	5.10E-002	1.37E-004	0.15	9.00E-006	0.43	1.5	1.99E+003	0.15	0.28	1.37E-004	2.16E-010
Benzo(a)pyrene	0.28	4.30E-002	4.63E-005	0.15	9.00E-006	0.43	1.5	5.10E+003	0.15	0.28	4.63E-005	3.20E-011
Benzo(b)fluoranthene	0.28	2.26E-002	4.55E-003	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	4.55E-003	8.97E-010
Benzo(k)fluoranthene	0.28	2.26E-002	3.40E-005	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	3.40E-005	1.24E-011
Dibenzo(a,h)anthracene	0.28	2.02E-002	6.03E-007	0.15	5.18E-006	0.43	1.5	1.90E+004	0.15	0.28	6.03E-007	1.76E-012
Indeno(1,2,3-cd)pyrene	0.28	1.90E-002	6.56E-005	0.15	5.66E-006	0.43	1.5	1.74E+004	0.15	0.28	6.56E-005	5.90E-012
2-Methylnaphthalene	0.28	4.80E-002	2.12E-002	0.15	7.84E-006	0.43	1.5	1.49E+001	0.15	0.28	2.12E-002	3.62E-008
Naphthalene	0.28	5.90E-002	1.98E-002	0.15	7.50E-006	0.43	1.5	1.00E+001	0.15	0.28	1.98E-002	6.16E-008

Table: 4.28
Site: Little Valley Superfund Site
Scenario: Future
Receptor: Construction Worker
Media: CCA All Soil

Soil-Water Partition Coefficient = [cm^3/g]	Soil Organic Carbon-Water Partition Coefficient	X	Fraction of Organic Carbon Content of Soil
	1	X	

	Koc	foc	Kd
	Chemical Specific [cm^3/g]	0.005 [unitless]	Chemical-Specific [cm^3/g]

Chemical Name	Soil Organic Carbon-Water Partition Coefficient [cm^3/g]	Fraction of Organic Carbon Content of Soil [unitless]	Soil-Water Partition Coefficient [cm^3/g]
Benzene	5.89E+001	0.005	2.95E-001
Methylcyclohexane	2.68E+002	0.005	1.34E+000
Trichloroethylene	1.66E+002	0.005	8.30E-001
Acenaphthylene	6.12E+003	0.005	3.06E+001
Benzo(a)anthracene	3.98E+005	0.005	1.99E+003
Benzo(a)pyrene	1.02E+006	0.005	5.10E+003
Benzo(b)fluoranthene	1.23E+006	0.005	6.15E+003
Benzo(k)fluoranthene	1.23E+006	0.005	6.15E+003
Dibenzo(a,h)anthracene	3.80E+006	0.005	1.90E+004
Indeno(1,2,3-cd)pyrene	3.47E+006	0.005	1.74E+004
2-Methylnaphthalene	2.98E+003	0.005	1.49E+001
Naphthalene	2.00E+003	0.005	1.00E+001

Table: 4.29
Site: Little Valley Superfund Site
Scenario: Current/Future and Future
Receptor: Construction Worker
Media: RRAA All Soil

$$\text{Volatilization Factor} = \left[\frac{\text{Inverse of Mean Concentration at Center of Square Source}}{1} \times \frac{3.14}{1} \times \frac{\text{Apparent Diffusivity}}{1} \times \frac{\text{Exposure Interval}}{1}\right]^{1/2} \times \frac{1}{2} \times \frac{1}{\text{Dry Soil Bulk Density}} \times \frac{1}{\text{Apparent Diffusivity}} \times \text{Conversion Factor}$$

[m^3/kg]

Variable Symbols =	Q/Cvol	Constant	DA	T	Constant	Rhob	DA	CF	VF
Parameter Values =	80.53	3.14	Calculated	Receptor-Specific	2	1.5	Calculated	1.00E-004	Chemical-Specific
Parameter Units =	[g/m^2-s per kg/m^3]	[unitless]	[cm^2/s]	[s]	[unitless]	[g/cm^3]	[cm^2/s]	[m^2/cm^2]	[m^3/kg]

Chemical Name	Inverse of Mean Concentration at Center of Square Source [g/m^2-s per kg/m^3]	3.14 [unitless]	Apparent Diffusivity [cm^2/s]	Exposure Interval [s]	2 [unitless]	Dry Soil Bulk Density [g/cm^3]	Apparent Diffusivity [cm^2/s]	Conversion Factor [m^2/cm^2]	Volatilizaton Factor [m^3/kg]
Acenaphthylene	80.53	3.14	3.90E-007	3.15E+007	2	1.5	3.90E-007	1.00E-004	4.27E+004
Benzo(a)anthracene	80.53	3.14	1.46E-003	3.15E+007	2	1.5	1.46E-003	1.00E-004	6.99E+002
Benzo(a)pyrene	80.53	3.14	4.93E-004	3.15E+007	2	1.5	4.93E-004	1.00E-004	1.20E+003
Benzo(b)fluoranthene	80.53	3.14	4.85E-002	3.15E+007	2	1.5	4.85E-002	1.00E-004	1.21E+002
Dibenzo(a,h)anthracene	80.53	3.14	6.43E-006	3.15E+007	2	1.5	6.43E-006	1.00E-004	1.05E+004
Indeno(1,2,3-cd)pyrene	80.53	3.14	6.99E-004	3.15E+007	2	1.5	6.99E-004	1.00E-004	1.01E+003
2-Methylnaphthalene	80.53	3.14	3.62E-006	3.15E+007	2	1.5	3.62E-006	1.00E-004	1.40E+004

Table: 4.29
Site: Little Valley Superfund Site
Scenario: Current/Future and Future
Receptor: Construction Worker
Media: RRAA All Soil

$$\text{Apparent Diffusivity} = \left[\left[\frac{\text{Air-Filled Soil Porosity}^{10/3}}{1} \times \text{Diffusivity in Air} \times \text{Dimensionless Henry's Law Constant} + \frac{\text{Water-Filled Soil Porosity}^{10/3}}{1} \times \text{Diffusivity in Water}\right] \times 1 \times \frac{\text{Total Soil Porosity}}{\text{Eta}}\right] \times \left[1 \times 1 + \text{Dry Soil Bulk Density} \times \text{Soil-Water Partition Coefficient} + \text{Water-Filled Soil Porosity} + \text{Air-Filled Soil Porosity} \times \text{Dimensionless Henry's Law Constant}\right]$$

(cm^2/s)

	Thetaa	Di	H'	Thetaw	Dw	Eta	Rhob	Kd	Thetaw	Thetaa	H'	DA
	0.28	Chemical Specific	Chemical Specific	0.15	Chemical Specific	0.43	1.5	Chemical Specific	0.15	0.28	Chemical Specific	Chemical-Specific
	[unitless]	[cm^2/s]	[unitless]	[unitless]	[cm^2/s]	[unitless]	[g/cm^3]	[cm^3/g]	[unitless]	[unitless]	[unitless]	[cm^2/s]
Chemical Name	Air-Filled Soil Porosity [unitless]	Diffusivity in Air [cm^2/s]	Dimensionless Henry's Law Constant [unitless]	Water-Filled Porosity [unitless]	Diffusivity in Water [cm^2/s]	Total Soil Porosity [unitless]	Dry Soil Bulk Density [g/cm^3]	Soil-Water Partition Coefficient [cm^3/g]	Water-Filled Porosity [unitless]	Air-Filled Soil Porosity [unitless]	Dimensionless Henry's Law Constant [unitless]	Apparent Diffusivity [cm^2/s]
Acenaphthylene	0.28	4.39E-002	5.11E-003	0.15	7.53E-006	0.43	1.5	3.06E+001	0.15	0.28	5.11E-003	3.90E-007
Benzo(a)anthracene	0.28	3.98E+005	1.37E-004	0.15	9.00E-006	0.43	1.5	1.99E+003	0.15	0.28	1.37E-004	1.46E-003
Benzo(a)pyrene	0.28	1.02E+006	4.63E-005	0.15	9.00E-006	0.43	1.5	5.10E+003	0.15	0.28	4.63E-005	4.93E-004
Benzo(b)fluoranthene	0.28	1.23E+006	4.55E-003	0.15	5.56E-006	0.43	1.5	6.15E+003	0.15	0.28	4.55E-003	4.85E-002
Dibenzo(a,h)anthracene	0.28	3.80E+006	6.03E-007	0.15	5.18E-006	0.43	1.5	1.90E+004	0.15	0.28	6.03E-007	6.43E-006
Indeno(1,2,3-cd)pyrene	0.28	3.47E+006	6.56E-005	0.15	5.66E-006	0.43	1.5	1.74E+004	0.15	0.28	6.56E-005	6.99E-004
2-Methylnaphthalene	0.28	4.80E-002	2.12E-002	0.15	7.84E-006	0.43	1.5	1.49E+001	0.15	0.28	2.12E-002	3.62E-006

Table: 4.29
Site: Little Valley Superfund Site
Scenario: Current/Future and Future
Receptor: Construction Worker
Media: RRAA All Soil

Soil-Water Partition Coefficient = [cm^3/g] = Soil Organic Carbon-Water Partition Coefficient / 1 X Fraction of Organic Carbon Content of Soil / X

Kd = Koc X foc

Koc: Chemical Specific [cm^3/g]
foc: 0.005 [unitless]
Kd: Chemical-Specific [cm^3/g]

Chemical Name	Soil Organic Carbon-Water Partition Coefficient [cm^3/g]	Fraction of Organic Carbon Content of Soil [unitless]	Soil-Water Partition Coefficient [cm^3/g]
Acenaphthylene	6.12E+003	0.005	3.06E+001
Benzo(a)anthracene	3.98E+005	0.005	1.99E+003
Benzo(a)pyrene	1.02E+006	0.005	5.10E+003
Benzo(b)fluoranthene	1.23E+006	0.005	6.15E+003
Dibenzo(a,h)anthracene	3.80E+006	0.005	1.90E+004
Indeno(1,2,3-cd)pyrene	3.47E+006	0.005	1.74E+004
2-Methylnaphthalene	2.98E+003	0.005	1.49E+001

TABLE 4.30 (RAGS D ADULT LEAD WORKSHEET)
Site Name: Little Valley Superfund Site
Receptor: Adult Commercial Worker, CCA Surface Soil

1. Lead Screening Questions

Medium	Lead Concentration used in Model Run		Basis for Lead Concentration Used For Model Run	Lead Screening Concentration		Basis for Lead Screening Level
	Value	Units		Value	Units	
Soil	416	mg/kg	Average Detected Value	750	mg/kg	Recommended Soil Screening Level

2. Lead Model Questions

Question	Response
What lead model was used? Provide reference and version	EPA Adult Lead Model (2003)
If the EPA Adult Lead Model (ALM) was not used provide rationale for model selected.	n/a
Where are the input values located in the risk assessment report?	Located in Appendix E
What statistics were used to represent the exposure concentration terms and where are the data on concentrations in the risk assessment that support use of these statistics?	Mean soil concentration. Data are Located in Appendix E
What was the point of exposure and location?	CCA Surface Soil
Where are the output values located in the risk assessment report?	Located in Appendix E
What GSD value was used? If this is outside the recommended range of 1.8-2.1), provide rationale in Appendix <Y>.	1.8
What baseline blood lead concentration (PbB_0) value was used? If this is outside the default range of 1.7 to 2.2 provide rationale in Appendix <Y>	1.7
Was the default exposure frequency (EF; 219 days/year) used?	No
Was the default BKSF used (0.4 ug/dL per ug/day) used?	Yes
Was the default absorption fraction (AF; 0.12) used?	Yes
Was the default soil ingestion rate (IR; 50 mg/day) used?	Yes
If non-default values were used for any of the parameters listed above, where are the rationale for the values located in the risk assessment report?	Located in Appendix E

3. Final Result

Medium	Result	Comment/RBRG [1]
Soil	Input value of 416 ppm in soil results in <5% of receptors above a blood lead level of 10 ug/dL and geometric mean blood lead = 3.86 ug/dL. This does not exceed the blood lead goal as described in the 1994 OSWER Directive.	n/a

1. Attach the ALM spreadsheet output file upon which the Risk Based Remediation Goal (RBRG) was based and description of rationale for parameters used. For additional information, see www.epa.gov/superfund/programs/lead

Table 4.31

LEAD MODEL ASSUMPTIONS AND CALCULATIONS

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil
Exposure Points: CCA Surface Soil
Receptor Population: Commericial Worker
Receptor Age: Adult

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference	Equation/ Model Name
PbB adult,central (RME)	Central Estimate of Blood Lead Concentrations in Adults that have Site Exposures to Soil Lead at Concentration PbS (RME)	ug/dL	2.38		Adult Lead Model (see Footnotes)
PbB fetal, 0.95	95th Percentile Fetal Blood Lead Concentration Among Fetuses Born to Women Having Exposures to the Site Soil	ug/dL	3.86		
PbB fetal, 0.95,goal	Goal for the 95th Percentile Fetal Blood Lead Concentration Among Fetuses Born to Women Having Exposures to the Site Soil	ug/dL	10	[1]	
GSDi,adult	Estimated value of the individual geometric standard deviation	dimensionless	1.8	[8]	
Rfetal/maternal	Constant of proportionality between fetal blood lead concentration at birth and maternal blood lead concentration	dimensionless	0.9	[9]	
PbS	Soil lead concentration	ug/g	416	[6]	
PbB adult,0	Typical Blood Lead Concentration in Adults (Women of Child-Bearing Age) in the Absence of Exposures to the Site Soil	ug/dL	1.7	[2]	
BKSF	Biokinetic Slope Factor Relating Increase in Typical Adult Blood Lead Concentration to Average Daily Lead Uptake	ug/dL per ug/day	0.4	[3]	
IRs	Combined Soil and Dust Intake Rate	g/day	0.05	[7]	
EFs	Exposure Frequency	days/year	250	[7]	
AFs	Absolute Gastrointestinal Absorption Fraction for Ingested Lead in soil	dimensionless	0.12	[4]	
AT	Averaging Time for Exposure	days/year	365	[5]	

Footnotes:

$$PbB_{adult,central} = PbB_{adult,0} + \frac{PbS \cdot BKSF \cdot IR_s \cdot AF_s \cdot EF_s}{AT}$$

$$PbB_{fetal,0.95} = PbB_{adult,central} \cdot GSD_{i,adult}^{1.645} \cdot R_{fetal/maternal}$$

[1] EPA, 2003. Recommendations of the Technical Review Workgroup for Lead for an Approach to Assessing Risks Associated with Adult Exposures to Lead. EPA-540-R-03-001. OSWER Directive 9285.7-54. Value for protection of the fetus to the same level as children; Recommended for estimating cleanup goals based on risk to the developing fetus.

[2] EPA, 2003. Value of 1.7 recommended by the Technical Review Work Group for Lead, for non-Hispanic white women. Appendix A. Table 1 - range from 1.7 to 2.2 for specific subpopulations.

Table 4.31

LEAD MODEL ASSUMPTIONS AND CALCULATIONS

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Soil
Exposure Medium: Soil
Exposure Points: CCA Surface Soil
Receptor Population: Commericial Worker
Receptor Age: Adult

[3] EPA, 2003. Table 1 - Default value derived from the study of Pocock et al. (1983) which based the study between tap water lead concentrations and blood lead concentrations in adult males, and the analysis of Sherlock et al (1984).

[4] EPA, 2003. Table 1 - Default value based on an absorption factor for soluble lead of 0.20 and the relative bioavailability of Pb as 0.6 (soil/soluble).

[5] For continuing long term exposures; Sufficient for blood lead levels to approach quasi-steady state.

[6] See Table 3.5 RME

[7] See Tables 4.1RME and 4.1CT

[7] See Table 4.1CT

[8] EPA, 2003. Table 1 - Default value for a homogenous population.

[9] EPA, 2003. Table 1 - Default value based on Goyer (1990) and Graziano et al (1990).

TABLE 4.32 (RAGS D ADULT LEAD WORKSHEET)
Site Name: Little Valley Superfund Site
Receptor: Adult Construction Worker, CCA All Soil

1. Lead Screening Questions

Medium	Lead Concentration used in Model Run		Basis for Lead Concentration Used For Model Run	Lead Screening Concentration		Basis for Lead Screening Level
	Value	Units		Value	Units	
Soil	310	mg/kg	Average Detected Value	750	mg/kg	Recommended Soil Screening Level

2. Lead Model Questions

Question	Response
What lead model was used? Provide reference and version	EPA Adult Lead Model (2003)
If the EPA Adult Lead Model (ALM) was not used provide rationale for model selected.	n/a
Where are the input values located in the risk assessment report?	Located in Appendix E
What statistics were used to represent the exposure concentration terms and where are the data on concentrations in the risk assessment that support use of these statistics?	Mean soil concentration. Data are Located in Appendix E
What was the point of exposure and location?	CCA All Soil
Where are the output values located in the risk assessment report?	Located in Appendix E
What GSD value was used? If this is outside the recommended range of 1.8-2.1), provide rationale in Appendix <Y>.	1.8
What baseline blood lead concentration (PbB_0) value was used? If this is outside the default range of 1.7 to 2.2 provide rationale in Appendix <Y>	1.7
Was the default exposure frequency (EF; 219 days/year) used?	No
Was the default BKSF used (0.4 ug/dL per ug/day) used?	Yes
Was the default absorption fraction (AF; 0.12) used?	Yes
Was the default soil ingestion rate (IR; 50 mg/day) used?	No
If non-default values were used for any of the parameters listed above, where are the rationale for the values located in the risk assessment report?	Located in Appendix E

3. Final Result

Medium	Result	Comment/RBRG [1]
Soil	Input value of 310 ppm in soil results in <5% of receptors above a blood lead level of 10 ug/dL and geometric mean blood lead = 6.68 ug/dL. This does not exceed the blood lead goal as described in the 1994 OSWER Directive.	n/a

1. Attach the ALM spreadsheet output file upon which the Risk Based Remediation Goal (RBRG) was based and description of rationale for parameters used. For additional information, see www.epa.gov/superfund/programs/lead

Table 4.33

LEAD MODEL ASSUMPTIONS AND CALCULATIONS

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: CCA All Soil
Receptor Population: Construction Worker
Receptor Age: Adult

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference	Equation/ Model Name
PbB adult,central	Central Estimate of Blood Lead Concentrations in Adults that have Site Exposures to Soil Lead at Concentration PbS	ug/dL	4.12		Adult Lead Model (see Footnotes)
PbB fetal, 0.95	95th Percentile Fetal Blood Lead Concentration Among Fetuses Born to Women Having Exposures to the Site Soil	ug/dL	6.68		
PbB fetal, 0.95,goal	Goal for the 95th Percentile Fetal Blood Lead Concentration Among Fetuses Born to Women Having Exposures to the Site Soil	ug/dL	10	[1]	
GSDi,adult	Estimated value of the individual geometric standard deviation	dimensionless	1.8	[8]	
Rfetal/maternal	Constant of proportionality between fetal blood lead concentration at birth and maternal blood lead concentration	dimensionless	0.9	[9]	
PbS	Soil lead concentration	ug/g	310	[6]	
PbB adult,0	Typical Blood Lead Concentration in Adults (Women of Child-Bearing Age) in the Absence of Exposures to the Site Soil	ug/dL	1.7	[2]	
BKSF	Biokinetic Slope Factor Relating Increase in Typical Adult Blood Lead Concentration to Average Daily Lead Uptake	ug/dL per ug/day	0.4	[3]	
IRs	Combined Soil and Dust Intake Rate	g/day	0.33	[7]	
EFs	Exposure Frequency	days/year	180	[7]	
AFs	Absolute Gastrointestinal Absorption Fraction for Ingested Lead in soil	dimensionless	0.12	[4]	
AT	Averaging Time for Exposure	days/year	365	[5]	

Footnotes:

$$PbB_{adult,central} = PbB_{adult,0} + \frac{PbS \cdot BKSF \cdot IR_S \cdot AF_S \cdot EF_S}{AT}$$

$$PbB_{fetal,0.95} = PbB_{adult,central} \cdot GSD_{i,adult}^{1.645} \cdot R_{fetal/maternal}$$

[1] EPA, 2003. Recommendations of the Technical Review Workgroup for Lead for an Approach to Assessing Risks Associated with Adult Exposures to Lead. EPA-540-R-03-001. OSWER Directive 9285.7-54. Value for protection of the fetus to the same level as children; Recommended for estimating cleanup goals based on risk to the developing fetus.

Table 4.33

LEAD MODEL ASSUMPTIONS AND CALCULATIONS

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: CCA All Soil
Receptor Population: Construction Worker
Receptor Age: Adult

[2] EPA, 2003. Value of 1.7 recommended by the Technical Review Work Group for Lead, for non-Hispanic white women. Appendix A. Table 1 - range from 1.7 to 2.2 for specific subpopulations.

[3] EPA, 2003. Table 1 - Default value derived from the study of Pocock et al. (1983) which based the study between tap water lead concentrations and blood lead concentrations in adult males, and the analysis of Sherlock et al (1984).

[4] EPA, 2003. Table 1 - Default value based on an absorption factor for soluble lead of 0.20 and the relative bioavailability of Pb as 0.6 (soil/soluble).

[5] For continuing long term exposures; Sufficient for blood lead levels to approach quasi-steady state.

[6] See Table 3.6 RME

[7] See Table 4.3 RME

[8] EPA, 2003. Table 1 - Default value for a homogenous population.

[9] EPA, 2003. Table 1 - Default value based on Goyer (1990) and Graziano et al (1990).

TABLE 4.34 (RAGS D IEUBK LEAD WORKSHEET)
Site Name: Little Valley Superfund Site
Receptor: Resident (Age 0-6 years) CCA Surface Soil

1. Lead Screening Questions

Medium	Lead Concentration Used in Model Run		Basis for Lead Concentration Used For Model Run	Lead Screening Concentration		Basis for Lead Screening Level
	Value	Units		Value	Units	
Soil	416	mg/kg	Average Detected Value	400	mg/kg	Recommended Soil Screening Level
Water	n/a	ug/L	Average Detected Value	15	ug/L	Recommended Drinking Water Action Level

2. Lead Model Questions

Question	Response for Residential Lead Model
What lead model (version and date) was used?	IEUBK Child Lead Model version 1.0, 2002
Where are the input values located in the risk assessment report?	Located in Appendix E
What range of media concentrations were used for the model?	See Table 2.5 in Appendix E
What statistics were used to represent the exposure concentration terms and where are the data on concentrations in the risk assessment that support use of these statistics?	Mean soil concentration. Data are Located in Appendix E
Was soil sample taken from top 2 cm? If not, why?	No, use of older data in the depth range of 0-2' available.
Was soil sample sieved? What size screen was used? If not sieved, provide rationale.	No. Older soil data.
What was the point of exposure/location?	CCA Surface Soil
Where are the output values located in the risk assessment report?	Located in Appendix E as Table 36
Was the model run using default values only?	No
Was the default soil bioavailability used?	Yes Default is 30%
Was the default soil ingestion rate used?	No
If non-default values were used, where are the rationale for the values located in the risk assessment report?	Located in Appendix E

3. Final Result

Medium	Result	Comment/PRG [1]
<MEDIUM>	Input value of 416 ppm in soil results in <5% of receptors above a blood lead level of 10 ug/dL. Geometric mean blood lead = 5.60 to 9.30 ug/dL. This does not exceed the blood lead goal as described in the 1994 OSWER Directive.	n/a

1. Attach the IEUBK text output file and graph upon which the PRG was based as an appendix. For additional information, see www.epa.gov/superfund/programs/lead

Table 4.35

IEUBK MODEL ASSUMPTIONS AND CALCULATIONS

Little Valley Superfund Site

Scenario Timeframe: Current/Future or Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: CCA Surface Soil
Receptor Population: Resident
Receptor Age: Child

Parameter Code	Parameter Definition	Units	Value	Rationale/ Reference	Equation/ Model Name
PbB child	Blood Lead Level in Child	ug/dL	5.60 - 9.30	[1]	IEUBK Model ([1]
Pbloc	Blood Lead Level of Concern (95 percent of the study population is to be below this value)	ug/dL	10	[2]	
PbS	Soil lead concentration	ug/g	416	[5]	
IRs	Combined Soil and Dust Intake Rate	g/day	0.2	[3]	
WF	Soil/Dust Ingestion Weighting Factor (% soil)	%	45	[4]	
TO	Time Spent Outdoors	hrs/day	24	[3]	
VR	Ventilation Rate	m^3/hr	0.42	[3]	

Footnotes:

[1] EPA, 2001. User's Guide for the Integrated Exposure Uptake Biokinetic Model for Lead in Children (IEUBK) Windows version. Range of values calculated for a child 0-6 years is shown.

[2] EPA, 1994. Guidance Manual for the Integrated Exposure Uptake Biokinetic Modle for Lead in Children. EPA/540/R-93/081. February. Default Level of Concern for children's blood lead concentration.

[3] See Tables 4.1RME and 4.2RME

[4] EPA, 1994. Default value.

[5] See Tables 3.5 RME and CT

Table 4.36
LEAD MODEL FOR WINDOWS Version 1.0
Little Valley Superfund Site

Model Version: 1.0 Build 253
User Name: Melanie Weed
Date: 5/3/2004
Site Name: Little Valley Superfund Site
Operable Unit: CCA Surface Soil
Run Mode: Site Risk Assessment

#All default values

The time step used in this model run: 1 - Every 4 Hours (6 times a day).

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (ug Pb/m^3)
.5-1	8.000	20.000	32.000	0.100
1-2	8.000	20.000	32.000	0.100
2-3	8.000	20.000	32.000	0.100
3-4	8.000	20.000	32.000	0.100
4-5	8.000	20.000	32.000	0.100
5-6	8.000	20.000	32.000	0.100
6-7	8.000	20.000	32.000	0.100

****** Diet ******

Age	Diet Intake(ug/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

Table 4.36
LEAD MODEL FOR WINDOWS Version 1.0
Little Valley Superfund Site

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

Drinking Water Concentration: 4.000 ug Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 301.200 ug/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700
Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (ug Pb/g)	House Dust (ug Pb/g)
.5-1	416.000	301.200
1-2	416.000	301.200
2-3	416.000	301.200
3-4	416.000	301.200
4-5	416.000	301.200
5-6	416.000	301.200
6-7	416.000	301.200

****** Alternate Intake ******

Age	Alternate (ug Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

Table 4.36
LEAD MODEL FOR WINDOWS Version 1.0
Little Valley Superfund Site

****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 2.500 ug Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (ug/dL)	Diet (ug/day)	Alternate (ug/day)	Water (ug/day)
.5-1	0.341	0.000	0.000	0.000
1-2	0.341	0.000	0.000	0.000
2-3	0.341	0.000	0.000	0.000
3-4	0.341	0.000	0.000	0.000
4-5	0.341	0.000	0.000	0.000
5-6	0.341	0.000	0.000	0.000
6-7	0.341	0.000	0.000	0.000

Year	Soil+Dust (ug/day)	Total (ug/day)	Blood (ug/dL)
.5-1	17.298	17.640	9.3
1-2	18.022	18.364	8.0
2-3	18.417	18.758	7.0
3-4	18.760	19.102	6.6
4-5	19.048	19.389	6.4
5-6	19.260	19.601	6.0
6-7	19.401	19.742	5.6

Table 4.37

ABSORBED DOSE PER EVENT PARAMETERS AND CALCULATIONS FOR THE COMMERCIAL WORKER - WASHDOWN SCENARIO

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater (Shallow Aquifer)
Exposure Point: Groundwater (Wash Down Scenario)
Receptor Population: Commercial Worker
Receptor Age: Adult
Exposure Route: Dermal Absorption

	Event Duration	Lag Time Per Event	Concentration in Groundwater	Fraction Absorbed	Dermal Permeability Coefficient of Compound in Water	Conversion Factor 2	
DAevent = mg/cm^2-event							
Variable Symbols =	tevent	tauevent	Cgw	FA	Kp	CF2	DAevent
Parameter Values =	1	Chemical-Specific	Chemical-Specific	Chemical-Specific	Chemical-Specific	0.001	
Parameter Units =	hr/event	hr/event	mg/L	unitless	cm/hr	L/cm3	mg/cm^2-event

Chemical of Concern	Event Duration (1)	Lag Time Per Event (3)	Concentration in Groundwater (2)	Fraction Absorbed (3)	Dermal Permeability Coefficient of Compound in Water (3)	Conversion Factor 2	Absorbed dose per event
	hr/event	hr/event	mg/L	unitless	cm/hr	L/cm3	mg/cm^2-event
Benzene	1	0.29	0.00087	1	1.50E-002	0.001	2.02E-008
cis-1,2-Dichloroethylene	1	-	0.01596	-	-	0.001	-
Tetrachloroethylene	1	0.91	0.00067	1	3.30E-002	0.001	5.83E-008
Trichloroethylene	1	0.58	0.03600	1	1.20E-002	0.001	9.09E-007
Aluminum	1	-	2.98200	-	1.00E-003	0.001	2.98E-006
Arsenic	1	-	0.00640	-	1.00E-003	0.001	6.40E-009
Barium	1	-	0.25100	-	1.00E-003	0.001	2.51E-007
Chromium	1	-	0.05600	-	2.00E-003	0.001	1.12E-007
Iron	1	-	9.14600	-	1.00E-003	0.001	9.15E-006
Lead	1	-	0.00414	-	1.00E-004	0.001	4.14E-010
Manganese	1	-	1.10000	-	1.00E-003	0.001	1.10E-006
Nickel	1	-	0.06000	-	2.00E-004	0.001	1.20E-008

Organic Compounds, if tevent <= t* DAevent = Cgw * FA * Kp * CF2 * 2 * (SQRT(6*tauevent*tevent/PI))

Organic Compounds, if tevent > t* DAevent = Cgw * FA * Kp * CF2 * [tevent/(1+B) + 2*tauevent*(1+3B+3B^2)/(1+B)^2]

where: t* = 2.4 * tauevent

Inorganic Compounds, DAevent = Cgw * Kp * CF2 * tevent

Footnotes:

(1) See Tables 4.6 RME and CT.

(2) See Table 3.9 RME and CT.

(3) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), EPA/540/R/99/005, OSWER 9285.7-02EP, September. From Exhibit 3-1, Exhibit B-3, and Exhibit B-4.

Table 4.38

ABSORBED DOSE PER EVENT PARAMETERS AND CALCULATIONS FOR THE COMMERCIAL WORKER - CAR WASH SCENARIO

Little Valley Superfund Site

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater (Shallow Aquifer)
Exposure Point: Groundwater (Car Wash Scenario)
Receptor Population: Commercial Worker
Receptor Age: Adult
Exposure Route: Dermal Absorption

	Event Duration	Lag Time Per Event	Concentration in Groundwater	Fraction Absorbed	Dermal Permeability Coefficient of Compound in Water	Conversion Factor 2	
DAevent = mg/cm^2-event							
Variable Symbols =	tevent	tauevent	Cgw	FA	Kp	CF2	DAevent
Parameter Values =	4	Chemical-Specific	Chemical-Specific	Chemical-Specific	Chemical-Specific	0.001	
Parameter Units =	hr/event	hr/event	mg/L	unitless	cm/hr	L/cm3	mg/cm^2-event

Chemical of Concern	Event Duration (1)	Lag Time Per Event (3)	Concentration in Groundwater (2)	Fraction Absorbed (3)	Dermal Permeability Coefficient of Compound in Water (3)	Conversion Factor 2	Absorbed dose per event
	hr/event	hr/event	mg/L	unitless	cm/hr	L/cm3	mg/cm^2-event
Benzene	4	0.29	0.00087	1	1.50E-002	0.001	5.58E-008
cis-1,2-Dichloroethylene	4	-	0.01596	-	-	0.001	-
Tetrachloroethylene	4	0.91	0.00067	1	3.30E-002	0.001	1.17E-007
Trichloroethylene	4	0.58	0.03600	1	1.20E-002	0.001	2.12E-006
Aluminum	4	-	2.98200	-	1.00E-003	0.001	1.19E-005
Arsenic	4	-	0.00640	-	1.00E-003	0.001	2.56E-008
Barium	4	-	0.25100	-	1.00E-003	0.001	1.00E-006
Chromium	4	-	0.05600	-	2.00E-003	0.001	4.48E-007
Iron	4	-	9.14600	-	1.00E-003	0.001	3.66E-005
Lead	4	-	0.00414	-	1.00E-004	0.001	1.66E-009
Manganese	4	-	1.10000	-	1.00E-003	0.001	4.40E-006
Nickel	4	-	0.06000	-	2.00E-004	0.001	4.80E-008

Organic Compounds, if tevent <= t* DAevent = Cgw * FA * Kp * CF2 * 2 * (SQRT(6*tauevent*tevent/PI))

Organic Compounds, if tevent > t* DAevent = Cgw * FA * Kp * CF2 * [tevent/(1+B) + 2*tauevent*(1+3B+3B^2)/(1+B)^2]

where: t* = 2.4 * tauevent

Inorganic Compounds, DAevent = Cgw * Kp * CF2 * tevent

Footnotes:

(1) See Tables 4.6 RME and CT.

(2) See Table 3.9 RME and CT.

(3) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessme EPA/540/R/99/005, OSWER 9285.7-02EP, September. From Exhibit 3-1, Exhibit B-3, and Exhibit B-4.

Table 4.39

ABSORBED DOSE PER EVENT PARAMETERS AND CALCULATIONS FOR THE ADULT AND CHILD SHORELINE RESIDENTS

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water
Exposure Point: Surface Water
Receptor Population: Shoreline Resident
Receptor Age: Adul and Child
Exposure Route: Dermal Absorption

	Event Duration	Lag Time Per Event	Concentration in Surface Water	Fraction Absorbed	Dermal Permeability Coefficient of Compound In Water	Conversion Factor 2
DAevent =						
mg/cm^2-event						

Variable Symbols =	tevent	tauevent	Csw	FA	Kp	CF2	DAevent
Parameter Values =	2	Chemical-Specific	Chemical-Specific	Chemical-Specific	Chemical-Specific	0.001	
Parameter Units =	hr/event	hr/event	mg/L	unitless	cm/hr	L/cm3	mg/cm^2-event

Chemical of Concern	Event Duration (1)	Lag Time Per Event (3)	Concentration in Surface Water (2)	Fraction Absorbed (3)	Dermal Permeability Coefficient of Compound in Water (3)	Conversion Factor 2	Absorbed dose per event
	hr/event	hr/event	mg/L	unitless	cm/hr	L/cm3	mg/cm^2-event
cis-1,2-Dichloroethylene	2	-	0.012	-	-	0.001	-
1,2-Dichloroethane	2	0.38	0.005	1	4.20E-003	0.001	5.80E-008
Methyl chloride (chloromethane)	2	0.32	0.012	1	3.50E-003	0.001	1.11E-007
Trichloroethylene	2	0.58	0.019	1	1.20E-002	0.001	6.87E-007
Bis(2-ethylhexyl)phthalate (BEHP)	2	16.64	0.006	0.8	2.50E-002	0.001	1.75E-006
Iron	2	-	2.655	-	1.00E-003	0.001	5.31E-006
Lead	2	-	0.006	-	1.00E-004	0.001	1.22E-009
Manganese	2	-	0.241	-	1.00E-003	0.001	4.82E-007
	Organic Compounds, if tevent <= t*		DAevent = Csw * FA * Kp * CF2 * 2 * (SQRT(6*tauevent*tevent/PI))				
	Organic Compounds, if tevent > t*		DAevent = Csw * FA * Kp * CF2 * [tevent/(1+B) + 2*tauevent*(1+3B+3B^2)/(1+B)^2]				
	where: t* = 2.4 * tauevent						
	Inorganic Compounds,		DAevent = Csw * Kp * CF2 * tevent				

Footnotes:

(1) See Tables 4.4 RME and CT.

(2) See Table 3.1 RME and CT.

(3) EPA, 2001. Risk Assessment Guidance for Superfund: Vol I - Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Interim, EPA/540/R/99/005, OSWER 9285.7-02EP, September. From Exhibit 3-1, Exhibit B-3, and Exhibit B-4.

TABLE 5.1

NON-CANCER TOXICITY DATA -- ORAL/DERMAL

Little Valley Superfund Site

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal (1)	Absorbed RfD for Dermal (2)		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD:Target Organ(s)	
		Value	Units		Value	Units			Source(s)	Date(s)
Benzene	Chronic	4.0E-003	mg/kg-day	100%	4.0E-003	mg/kg-day	RBC	300	IRIS	04/26/2004
1,2-Dichloroethane	Chronic	2.0E-002	mg/kg-day	100%	2.0E-002	mg/kg-day	Liver, Kidney	3000	NCEA	10/01/2002
cis-1,2-Dichloroethylene	Chronic	1.0E-002	mg/kg-day	100%	1.0E-002	mg/kg-day	Blood	3000	NCEA	09/24/2002
Methyl chloride (chloromethane) (5)	Chronic	2.00E-003	mg/kg-day	100%	2.0E-003	mg/kg-day	Heart	10000	HEAST	07/01/1997
Methylcyclohexane	-	-	-	-	-	-	-	-	-	-
Tetrachloroethylene	Chronic	1.0E-002	mg/kg-day	100%	1.0E-002	mg/kg-day	Liver	1000	IRIS	04/26/2004
Trichloroethylene	Chronic	3.0E-004	mg/kg-day	100%	3.0E-004	mg/kg-day	Liver	-	NCEA (3)	2001
Acenaphthylene (6)	Chronic	2.5E-002	mg/kg-day	100%	2.5E-002	mg/kg-day	Body Weight, Liver, Kidney	100	IRIS	12/15/2004
Benzo(a)anthracene (6)	Chronic	2.5E-002	mg/kg-day	100%	2.5E-002	mg/kg-day	Body Weight, Liver, Kidney	100	IRIS	12/15/2004
Benzo(a)pyrene (6)	Chronic	2.5E-002	mg/kg-day	100%	2.5E-002	mg/kg-day	Body Weight, Liver, Kidney	100	IRIS	12/15/2004
Benzo(b)fluoranthene (6)	Chronic	2.5E-002	mg/kg-day	100%	2.5E-002	mg/kg-day	Body Weight, Liver, Kidney	100	IRIS	12/15/2004
Benzo(ghi)perylene (6)	Chronic	2.5E-002	mg/kg-day	100%	2.5E-002	mg/kg-day	Body Weight, Liver, Kidney	100	IRIS	12/15/2004
Benzo(k)fluoranthene (6)	Chronic	2.5E-002	mg/kg-day	100%	2.5E-002	mg/kg-day	Body Weight, Liver, Kidney	100	IRIS	12/15/2004
Bis(2-ethylhexyl)phthalate (BEHP)	Chronic	2.0E-002	mg/kg-day	100%	2.0E-002	mg/kg-day	Liver	1000	IRIS	04/26/2004
Dibenzo(a,h)anthracene (7)	Chronic	5.0E-002	mg/kg-day	100%	5.0E-002	mg/kg-day	Body Weight	1000	IRIS	12/15/2004
Indeno(1,2,3-cd)pyrene (6)	Chronic	2.5E-002	mg/kg-day	100%	2.5E-002	mg/kg-day	Body Weight, Liver, Kidney	100	IRIS	12/15/2004
Naphthalene	Chronic	2.0E-002	mg/kg-day	100%	2.0E-002	mg/kg-day	Body Weight	3000	IRIS	04/26/2004
Phenanthrene	-	-	-	-	-	-	-	-	-	-
Aluminum	-	-	-	-	-	-	-	-	-	-
Antimony	Chronic	4.0E-004	mg/kg-day	15%	6.0E-005	mg/kg-day	Blood	1000	IRIS	04/26/2004
Arsenic	Chronic	3.0E-004	mg/kg-day	100%	3.0E-004	mg/kg-day	Skin	3	IRIS	04/26/2004
Barium	Chronic	7.0E-002	mg/kg-day	7%	4.9E-003	mg/kg-day	Kidney	3	IRIS	04/26/2004
Cadmium (food)	Chronic	1.0E-003	mg/kg-day	2.5%	2.5E-005	mg/kg-day	Kidney	10	IRIS	04/26/2004
Cadmium (water)	Chronic	5.0E-004	mg/kg-day	5%	2.5E-005	mg/kg-day	Kidney	10	IRIS	04/26/2004
Chromium (VI)	Chronic	3.0E-003	mg/kg-day	2.5%	7.5E-005	mg/kg-day	None	900	IRIS	04/26/2004
Copper	-	-	-	-	-	-	-	-	-	-

TABLE 5.1

NON-CANCER TOXICITY DATA -- ORAL/DERMAL

Little Valley Superfund Site

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal (1)	Absorbed RfD for Dermal (2)		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD:Target Organ(s)	
		Value	Units		Value	Units			Source(s)	Date(s)
Iron	Chronic	3.0E-001	mg/kg-day	100%	3.0E-001	mg/kg-day	Iron Overload	1	NCEA	11/14/2001
Lead	-	-	-	-	-	-	-	-	-	-
Manganese	Chronic	4.7E-002	mg/kg-day	4%	1.9E-003	mg/kg-day	CNS	1	IRIS	12/15/2004
Mercury (mercuric chloride)	Chronic	3.0E-004	mg/kg-day	7%	2.1E-005	mg/kg-day	Autoimmune	1000	IRIS	04/26/2004
Nickel	Chronic	2.0E-002	mg/kg-day	4%	8.0E-004	mg/kg-day	Body Weight	300	IRIS	04/26/2004
Thallium	-	-	-	-	-	-	-	-	-	-
Vanadium	Chronic	7.0E-003	mg/kg-day	2.6%	1.8E-004	mg/kg-day	-	100	HEAST	07/01/1997

Footnotes:

- = Not Applicable

IRIS = Integrated Risk Information System

HEAST= Health Effects Assessment Summary Tables

NCEA = National Center for Environmental Assessment

(1) EPA, 2001. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Risk Assessment). Interim. EPA/540/r/99/005. Exhibit 4-1.

(2) Absorbed RfD for Dermal = Oral RfD x Oral Absorption Efficiency for Dermal

(3) EPA, 2001. External Review Draft Trichloroethylene Health Risk Assessment: Synthesis and Characterization. Office of Research and Development, National Center for Environmental Assessment - Washington Office. EPA/600/P-01/002A. August.

(4) EPA, 2002. Region 9 PRGs Table 2002 Update. Region 9 PRGs designed with special consideration. October.

(5) Chloroacetic acid toxicity value used as a surrogate, as per EPA (12/04).

(6) N,N-Diphenylamine toxicity value used as a surrogate, as per EPA, (12/04).

(7) Bisphenol A toxicity value used as a surrogate, as per EPA (12/04).

TABLE 5.2

NON-CANCER TOXICITY DATA -- INHALATION

Little Valley Superfund Site

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfC		Extrapolated RfD (1)		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfC : Target Organ(s)	
		Value	Units	Value	Units			Source(s)	Date(s)
Benzene	Chronic	3.0E-002	mg/m^3	8.6E-003	mg/kg-day	RBC	300	IRIS	04/26/2004
1,2-Dichloroethane	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethylene	-	-	-	-	-	-	-	-	-
Methyl chloride (chloromethane)	Chronic	9.0E-002	mg/m^3	2.6E-002	mg/kg-day	Brain	1000	IRIS	04/26/2004
Methylcyclohexane	Chronic	3.0E+000	mg/m^3	8.6E-001	mg/kg-day	Kidney	100	HEAST	07/01/1997
Tetrachloroethylene	-	-	-	-	-	-	-	-	-
Trichloroethylene	Chronic	3.5E-002	mg/m^3	1.0E-002	mg/kg-day	Liver, CNS	-	NCEA (2)	2001
Acenaphthylene	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	-	-	-	-	-	-	-	-	-
Benzo(ghi)perylene	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)phthalate (BEHP)	-	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	-	-	-	-	-	-	-	-	-
Naphthalene	Chronic	3E-003	mg/m^3	8.6E-004	mg/kg-day	Nose, Lungs	3000	IRIS	04/26/2004
Phenanthrene	-	-	-	-	-	-	-	-	-
Aluminum	-	-	-	-	-	-	-	-	-
Antimony	-	-	-	-	-	-	-	-	-
Arsenic	-	-	-	-	-	-	-	-	-
Barium	-	-	-	-	-	-	-	-	-
Cadmium	-	-	-	-	-	-	-	-	-
Chromium (VI)	Chronic	1.0E-004	mg/m^3	2.9E-005	mg/kg-day	Lungs	300	IRIS	04/26/2004
Copper	-	-	-	-	-	-	-	-	-

TABLE 5.2

NON-CANCER TOXICITY DATA -- INHALATION

Little Valley Superfund Site

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfC		Extrapolated RfD (1)		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfC : Target Organ(s)	
		Value	Units	Value	Units			Source(s)	Date(s)
Iron	-	-	-	-	-	-	-	-	-
Lead	-	-	-	-	-	-	-	-	-
Manganese	Chronic	5.0E-005	mg/m^3	1.4E-005	mg/kg-day	CNS	1000	IRIS	04/26/2004
Mercury (mercuric chloride)	-	-	-	-	-	-	-	-	-
Nickel	-	-	-	-	-	-	-	-	-
Thallium	-	-	-	-	-	-	-	-	-
Vanadium	-	-	-	-	-	-	-	-	-

Footnotes:

IRIS = Integrated Risk Information System

NCEA = National Center for Environmental Assessment

(1) Extrapolated RfD = Inhalation RfC x 20 m^3/day x 1/70 mg

(2) EPA, 2001. External Review Draft Trichloroethylene Health Risk Assessment: Synthesis and Characterization. Office of Research and Development, National Center for Environmental Assessment - Washington Office. EPA/600/P-01/002A. August.

TABLE 6.1

CANCER TOXICITY DATA -- ORAL/DERMAL

Little Valley Superfund Site

Chemical of Potential Concern	Oral Cancer Slope Factor		Oral Absorption Efficiency for Dermal	Absorbed Cancer Slope Factor for Dermal (2)		Weight of Evidence/ Cancer Guideline Description	Oral CSF	
	Value	Units	(1)	Value	Units	(3)	Source(s)	Date(s)
Benzene	5.5E-002	(mg/kg-day)-1	100%	5.5E-002	(mg/kg-day)-1	A	IRIS	04/26/2004
1,2-Dichloroethane	9.0E-002	(mg/kg-day)-1	100%	9.0E-002	(mg/kg-day)-1	B2	IRIS	04/26/2004
cis-1,2-Dichloroethylene	-	-	-	-	-	D	IRIS	04/26/2004
Methyl chloride (chloromethane)	-	-	-	-	-	D	IRIS	04/26/2004
Methylcyclohexane	-	-	-	-	-	-	-	-
Tetrachloroethylene	5.1E-002	(mg/kg-day)-1	100%	5.1E-002	(mg/kg-day)-1	-	CalEPA (6)	04/26/2004
Trichloroethylene	4.0E-001	(mg/kg-day)-1	100%	4.0E-001	(mg/kg-day)-1	B1	NCEA (5)	2001
Acenaphthylene	-	-	-	-	-	D	IRIS	04/26/2004
Benzo(a)anthracene	7.3E-001	(mg/kg-day)-1	100%	7.3E-001	(mg/kg-day)-1	B2	IRIS (4)	04/26/2004
Benzo(a)pyrene	7.3E+000	(mg/kg-day)-1	100%	7.3E+000	(mg/kg-day)-1	B2	IRIS (4)	04/26/2004
Benzo(b)fluoranthene	7.3E-001	(mg/kg-day)-1	100%	7.3E-001	(mg/kg-day)-1	B2	IRIS (4)	04/26/2004
Benzo(ghi)perylene	-	-	-	-	-	D	IRIS	04/26/2004
Benzo(k)fluoranthene	7.3E-002	(mg/kg-day)-1	100%	7.3E-002	(mg/kg-day)-1	B2	IRIS (4)	04/26/2004
Bis(2-ethylhexyl)phthalate (BEHP)	1.4E-002	(mg/kg-day)-1	100%	1.4E-002	(mg/kg-day)-1	B2	IRIS	04/26/2004
Dibenzo(a,h)anthracene	7.3E+000	(mg/kg-day)-1	100%	7.3E+000	(mg/kg-day)-1	B2	IRIS (4)	04/26/2004
Indeno(1,2,3-cd)pyrene	7.3E-001	(mg/kg-day)-1	100%	7.3E-001	(mg/kg-day)-1	B2	IRIS (4)	04/26/2004
Naphthalene	-	-	-	-	-	C	IRIS	04/26/2004
Phenanthrene	-	-	-	-	-	D	IRIS	12/01/1990
Aluminum	-	-	-	-	-	-	-	-
Antimony	-	-	-	-	-	-	-	-
Arsenic	1.5E+000	(mg/kg-day)-1	100%	1.5E+000	(mg/kg-day)-1	A	IRIS	04/26/2004
Barium	-	-	-	-	-	D	IRIS	04/26/2004
Cadmium	-	-	-	-	-	B1	IRIS	04/26/2004
Chromium (VI)	-	-	-	-	-	A	IRIS	04/26/2004
Copper	-	-	-	-	-	D	IRIS	04/26/2004
Iron	-	-	-	-	-	-	-	-
Lead	-	-	-	-	-	B2	IRIS	04/26/2004

TABLE 6.1

CANCER TOXICITY DATA -- ORAL/DERMAL

Little Valley Superfund Site

Chemical of Potential Concern	Oral Cancer Slope Factor		Oral Absorption Efficiency for Dermal (1)	Absorbed Cancer Slope Factor for Dermal (2)		Weight of Evidence/ Cancer Guideline Description (3)	Oral CSF	
	Value	Units		Value	Units		Source(s)	Date(s)
Manganese	-	-	-	-	-	D	IRIS	04/26/2004
Mercury (mercuric chloride)	-	-	-	-	-	C	IRIS	04/26/2004
Nickel	-	-	-	-	-	-	-	-
Thallium	-	-	-	-	-	-	-	-
Vanadium	-	-	-	-	-	-	-	-

Footnotes:

- = Not Applicable

IRIS = Integrated Risk Information System

NCEA = National Center for Environmental Assessment

CalEPA = California Evironmental Protection Agency

(1) EPA, 2001. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Risk Assessment). Interim. EPA/540/r/99/005. Exhibit 4-1.

(2) Absorbed Cancer Slope Factor = Oral Cancer Slope Factor / Oral Absorption Efficiency for Dermal.

(3) EPA Group:

A - Human carcinogen

B1 - Probable human carcinogen - indicates that limited human data are available

B2 - Probable human carcinogen - indicates sufficient evidence in animals and inadequate or no evidence in humans

C - Possible human carcinogen

D - Not classifiable as a human carcinogen

E - Evidence of noncarcinogenicity

NA - Weight-of-evidence classification not available

Weight of Evidence: Known/Likely

Cannot be Determined

Not Likely

(4) Most EPA regions have adopted a Toxicity Equivalency Factor (TEF) methodology for carcinogenic polycyclic aromatic hydrocarbons (PAHs). These TEFs are based on the potency of each compound relative to that of benzo(a)pyrene (BaP). The following TEFs were used to convert each PAH concentration to an equivalent concentration of BaP: (1) benzo(a)pyrene, TEF=1.0; (2) benz(a)anthracene, TEF=0.1; (3) benzo(b)fluoranthene, TEF=0.1; (4) benzo(k)fluoranthene, TEF=0.01; (5) dibenz(a,h)anthracene, TEF=1.0; (6) indeno(1,2,3-cd)pyrene, TEF=0.1.

(5) EPA, 2001. External Review Draft Trichloroethylene Health Risk Assessment: Synthesis and Characterization. Office of Research and Development, National Center for Environmental Assessment Washington Office. Upper value (most potent) of the range presented. EPA/600/P-01/002A. August.

(6) OEHHA, 2002. Technical Support Document for Describing Available Cancer Potency Factors. California EPA.

TABLE 6.2

CANCER TOXICITY DATA -- INHALATION

Little Valley Superfund Site

Chemical of Potential Concern	Unit Risk		Inhalation Cancer Slope Factor (1)		Weight of Evidence/ Cancer Guideline Description (2)	Unit Risk : Inhalation CSF	
	Value	Units	Value	Units		Source(s)	Date(s)
Benzene	7.8E-003	(mg/m^3)-1	2.7E-002	(mg/kg-day)-1	A	IRIS	04/26/2004
1,2-Dichloroethane	2.6E-002	(mg/m^3)-1	9.1E-002	(mg/kg-day)-1	B2	IRIS	04/26/2004
cis-1,2-Dichloroethylene	-	-	-	-	D	IRIS	04/26/2004
Methyl chloride (chloromethane)	-	-	-	-	D	IRIS	04/26/2004
Methylcyclohexane	-	-	-	-	-	-	-
Tetrachloroethylene	6.0E-003	(mg/m^3)-1	2.10E-002	(mg/kg-day)-1	-	CalEPA (4)	04/26/2004
Trichloroethylene	1.1E-001	(mg/m^3)-1	4.0E-001	(mg/kg-day)-1	B1	NCEA (3)	2001
Acenaphthylene	-	-	-	-	D	IRIS	04/26/2004
Benzo(a)anthracene (5)	8.9E-002	(mg/m^3)-1	3.1E-001	(mg/kg-day)-1	B2	IRIS	04/26/2004
Benzo(a)pyrene	8.9E-001	(mg/m^3)-1	3.1E+000	(mg/kg-day)-1	B2	IRIS	04/26/2004
Benzo(b)fluoranthene (5)	8.9E-002	(mg/m^3)-1	3.1E-001	(mg/kg-day)-1	B2	IRIS	04/26/2004
Benzo(ghi)perylene	-	-	-	-	D	IRIS	04/26/2004
Benzo(k)fluoranthene (5)	8.9E-003	(mg/m^3)-1	3.1E-002	(mg/kg-day)-1	B2	IRIS	04/26/2004
Bis(2-ethylhexyl)phthalate (BEHP)	-	-	-	-	B2	IRIS	04/26/2004
Dibenzo(a,h)anthracene (5)	8.9E-001	(mg/m^3)-1	3.1E+000	(mg/kg-day)-1	B2	IRIS	04/26/2004
Indeno(1,2,3-cd)pyrene (5)	8.9E-002	(mg/m^3)-1	3.1E-001	(mg/kg-day)-1	B2	IRIS	04/26/2004
Naphthalene	-	-	-	-	C	IRIS	04/26/2004
Phenanthrene	-	-	-	-	D	IRIS	12/01/1990
Aluminum	-	-	-	-	-	-	-
Antimony	-	-	-	-	-	-	-
Arsenic	4.3E+000	(mg/m^3)-1	1.5E+001	(mg/kg-day)-1	A	IRIS	04/26/2004
Barium	-	-	-	-	D	IRIS	04/26/2004
Cadmium	1.8E+000	(mg/m^3)-1	6.3E+000	(mg/kg-day)-1	B1	IRIS	04/26/2004
Chromium (VI)	1.2E-001	(mg/m^3)-1	4.2E-001	(mg/kg-day)-1	A	IRIS	04/26/2004
Copper	-	-	-	-	D	IRIS	04/26/2004
Iron	-	-	-	-	-	-	-
Lead	-	-	-	-	B2	IRIS	04/26/2004

TABLE 6.2

CANCER TOXICITY DATA -- INHALATION

Little Valley Superfund Site

Chemical of Potential Concern	Unit Risk		Inhalation Cancer Slope Factor (1)		Weight of Evidence/ Cancer Guideline Description (2)	Unit Risk : Inhalation CSF	
	Value	Units	Value	Units		Source(s)	Date(s)
Manganese	-	-	-	-	D	IRIS	04/26/2004
Mercury (mercuric chloride)	-	-	-	-	C	IRIS	04/26/2004
Nickel	-	-	-	-	-	-	-
Thallium	-	-	-	-	-	-	-
Vanadium	-	-	-	-	-	-	-

Footnotes:

- = Not Applicable

IRIS = Integrated Risk Information System

NCEA = National Center for Environmental Assessment

CalEPA = California Evironmental Protection Agency

(1) Inhalation Cancer Slope Factor = Unit Risk x 70 mg x 1/(20 m^3/day)

(2) EPA Group:

A - Human carcinogen

B1 - Probable human carcinogen - indicates that limited human data are available

B2 - Probable human carcinogen - indicates sufficient evidence in animals and inadequate or no evidence in humans

C - Possible human carcinogen

D - Not classifiable as a human carcinogen

E - Evidence of noncarcinogenicity

NA - Weight-of-evidence classification not available

Weight of Evidence: Known/Likely

Cannot be Determined

Not Likely

(3) EPA, 2001. External Review Draft Trichloroethylene Health Risk Assessment: Synthesis and Characterization. Office of Research and Development, National Center for Environmental Assessment , Washington Office. EPA/600/P-01/002A. August.

(4) OEHHA, 2002 Technical Support Document for Describing Available Cancer Potency Factors. California EPA.

(5) Most EPA regions have adopted a Toxicity Equivalency Factor (TEF) methodology for carcinogenic polycyclic aromatic hydrocarbons (PAHs). These TEFs are based on the potency of each compound relative to that of benzo(a)pyrene (BaP). The following TEFs were used to convert each PAH concentration to an equivalent concentration of BaP: (1) benzo(a)pyrene, TEF=1.0; (2) benz(a)anthracene, TEF=0.1; (3) benzo(b)fluoranthene, TEF=0.1; (4) benzo(k)fluoranthene, TEF=0.01; (5) dibenz(a,h)anthracene, TEF=1.0; (6) indeno(1,2,3-cd)pyrene, TEF=0.1.

TABLE 7.1 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	BIA Surface Soil	Incidental Ingestion	Benzo(ghi)perylene	0.06	mg/kg	1.0E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.9E-008	mg/kg-day	2.5E-002	mg/kg-day	1.2E-006
				Phenanthrene	0.065	mg/kg	1.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.2E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	2.9E-003	mg/kg-day	-	(mg/kg-day)-1	-	8.0E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	2.0E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.0E-006	5.6E-006	mg/kg-day	3.0E-004	mg/kg-day	1.9E-002
				Chromium	17.5	mg/kg	3.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	8.6E-006	mg/kg-day	3.0E-003	mg/kg-day	2.9E-003
				Iron	21,952	mg/kg	3.8E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-002	mg/kg-day	3.0E-001	mg/kg-day	3.6E-002
				Manganese	652	mg/kg	1.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	3.2E-004	mg/kg-day	4.7E-002	mg/kg-day	6.8E-003
				Thallium	17.6	mg/kg	3.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	8.6E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								3.0E-006					6.4E-002
			Dermal Absorption	Benzo(ghi)perylene	0.06	mg/kg	1.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.0E-008	mg/kg-day	2.5E-002	mg/kg-day	2.0E-006
				Phenanthrene	0.065	mg/kg	1.9E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.5E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	3.8E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	7.9E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.2E-006	2.2E-006	mg/kg-day	3.0E-004	mg/kg-day	7.4E-003
				Chromium	17.5	mg/kg	4.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	7.5E-005	mg/kg-day	1.5E-002
				Iron	21,952	mg/kg	5.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-003	mg/kg-day	3.0E-001	mg/kg-day	4.7E-003
				Manganese	652	mg/kg	1.5E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.2E-005	mg/kg-day	1.9E-003	mg/kg-day	2.2E-002
				Thallium	17.6	mg/kg	4.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.2E-006					4.9E-002
			Inhalation	Benzo(ghi)perylene	0.06	mg/kg	7.0E-010	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-009	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.065	mg/kg	7.5E-010	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-009	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	1.9E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.3E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	1.3E-007	mg/kg-day	1.5E+001	(mg/kg-day)-1	2.0E-006	3.7E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	17.5	mg/kg	2.0E-007	mg/kg-day	4.2E-001	(mg/kg-day)-1	8.5E-008	5.7E-007	mg/kg-day	2.9E-005	mg/kg-day	2.0E-002
				Iron	21,952	mg/kg	2.5E-004	mg/kg-day	-	(mg/kg-day)-1	-	7.1E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	652	mg/kg	7.6E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-005	mg/kg-day	1.4E-005	mg/kg-day	1.5E+000
				Thallium	17.6	mg/kg	2.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.7E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								2.1E-006					1.5E+000
		Exposure Point Total									6.2E-006					1.6E+000
	Exposure Medium Total										6.2E-006					1.6E+000
Medium Total											6.2E-006					1.6E+000
										Total of Receptor Risks Across All Media	6.2E-006			Total of Receptor Hazards Across All Media		1.6E+000

TABLE 7.1 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
							Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
					Value	Units	Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	BIA Surface Soil	Incidental Ingestion	Benzo(ghi)perylene	0.06	mg/kg	3.3E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-008	mg/kg-day	2.5E-002	mg/kg-day	1.0E-006
				Phenanthrene	0.065	mg/kg	3.6E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.8E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	9.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	7.0E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	6.3E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	9.4E-007	4.9E-006	mg/kg-day	3.0E-004	mg/kg-day	1.6E-002
				Chromium	17.5	mg/kg	9.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.5E-006	mg/kg-day	3.0E-003	mg/kg-day	2.5E-003
				Iron	21,952	mg/kg	1.2E-003	mg/kg-day	-	(mg/kg-day)-1	-	9.4E-003	mg/kg-day	3.0E-001	mg/kg-day	3.1E-002
				Manganese	652	mg/kg	3.6E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.8E-004	mg/kg-day	4.7E-002	mg/kg-day	5.9E-003
				Thallium	17.6	mg/kg	9.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.5E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								9.4E-007					5.6E-002
			Dermal Absorption	Benzo(ghi)perylene	0.06	mg/kg	5.7E-010	mg/kg-day	-	(mg/kg-day)-1	-	4.4E-009	mg/kg-day	2.5E-002	mg/kg-day	1.8E-007
				Phenanthrene	0.065	mg/kg	6.1E-010	mg/kg-day	-	(mg/kg-day)-1	-	4.8E-009	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	1.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	9.3E-005	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	2.5E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.7E-008	1.9E-007	mg/kg-day	3.0E-004	mg/kg-day	6.4E-004
				Chromium	17.5	mg/kg	1.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	9.9E-008	mg/kg-day	7.5E-005	mg/kg-day	1.3E-003
				Iron	21,952	mg/kg	1.6E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-004	mg/kg-day	3.0E-001	mg/kg-day	4.1E-004
				Manganese	652	mg/kg	4.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.7E-006	mg/kg-day	1.9E-003	mg/kg-day	1.9E-003
				Thallium	17.6	mg/kg	1.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								3.7E-008					4.3E-003
			Inhalation	Benzo(ghi)perylene	0.06	mg/kg	1.3E-010	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-009	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.065	mg/kg	1.4E-010	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-009	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	3.6E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.8E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	2.5E-008	mg/kg-day	1.5E+001	(mg/kg-day)-1	3.8E-007	1.9E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	17.5	mg/kg	3.8E-008	mg/kg-day	4.2E-001	(mg/kg-day)-1	1.6E-008	3.0E-007	mg/kg-day	2.9E-005	mg/kg-day	1.0E-002
				Iron	21,952	mg/kg	4.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.7E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	652	mg/kg	1.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-005	mg/kg-day	1.4E-005	mg/kg-day	7.8E-001
				Thallium	17.6	mg/kg	3.9E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								3.9E-007					7.9E-001
		Exposure Point Total									1.4E-006					8.5E-001
	Exposure Medium Total										1.4E-006					8.5E-001
Medium Total											1.4E-006					8.5E-001
										Total of Receptor Risks Across All Media	1.4E-006			Total of Receptor Hazards Across All Media		8.5E-001

TABLE 7.2 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Incidental Ingestion	Trichloroethylene	53.4	mg/kg	9.3E-006	mg/kg-day	4.00E-001	(mg/kg-day)-1	3.7E-006	2.6E-005	mg/kg-day	3.0E-004	mg/kg-day	8.7E-002
				Acenaphthylene	1.90	mg/kg	3.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	9.3E-007	mg/kg-day	2.5E-002	mg/kg-day	3.7E-005
				Benzo(a)anthracene	29	mg/kg	5.1E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	3.7E-006	1.4E-005	mg/kg-day	2.5E-002	mg/kg-day	5.7E-004
				Benzo(a)pyrene	29	mg/kg	5.1E-006	mg/kg-day	7.3E+000	(mg/kg-day)-1	3.7E-005	1.4E-005	mg/kg-day	2.5E-002	mg/kg-day	5.7E-004
				Benzo(b)fluoranthene	44	mg/kg	7.7E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	5.6E-006	2.2E-005	mg/kg-day	2.5E-002	mg/kg-day	8.6E-004
				Benzo(ghi)perylene	8.3	mg/kg	1.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.1E-006	mg/kg-day	2.5E-002	mg/kg-day	1.6E-004
				Benzo(k)fluoranthene	18	mg/kg	3.1E-006	mg/kg-day	7.3E-002	(mg/kg-day)-1	2.3E-007	8.6E-006	mg/kg-day	2.5E-002	mg/kg-day	3.5E-004
				Dibenzo(a,h)anthracene	0.94	mg/kg	1.6E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.2E-006	4.6E-007	mg/kg-day	5.0E-002	mg/kg-day	9.2E-006
				Indeno(1,2,3-cd)pyrene	10	mg/kg	1.7E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.3E-006	4.9E-006	mg/kg-day	2.5E-002	mg/kg-day	2.0E-004
				Naphthalene	8.50	mg/kg	1.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.2E-006	mg/kg-day	2.0E-002	mg/kg-day	2.1E-004
				Phenanthrene	20	mg/kg	3.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	9.8E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	1.7E-003	mg/kg-day	-	(mg/kg-day)-1	-	4.7E-003	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	6.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-005	mg/kg-day	4.0E-004	mg/kg-day	4.5E-002
				Arsenic	23.4	mg/kg	4.1E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	6.1E-006	1.1E-005	mg/kg-day	3.0E-004	mg/kg-day	3.8E-002
				Cadmium	16.3	mg/kg	2.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	8.0E-006	mg/kg-day	1.0E-003	mg/kg-day	8.0E-003
				Chromium	392	mg/kg	6.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-004	mg/kg-day	3.0E-003	mg/kg-day	6.4E-002
				Copper	1,215	mg/kg	2.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.9E-004	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	7.8E-003	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-002	mg/kg-day	3.0E-001	mg/kg-day	7.3E-002
				Lead	416	mg/kg	7.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	2.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.9E-004	mg/kg-day	4.7E-002	mg/kg-day	1.2E-002
				Mercury	2.15	mg/kg	3.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	3.0E-004	mg/kg-day	3.5E-003
				Nickel	518	mg/kg	9.1E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-004	mg/kg-day	2.0E-002	mg/kg-day	1.3E-002
				Thallium	2.36	mg/kg	4.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-006	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	6.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-005	mg/kg-day	7.0E-003	mg/kg-day	2.5E-003
			Exp. Route Total								5.9E-005					3.5E-001
			Dermal Absorption	Trichloroethylene	53.4	mg/kg	3.7E-006	mg/kg-day	4.00E-001	(mg/kg-day)-1	1.5E-006	1.0E-005	mg/kg-day	3.0E-004	mg/kg-day	3.4E-002
				Acenaphthylene	1.90	mg/kg	5.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-006	mg/kg-day	2.5E-002	mg/kg-day	6.4E-005
				Benzo(a)anthracene	29	mg/kg	8.7E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	6.3E-006	2.4E-005	mg/kg-day	2.5E-002	mg/kg-day	9.7E-004
				Benzo(a)pyrene	29	mg/kg	8.7E-006	mg/kg-day	7.3E+000	(mg/kg-day)-1	6.3E-005	2.4E-005	mg/kg-day	2.5E-002	mg/kg-day	9.7E-004
				Benzo(b)fluoranthene	44	mg/kg	1.3E-005	mg/kg-day	7.3E-001	(mg/kg-day)-1	9.6E-006	3.7E-005	mg/kg-day	2.5E-002	mg/kg-day	1.5E-003
				Benzo(ghi)perylene	8.3	mg/kg	2.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	7.0E-006	mg/kg-day	2.5E-002	mg/kg-day	2.8E-004
				Benzo(k)fluoranthene	18	mg/kg	5.4E-006	mg/kg-day	7.3E-002	(mg/kg-day)-1	3.9E-007	1.5E-005	mg/kg-day	2.5E-002	mg/kg-day	6.0E-004
				Dibenzo(a,h)anthracene	0.94	mg/kg	2.8E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.1E-006	7.9E-007	mg/kg-day	5.0E-002	mg/kg-day	1.6E-005
				Indeno(1,2,3-cd)pyrene	10	mg/kg	3.0E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.2E-006	8.4E-006	mg/kg-day	2.5E-002	mg/kg-day	3.4E-004
				Naphthalene	8.50	mg/kg	2.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	7.1E-006	mg/kg-day	2.0E-002	mg/kg-day	3.6E-004
				Phenanthrene	20	mg/kg	6.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	2.2E-004	mg/kg-day	-	(mg/kg-day)-1	-	6.2E-004	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	8.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-006	mg/kg-day	6.0E-005	mg/kg-day	4.0E-002
				Arsenic	23.4	mg/kg	1.6E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	2.4E-006	4.5E-006	mg/kg-day	3.0E-004	mg/kg-day	1.5E-002
				Cadmium	16.3	mg/kg	3.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	2.5E-005	mg/kg-day	4.2E-002
				Chromium	392	mg/kg	9.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-005	mg/kg-day	7.5E-005	mg/kg-day	3.4E-001

TABLE 7.2 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Dermal Absorption	Copper	1,215	mg/kg	2.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	7.8E-005	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	1.0E-003	mg/kg-day	-	(mg/kg-day)-1	-	2.9E-003	mg/kg-day	3.0E-001	mg/kg-day	9.6E-003
				Lead	416	mg/kg	9.6E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	2.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	7.7E-005	mg/kg-day	1.9E-003	mg/kg-day	4.1E-002
				Mercury	2.15	mg/kg	5.0E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-007	mg/kg-day	2.1E-005	mg/kg-day	6.6E-003
				Nickel	518	mg/kg	1.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.3E-005	mg/kg-day	8.0E-004	mg/kg-day	4.2E-002
				Thallium	2.36	mg/kg	5.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-007	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	8.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-006	mg/kg-day	1.8E-004	mg/kg-day	1.3E-002
			Exp. Route Total								8.6E-005					5.9E-001
			Inhalation	Trichloroethylene	53.4	mg/kg	1.5E-003	mg/kg-day	4.0E-001	(mg/kg-day)-1	6.1E-004	4.2E-003	mg/kg-day	1.0E-002	mg/kg-day	4.2E-001
				Acenaphthylene	1.90	mg/kg	8.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	29	mg/kg	5.7E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.8E-007	1.6E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	29	mg/kg	4.0E-007	mg/kg-day	3.1E+000	(mg/kg-day)-1	1.2E-006	1.1E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	44	mg/kg	1.3E-006	mg/kg-day	3.1E-001	(mg/kg-day)-1	4.1E-007	3.7E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	8.3	mg/kg	8.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(k)fluoranthene	18	mg/kg	2.2E-007	mg/kg-day	3.1E-002	(mg/kg-day)-1	6.8E-009	6.2E-007	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.94	mg/kg	1.0E-008	mg/kg-day	3.1E+000	(mg/kg-day)-1	3.1E-008	2.8E-008	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	10	mg/kg	1.1E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	3.6E-008	3.2E-007	mg/kg-day	-	mg/kg-day	-
				Naphthalene	8.50	mg/kg	1.4E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.0E-005	mg/kg-day	8.6E-004	mg/kg-day	4.7E-002
				Phenanthrene	20	mg/kg	2.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.5E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	9.4E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-004	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	3.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-006	mg/kg-day	-	mg/kg-day	-
				Arsenic	23.4	mg/kg	2.3E-007	mg/kg-day	1.5E+001	(mg/kg-day)-1	3.5E-006	6.4E-007	mg/kg-day	-	mg/kg-day	-
				Cadmium	16.3	mg/kg	1.6E-007	mg/kg-day	6.3E+000	(mg/kg-day)-1	1.0E-006	4.5E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	392	mg/kg	3.9E-006	mg/kg-day	4.2E-001	(mg/kg-day)-1	1.6E-006	1.1E-005	mg/kg-day	2.9E-005	mg/kg-day	3.8E-001
				Copper	1,215	mg/kg	1.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.3E-005	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	4.4E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-003	mg/kg-day	-	mg/kg-day	-
				Lead	416	mg/kg	4.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	1.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.3E-005	mg/kg-day	1.4E-005	mg/kg-day	2.3E+000
				Mercury	2.15	mg/kg	2.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.9E-008	mg/kg-day	-	mg/kg-day	-
				Nickel	518	mg/kg	5.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-005	mg/kg-day	-	mg/kg-day	-
				Thallium	2.36	mg/kg	2.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	6.5E-008	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	3.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	9.9E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								6.1E-004					3.2E+000
		Exposure Point Total									7.6E-004					4.1E+000
	Exposure Medium Total										7.6E-004					4.1E+000
Medium Total											7.6E-004					4.1E+000
										Total of Receptor Risks Across All Media	7.6E-004			Total of Receptor Hazards Across All Media		4.1E+000

TABLE 7.2 CT
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Incidental Ingestion	Trichloroethylene	53.4	mg/kg	2.9E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	1.2E-006	2.3E-005	mg/kg-day	3.0E-004	mg/kg-day	7.6E-002
				Acenaphthylene	1.90	mg/kg	1.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	8.1E-007	mg/kg-day	2.5E-002	mg/kg-day	3.3E-005
				Benzo(a)anthracene	29	mg/kg	1.6E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.2E-006	1.2E-005	mg/kg-day	2.5E-002	mg/kg-day	5.0E-004
				Benzo(a)pyrene	29	mg/kg	1.6E-006	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.2E-005	1.2E-005	mg/kg-day	2.5E-002	mg/kg-day	5.0E-004
				Benzo(b)fluoranthene	44	mg/kg	2.4E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.8E-006	1.9E-005	mg/kg-day	2.5E-002	mg/kg-day	7.5E-004
				Benzo(ghi)perylene	8.3	mg/kg	4.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.6E-006	mg/kg-day	2.5E-002	mg/kg-day	1.4E-004
				Benzo(k)fluoranthene	18	mg/kg	9.9E-007	mg/kg-day	7.3E-002	(mg/kg-day)-1	7.2E-008	7.7E-006	mg/kg-day	2.5E-002	mg/kg-day	3.1E-004
				Dibenzo(a,h)anthracene	0.94	mg/kg	5.2E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	3.8E-007	4.0E-007	mg/kg-day	5.0E-002	mg/kg-day	8.1E-006
				Indeno(1,2,3-cd)pyrene	10	mg/kg	5.5E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	4.0E-007	4.3E-006	mg/kg-day	2.5E-002	mg/kg-day	1.7E-004
				Naphthalene	8.50	mg/kg	4.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.6E-006	mg/kg-day	2.0E-002	mg/kg-day	1.8E-004
				Phenanthrene	20	mg/kg	1.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	8.6E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	5.3E-004	mg/kg-day	-	(mg/kg-day)-1	-	4.1E-003	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	2.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-005	mg/kg-day	4.0E-004	mg/kg-day	3.9E-002
				Arsenic	23.4	mg/kg	1.3E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.9E-006	1.0E-005	mg/kg-day	3.0E-004	mg/kg-day	3.3E-002
				Cadmium	16.3	mg/kg	9.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.0E-006	mg/kg-day	1.0E-003	mg/kg-day	7.0E-003
				Chromium	392	mg/kg	2.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-004	mg/kg-day	3.0E-003	mg/kg-day	5.6E-002
				Copper	1,215	mg/kg	6.7E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.2E-004	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	2.5E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-002	mg/kg-day	3.0E-001	mg/kg-day	6.4E-002
				Lead	416	mg/kg	2.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	6.6E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.1E-004	mg/kg-day	4.7E-002	mg/kg-day	1.1E-002
				Mercury	2.15	mg/kg	1.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	9.2E-007	mg/kg-day	3.0E-004	mg/kg-day	3.1E-003
				Nickel	518	mg/kg	2.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-004	mg/kg-day	2.00E-002	mg/kg-day	1.1E-002
				Thallium	2.36	mg/kg	1.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-006	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	2.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-005	mg/kg-day	7.0E-003	mg/kg-day	2.2E-003
			Exp. Route Total								1.9E-005					3.1E-001
			Dermal Absorption	Trichloroethylene	53.4	mg/kg	1.2E-007	mg/kg-day	4.0E-001	(mg/kg-day)-1	4.7E-008	9.1E-007	mg/kg-day	3.0E-004	mg/kg-day	3.0E-003
				Acenaphthylene	1.90	mg/kg	1.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-007	mg/kg-day	2.5E-002	mg/kg-day	5.6E-006
				Benzo(a)anthracene	29	mg/kg	2.7E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.0E-007	2.1E-006	mg/kg-day	2.5E-002	mg/kg-day	8.5E-005
				Benzo(a)pyrene	29	mg/kg	2.7E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.0E-006	2.1E-006	mg/kg-day	2.5E-002	mg/kg-day	8.5E-005
				Benzo(b)fluoranthene	44	mg/kg	4.2E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	3.0E-007	3.2E-006	mg/kg-day	2.5E-002	mg/kg-day	1.3E-004
				Benzo(ghi)perylene	8.3	mg/kg	7.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	6.1E-007	mg/kg-day	2.5E-002	mg/kg-day	2.4E-005
				Benzo(k)fluoranthene	18	mg/kg	1.7E-007	mg/kg-day	7.3E-002	(mg/kg-day)-1	1.2E-008	1.3E-006	mg/kg-day	2.5E-002	mg/kg-day	5.3E-005
				Dibenzo(a,h)anthracene	0.94	mg/kg	8.9E-009	mg/kg-day	7.3E+000	(mg/kg-day)-1	6.5E-008	6.9E-008	mg/kg-day	5.0E-002	mg/kg-day	1.4E-006
				Indeno(1,2,3-cd)pyrene	10	mg/kg	9.5E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	6.9E-008	7.4E-007	mg/kg-day	2.5E-002	mg/kg-day	2.9E-005
				Naphthalene	8.50	mg/kg	8.0E-008	mg/kg-day	-	(mg/kg-day)-1	-	6.3E-007	mg/kg-day	2.0E-002	mg/kg-day	3.1E-005
				Phenanthrene	20	mg/kg	1.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	7.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	5.4E-005	mg/kg-day	-	mg/kg-day	-

TABLE 7.2 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Dermal Absorption	Antimony	36.7	mg/kg	2.7E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-007	mg/kg-day	6.0E-005	mg/kg-day	3.5E-003
				Arsenic	23.4	mg/kg	5.1E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	7.7E-008	4.0E-007	mg/kg-day	3.0E-004	mg/kg-day	1.3E-003
				Cadmium	16.3	mg/kg	1.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	9.2E-008	mg/kg-day	2.5E-005	mg/kg-day	3.7E-003
				Chromium	392	mg/kg	2.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-006	mg/kg-day	7.5E-005	mg/kg-day	3.0E-002
				Copper	1,215	mg/kg	8.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.9E-006	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	3.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-004	mg/kg-day	3.0E-001	mg/kg-day	8.4E-004
				Lead	416	mg/kg	3.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-006	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	8.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.8E-006	mg/kg-day	1.9E-003	mg/kg-day	3.6E-003
				Mercury	2.15	mg/kg	1.6E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-008	mg/kg-day	2.1E-005	mg/kg-day	5.8E-004
				Nickel	518	mg/kg	3.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.9E-006	mg/kg-day	8.00E-004	mg/kg-day	3.7E-003
				Thallium	2.36	mg/kg	1.7E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-008	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	2.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-007	mg/kg-day	1.8E-004	mg/kg-day	1.1E-003
			Exp. Route Total								2.8E-006					5.1E-002
			Inhalation	Trichloroethylene	53.4	mg/kg	4.8E-004	mg/kg-day	4.0E-001	(mg/kg-day)-1	1.9E-004	3.7E-003	mg/kg-day	1.0E-002	mg/kg-day	3.7E-001
				Acenaphthylene	1.90	mg/kg	2.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	29	mg/kg	1.4E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	4.5E-008	1.1E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	29	mg/kg	8.9E-008	mg/kg-day	3.1E+000	(mg/kg-day)-1	2.8E-007	6.9E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	44	mg/kg	3.6E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.1E-007	2.8E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	8.3	mg/kg	1.5E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(k)fluoranthene	18	mg/kg	4.7E-008	mg/kg-day	3.1E-002	(mg/kg-day)-1	1.5E-009	3.7E-007	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.94	mg/kg	2.0E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	6.2E-009	1.6E-008	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	10	mg/kg	2.4E-008	mg/kg-day	3.1E-001	(mg/kg-day)-1	7.4E-009	1.8E-007	mg/kg-day	-	mg/kg-day	-
				Naphthalene	8.50	mg/kg	4.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.5E-005	mg/kg-day	8.6E-004	mg/kg-day	4.1E-002
				Phenanthrene	20	mg/kg	3.7E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.9E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	1.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-004	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	6.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.3E-007	mg/kg-day	-	mg/kg-day	-
				Arsenic	23.4	mg/kg	4.4E-008	mg/kg-day	1.5E+001	(mg/kg-day)-1	6.6E-007	3.4E-007	mg/kg-day	-	mg/kg-day	-
				Cadmium	16.3	mg/kg	3.0E-008	mg/kg-day	6.3E+000	(mg/kg-day)-1	1.9E-007	2.4E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	392	mg/kg	7.3E-007	mg/kg-day	4.2E-001	(mg/kg-day)-1	3.1E-007	5.7E-006	mg/kg-day	2.9E-005	mg/kg-day	2.0E-001
				Copper	1,215	mg/kg	2.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-005	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	8.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	6.5E-004	mg/kg-day	-	mg/kg-day	-
				Lead	416	mg/kg	7.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.0E-006	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	2.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-005	mg/kg-day	1.4E-005	mg/kg-day	1.2E+000
				Mercury	2.15	mg/kg	4.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.1E-008	mg/kg-day	-	mg/kg-day	-
				Nickel	518	mg/kg	9.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.5E-006	mg/kg-day	-	mg/kg-day	-
				Thallium	2.36	mg/kg	4.4E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-008	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	6.7E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.2E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.9E-004					1.8E+000
		Exposure Point Total									2.1E-004					2.2E+000
	Exposure Medium Total										2.1E-004					2.2E+000
Medium Total											2.1E-004					2.2E+000
										Total of Receptor Risks Across All Media	2.1E-004			Total of Receptor Hazards Across All Media		2.2E+000

TABLE 7.3 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Groundwater	Groundwater (Shallow Aquifer)	Process Water (Washdown Scenario)	Incidental Ingestion	Benzene	0.87	ug/l	7.6E-008	mg/kg-day	5.5E-002	(mg/kg-day)-1	4.2E-009	2.1E-007	mg/kg-day	4.0E-003	mg/kg-day	5.3E-005
				cis-1,2-Dichloroethylene	15.96	ug/l	1.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.9E-006	mg/kg-day	1.0E-002	mg/kg-day	3.9E-004
				Tetrachloroethylene	0.67	ug/l	5.9E-008	mg/kg-day	5.1E-002	(mg/kg-day)-1	3.0E-009	1.6E-007	mg/kg-day	1.0E-002	mg/kg-day	1.6E-005
				Trichloroethylene	36	ug/l	3.2E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	1.3E-006	8.9E-006	mg/kg-day	3.0E-004	mg/kg-day	3.0E-002
				Aluminum	2,982	ug/l	2.6E-004	mg/kg-day	-	(mg/kg-day)-1	-	7.3E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	6.40	ug/l	5.6E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	8.4E-007	1.6E-006	mg/kg-day	3.0E-004	mg/kg-day	5.2E-003
				Barium	251	ug/l	2.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	6.1E-005	mg/kg-day	7.0E-002	mg/kg-day	8.8E-004
				Chromium	56	ug/l	4.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-005	mg/kg-day	3.0E-003	mg/kg-day	4.6E-003
				Iron	9,146	ug/l	8.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-003	mg/kg-day	3.0E-001	mg/kg-day	7.5E-003
				Lead	4.14	ug/l	3.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-006	mg/kg-day	-	mg/kg-day	-
				Manganese	1,100	ug/l	9.6E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-004	mg/kg-day	4.7E-002	mg/kg-day	5.7E-003
				Nickel	60	ug/l	5.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-005	mg/kg-day	2.0E-002	mg/kg-day	7.3E-004
			Exp. Route Total								2.1E-006					5.5E-002
			Dermal Absorption	Benzene	0.87	ug/l	2.3E-007	mg/kg-day	5.5E-002	(mg/kg-day)-1	1.3E-008	6.5E-007	mg/kg-day	4.0E-003	mg/kg-day	1.6E-004
				cis-1,2-Dichloroethylene	15.96	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	1.0E-002	mg/kg-day	-
				Tetrachloroethylene	0.67	ug/l	6.7E-007	mg/kg-day	5.1E-002	(mg/kg-day)-1	3.4E-008	1.9E-006	mg/kg-day	1.0E-002	mg/kg-day	1.9E-004
				Trichloroethylene	36	ug/l	1.0E-005	mg/kg-day	4.0E-001	(mg/kg-day)-1	4.2E-006	2.9E-005	mg/kg-day	3.0E-004	mg/kg-day	9.8E-002
				Aluminum	2,982	ug/l	3.4E-005	mg/kg-day	-	(mg/kg-day)-1	-	9.6E-005	mg/kg-day	-	mg/kg-day	-
				Arsenic	6.40	ug/l	7.4E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.1E-007	2.1E-007	mg/kg-day	3.0E-004	mg/kg-day	6.9E-004
				Barium	251	ug/l	2.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	8.1E-006	mg/kg-day	4.9E-003	mg/kg-day	1.7E-003
				Chromium	56	ug/l	1.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.6E-006	mg/kg-day	7.5E-005	mg/kg-day	4.8E-002
				Iron	9,146	ug/l	1.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-004	mg/kg-day	3.0E-001	mg/kg-day	9.8E-004
				Lead	4.14	ug/l	4.8E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-008	mg/kg-day	-	mg/kg-day	-
				Manganese	1,100	ug/l	1.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.6E-005	mg/kg-day	1.9E-003	mg/kg-day	1.9E-002
				Nickel	60	ug/l	1.4E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.9E-007	mg/kg-day	8.0E-004	mg/kg-day	4.8E-004
			Exp. Route Total								1.4E-006					1.7E-001
			Inhalation	Benzene	0.87	ug/l	1.5E-005	mg/kg-day	2.7E-002	(mg/kg-day)-1	4.2E-007	4.3E-005	mg/kg-day	8.6E-003	mg/kg-day	5.0E-003
				cis-1,2-Dichloroethylene	15.96	ug/l	2.8E-004	mg/kg-day	-	(mg/kg-day)-1	-	7.6E-004	mg/kg-day	-	mg/kg-day	-
				Tetrachloroethylene	0.67	ug/l	1.2E-005	mg/kg-day	2.1E-002	(mg/kg-day)-1	2.5E-007	3.3E-005	mg/kg-day	-	mg/kg-day	-
				Trichloroethylene	36	ug/l	6.3E-004	mg/kg-day	4.0E-001	(mg/kg-day)-1	2.5E-004	1.8E-003	mg/kg-day	1.00E-002	mg/kg-day	1.8E-001
				Aluminum	2,982	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Arsenic	6.40	ug/l	-	mg/kg-day	1.5E+001	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Barium	251	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Chromium	56	ug/l	-	mg/kg-day	4.2E-001	(mg/kg-day)-1	-	-	mg/kg-day	2.9E-005	mg/kg-day	-

TABLE 7.3 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Groundwater	Groundwater (Shallow Aquifer)	Process Water (Washdown Scenario)	Inhalation	Iron	9,146	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Lead	4.14	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Manganese	1,100	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	1.4E-005	mg/kg-day	-
				Nickel	60	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								2.5E-004					1.6E-001
		Exposure Point Total									2.6E-004					4.1E-001
	Exposure Medium Total										2.6E-004					4.1E-001
Medium Total											2.6E-004					4.1E-001
										Total of Receptor Risks Across All Media	2.6E-004			Total of Receptor Hazards Across All Media		4.1E-001

TABLE 7.3 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Groundwater	Groundwater (Shallow Aquifer)	Process Water (Washdown Scenario)	Incidental Ingestion	Benzene	0.87	ug/l	2.4E-008	mg/kg-day	5.5E-002	(mg/kg-day)-1	1.3E-009	1.9E-007	mg/kg-day	4.0E-003	mg/kg-day	4.7E-005
				cis-1,2-Dichloroethylene	15.96	ug/l	4.4E-007	mg/kg-day	-		-	3.4E-006	mg/kg-day	1.0E-002	mg/kg-day	3.4E-004
				Tetrachloroethylene	0.67	ug/l	1.8E-008	mg/kg-day	5.1E-002	(mg/kg-day)-1	9.4E-010	1.4E-007	mg/kg-day	1.0E-002	mg/kg-day	1.4E-005
				Trichloroethylene	36	ug/l	1.0E-006	mg/kg-day	4.00E-001	(mg/kg-day)-1	4.0E-007	7.8E-006	mg/kg-day	3.0E-004	mg/kg-day	2.6E-002
				Aluminum	2,982	ug/l	8.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	6.4E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	6.40	ug/l	1.8E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	2.6E-007	1.4E-006	mg/kg-day	3.0E-004	mg/kg-day	4.6E-003
				Barium	251	ug/l	6.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	5.4E-005	mg/kg-day	7.0E-002	mg/kg-day	7.7E-004
				Chromium	56	ug/l	1.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-005	mg/kg-day	3.0E-003	mg/kg-day	4.0E-003
				Iron	9,146	ug/l	2.5E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-003	mg/kg-day	3.0E-001	mg/kg-day	6.5E-003
				Lead	4.14	ug/l	1.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	8.9E-007	mg/kg-day	-	mg/kg-day	-
				Manganese	1,100	ug/l	3.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-004	mg/kg-day	4.7E-002	mg/kg-day	5.0E-003
				Nickel	60	ug/l	1.6E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	2.0E-002	mg/kg-day	6.4E-004
			Exp. Route Total								6.7E-007					4.8E-002
			Dermal Absorption	Benzene	0.87	ug/l	7.3E-008	mg/kg-day	5.5E-002	(mg/kg-day)-1	4.0E-009	5.7E-007	mg/kg-day	4.0E-003	mg/kg-day	1.4E-004
				cis-1,2-Dichloroethylene	15.96	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	1.0E-002	mg/kg-day	-
				Tetrachloroethylene	0.67	ug/l	2.1E-007	mg/kg-day	5.1E-002	(mg/kg-day)-1	1.1E-008	1.6E-006	mg/kg-day	1.0E-002	mg/kg-day	1.6E-004
				Trichloroethylene	36	ug/l	3.3E-006	mg/kg-day	4.00E-001	(mg/kg-day)-1	1.3E-006	2.6E-005	mg/kg-day	3.0E-004	mg/kg-day	8.6E-002
				Aluminum	2,982	ug/l	1.1E-005	mg/kg-day	-	(mg/kg-day)-1	-	8.4E-005	mg/kg-day	-	mg/kg-day	-
				Arsenic	6.40	ug/l	2.3E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.5E-008	1.8E-007	mg/kg-day	3.0E-004	mg/kg-day	6.0E-004
				Barium	251	ug/l	9.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.1E-006	mg/kg-day	4.9E-003	mg/kg-day	1.4E-003
				Chromium	56	ug/l	4.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.2E-006	mg/kg-day	7.5E-005	mg/kg-day	4.2E-002
				Iron	9,146	ug/l	3.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-004	mg/kg-day	3.0E-001	mg/kg-day	8.6E-004
				Lead	4.14	ug/l	1.5E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-008	mg/kg-day	-	mg/kg-day	-
				Manganese	1,100	ug/l	4.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.1E-005	mg/kg-day	1.9E-003	mg/kg-day	1.6E-002
				Nickel	60	ug/l	4.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-007	mg/kg-day	8.0E-004	mg/kg-day	4.2E-004
			Exp. Route Total								1.4E-006					1.5E-001
			Inhalation	Benzene	0.87	ug/l	2.9E-006	mg/kg-day	2.7E-002	(mg/kg-day)-1	7.9E-008	2.2E-005	mg/kg-day	8.6E-003	mg/kg-day	2.6E-003
				cis-1,2-Dichloroethylene	15.96	ug/l	5.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.1E-004	mg/kg-day	-	mg/kg-day	-
				Tetrachloroethylene	0.67	ug/l	2.2E-006	mg/kg-day	2.10E-002	(mg/kg-day)-1	4.7E-008	1.7E-005	mg/kg-day	-	mg/kg-day	-
				Trichloroethylene	36	ug/l	1.2E-004	mg/kg-day	4.00E-001	(mg/kg-day)-1	4.8E-005	9.3E-004	mg/kg-day	1.00E-002	mg/kg-day	9.3E-002
				Aluminum	2,982	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Arsenic	6.40	ug/l	-	mg/kg-day	1.5E+001	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Barium	251	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Chromium	56	ug/l	-	mg/kg-day	4.2E-001	(mg/kg-day)-1	-	-	mg/kg-day	2.9E-005	mg/kg-day	-
				Iron	9,146	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Lead	4.14	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Manganese	1,100	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	1.4E-005	mg/kg-day	-
				Nickel	60	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								4.8E-005					9.6E-002
		Exposure Point Total									5.0E-005					2.9E-001
	Exposure Medium Total										5.0E-005					2.9E-001
Medium Total											5.0E-005					2.9E-001
										Total of Receptor Risks Across All Media	5.0E-005				Total of Receptor Hazards Across All Media	2.9E-001

TABLE 7.4 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Groundwater	Groundwater (Shallow Aquifer)	Process Water (Car Wash Scenario)	Incidental Ingestion	Benzene	0.87	ug/l	6.1E-007	mg/kg-day	5.5E-002	(mg/kg-day)-1	3.4E-008	1.7E-006	mg/kg-day	4.0E-003	mg/kg-day	4.3E-004
				cis-1,2-Dichloroethylene	15.96	ug/l	1.1E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.1E-005	mg/kg-day	1.0E-002	mg/kg-day	3.1E-003
				Tetrachloroethylene	0.67	ug/l	4.7E-007	mg/kg-day	5.1E-002	(mg/kg-day)-1	2.4E-008	1.3E-006	mg/kg-day	1.0E-002	mg/kg-day	1.3E-004
				Trichloroethylene	36	ug/l	2.5E-005	mg/kg-day	4.0E-001	(mg/kg-day)-1	1.0E-005	7.1E-005	mg/kg-day	3.0E-004	mg/kg-day	2.4E-001
				Aluminum	2,982	ug/l	2.1E-003	mg/kg-day	-	(mg/kg-day)-1	-	5.8E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	6.40	ug/l	4.5E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	6.7E-006	1.3E-005	mg/kg-day	3.0E-004	mg/kg-day	4.2E-002
				Barium	251	ug/l	1.8E-004	mg/kg-day	-	(mg/kg-day)-1	-	4.9E-004	mg/kg-day	7.0E-002	mg/kg-day	7.0E-003
				Chromium	56	ug/l	3.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-004	mg/kg-day	3.0E-003	mg/kg-day	3.7E-002
				Iron	9,146	ug/l	6.4E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-002	mg/kg-day	3.0E-001	mg/kg-day	6.0E-002
				Lead	4.14	ug/l	2.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	8.1E-006	mg/kg-day	-	mg/kg-day	-
				Manganese	1,100	ug/l	7.7E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-003	mg/kg-day	4.7E-002	mg/kg-day	4.6E-002
				Nickel	60	ug/l	4.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-004	mg/kg-day	2.0E-002	mg/kg-day	5.8E-003
			Exp. Route Total								1.7E-005					4.4E-001
			Dermal Absorption	Benzene	0.87	ug/l	2.4E-006	mg/kg-day	5.5E-002	(mg/kg-day)-1	1.3E-007	6.6E-006	mg/kg-day	4.0E-003	mg/kg-day	1.7E-003
				cis-1,2-Dichloroethylene	15.96	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	1.0E-002	mg/kg-day	-
				Tetrachloroethylene	0.67	ug/l	4.9E-006	mg/kg-day	5.1E-002	(mg/kg-day)-1	2.5E-007	1.4E-005	mg/kg-day	1.0E-002	mg/kg-day	1.4E-003
				Trichloroethylene	36	ug/l	9.0E-005	mg/kg-day	4.0E-001	(mg/kg-day)-1	3.6E-005	2.5E-004	mg/kg-day	3.0E-004	mg/kg-day	8.4E-001
				Aluminum	2,982	ug/l	5.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	6.40	ug/l	1.1E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.6E-006	3.0E-006	mg/kg-day	3.0E-004	mg/kg-day	1.0E-002
				Barium	251	ug/l	4.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-004	mg/kg-day	4.9E-003	mg/kg-day	2.4E-002
				Chromium	56	ug/l	1.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.3E-005	mg/kg-day	7.5E-005	mg/kg-day	7.1E-001
				Iron	9,146	ug/l	1.6E-003	mg/kg-day	-	(mg/kg-day)-1	-	4.3E-003	mg/kg-day	3.0E-001	mg/kg-day	1.4E-002
				Lead	4.14	ug/l	7.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-007	mg/kg-day	-	mg/kg-day	-
				Manganese	1,100	ug/l	1.9E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.2E-004	mg/kg-day	1.9E-003	mg/kg-day	2.8E-001
				Nickel	60	ug/l	2.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	5.7E-006	mg/kg-day	8.0E-004	mg/kg-day	7.1E-003
			Exp. Route Total								3.8E-005					1.9E+000
			Inhalation	Benzene	0.87	ug/l	1.5E-004	mg/kg-day	2.7E-002	(mg/kg-day)-1	4.0E-006	4.1E-004	mg/kg-day	8.6E-003	mg/kg-day	4.8E-002
				cis-1,2-Dichloroethylene	15.96	ug/l	2.7E-003	mg/kg-day	-	(mg/kg-day)-1	-	7.5E-003	mg/kg-day	-	mg/kg-day	-
				Tetrachloroethylene	0.67	ug/l	1.1E-004	mg/kg-day	2.1E-002	(mg/kg-day)-1	2.4E-006	3.1E-004	mg/kg-day	-	mg/kg-day	-
				Trichloroethylene	36	ug/l	6.0E-003	mg/kg-day	4.0E-001	(mg/kg-day)-1	2.4E-003	1.7E-002	mg/kg-day	1.0E-002	mg/kg-day	1.7E+000
				Aluminum	2,982	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Arsenic	6.40	ug/l	-	mg/kg-day	1.5E+001	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Barium	251	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Chromium	56	ug/l	-	mg/kg-day	4.2E-001	(mg/kg-day)-1	-	-	mg/kg-day	2.9E-005	mg/kg-day	-

TABLE 7.4 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Groundwater	Groundwater (Shallow Aquifer)	Process Water (Car Wash Scenario)	Inhalation	Iron	9,146	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Lead	4.14	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Manganese	1,100	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	1.4E-005	mg/kg-day	-
				Nickel	60	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								2.4E-003					1.7E+000
		Exposure Point Total									2.5E-003					4.1E+000
	Exposure Medium Total										2.5E-003					4.1E+000
Medium Total											2.5E-003					4.1E+000
										Total of Receptor Risks Across All Media	2.5E-003				Total of Receptor Hazards Across All Media	4.1E+000

TABLE 7.4 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Groundwater	Groundwater	Process Water	Incidental Ingestion	Benzene	0.87	ug/l	1.9E-007	mg/kg-day	5.5E-002	(mg/kg-day)-1	1.1E-008	1.5E-006	mg/kg-day	4.0E-003	mg/kg-day	3.7E-004
	(Shallow Aquifer)	(Car Wash Scenario)		cis-1,2-Dichloroethylene	15.96	ug/l	3.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-005	mg/kg-day	1.0E-002	mg/kg-day	2.7E-003
				Tetrachloroethylene	0.67	ug/l	1.5E-007	mg/kg-day	5.4E-001	(mg/kg-day)-1	8.0E-008	1.1E-006	mg/kg-day	1.0E-002	mg/kg-day	1.1E-004
				Trichloroethylene	36	ug/l	8.0E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	3.2E-006	6.2E-005	mg/kg-day	3.0E-004	mg/kg-day	2.1E-001
				Aluminum	2,982	ug/l	6.6E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.1E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	6.40	ug/l	1.4E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	2.1E-006	1.1E-005	mg/kg-day	3.0E-004	mg/kg-day	3.7E-002
				Barium	251	ug/l	5.5E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.3E-004	mg/kg-day	7.0E-002	mg/kg-day	6.1E-003
				Chromium	56	ug/l	1.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	9.6E-005	mg/kg-day	3.0E-003	mg/kg-day	3.2E-002
				Iron	9,146	ug/l	2.0E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-002	mg/kg-day	3.0E-001	mg/kg-day	5.2E-002
				Lead	4.14	ug/l	9.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.1E-006	mg/kg-day	-	mg/kg-day	-
				Manganese	1,100	ug/l	2.4E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-003	mg/kg-day	4.7E-002	mg/kg-day	4.0E-002
				Nickel	60	ug/l	1.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-004	mg/kg-day	2.0E-002	mg/kg-day	5.1E-003
			Exp. Route Total								5.4E-006					3.8E-001
			Dermal Absorption	Benzene	0.87	ug/l	7.5E-007	mg/kg-day	5.5E-002	(mg/kg-day)-1	4.1E-008	5.8E-006	mg/kg-day	4.0E-003	mg/kg-day	1.5E-003
				cis-1,2-Dichloroethylene	15.96	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	1.0E-002	mg/kg-day	-
				Tetrachloroethylene	0.67	ug/l	1.6E-006	mg/kg-day	5.4E-001	(mg/kg-day)-1	8.4E-007	1.2E-005	mg/kg-day	1.0E-002	mg/kg-day	1.2E-003
				Trichloroethylene	36	ug/l	2.8E-005	mg/kg-day	4.0E-001	(mg/kg-day)-1	1.1E-005	2.2E-004	mg/kg-day	3.0E-004	mg/kg-day	7.4E-001
				Aluminum	2,982	ug/l	1.6E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	6.40	ug/l	3.4E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	5.1E-007	2.7E-006	mg/kg-day	3.0E-004	mg/kg-day	8.9E-003
				Barium	251	ug/l	1.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-004	mg/kg-day	4.9E-003	mg/kg-day	2.1E-002
				Chromium	56	ug/l	6.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.7E-005	mg/kg-day	7.5E-005	mg/kg-day	6.2E-001
				Iron	9,146	ug/l	4.9E-004	mg/kg-day	-	(mg/kg-day)-1	-	3.8E-003	mg/kg-day	3.0E-001	mg/kg-day	1.3E-002
				Lead	4.14	ug/l	2.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-007	mg/kg-day	-	mg/kg-day	-
				Manganese	1,100	ug/l	5.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.6E-004	mg/kg-day	1.9E-003	mg/kg-day	2.4E-001
				Nickel	60	ug/l	6.4E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.0E-006	mg/kg-day	8.0E-004	mg/kg-day	6.2E-003
			Exp. Route Total								1.3E-005					1.7E+000
			Inhalation	Benzene	0.87	ug/l	2.8E-005	mg/kg-day	2.7E-002	(mg/kg-day)-1	7.5E-007	2.1E-004	mg/kg-day	8.6E-003	mg/kg-day	2.5E-002
				cis-1,2-Dichloroethylene	15.96	ug/l	5.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	3.9E-003	mg/kg-day	-	mg/kg-day	-
				Tetrachloroethylene	0.67	ug/l	2.1E-005	mg/kg-day	2.1E-002	(mg/kg-day)-1	4.5E-007	1.7E-004	mg/kg-day	-	mg/kg-day	-
				Trichloroethylene	36	ug/l	1.1E-003	mg/kg-day	4.0E-001	(mg/kg-day)-1	4.6E-004	8.9E-003	mg/kg-day	1.00E-002	mg/kg-day	8.9E-001
				Aluminum	2,982	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Arsenic	6.40	ug/l	-	mg/kg-day	1.5E+001	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Barium	251	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Chromium	56	ug/l	-	mg/kg-day	4.2E-001	(mg/kg-day)-1	-	-	mg/kg-day	2.9E-005	mg/kg-day	-
				Iron	9,146	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Lead	4.14	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
				Manganese	1,100	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	1.4E-005	mg/kg-day	-
				Nickel	60	ug/l	-	mg/kg-day	-	(mg/kg-day)-1	-	-	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								4.6E-004					9.1E-001
		Exposure Point Total									4.8E-004					2.9E+000
	Exposure Medium Total										4.8E-004					2.9E+000
Medium Total											4.8E-004					2.9E+000
										Total of Receptor Risks Across All Media	4.8E-004				Total of Receptor Hazards Across All Media	2.9E+000

TABLE 7.5 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	RRAA Surface Soil	Incidental Ingestion	Acenaphthylene	0.27	mg/kg	1.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.9E-007	mg/kg-day	2.5E-002	mg/kg-day	1.2E-005
				Benzo(a)anthracene	0.80	mg/kg	3.7E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.7E-007	8.7E-007	mg/kg-day	2.5E-002	mg/kg-day	3.5E-005
				Benzo(a)pyrene	0.84	mg/kg	3.9E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.9E-006	9.2E-007	mg/kg-day	2.5E-002	mg/kg-day	3.7E-005
				Benzo(b)fluoranthene	0.87	mg/kg	4.1E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	3.0E-007	9.5E-007	mg/kg-day	2.5E-002	mg/kg-day	3.8E-005
				Benzo(ghi)perylene	0.53	mg/kg	2.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.9E-007	mg/kg-day	2.5E-002	mg/kg-day	2.3E-005
				Dibenzo(a,h)anthracene	0.26	mg/kg	1.2E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	8.9E-007	2.9E-007	mg/kg-day	5.0E-002	mg/kg-day	5.7E-006
				Indeno(1,2,3-cd)pyrene	0.65	mg/kg	3.0E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.2E-007	7.1E-007	mg/kg-day	2.5E-002	mg/kg-day	2.8E-005
				Phenanthrene	0.89	mg/kg	4.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	9.8E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	6.0E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-002	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	5.6E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	8.4E-006	1.3E-005	mg/kg-day	3.0E-004	mg/kg-day	4.4E-002
				Chromium	15.1	mg/kg	7.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-005	mg/kg-day	3.00E-003	mg/kg-day	5.5E-003
				Iron	23,516	mg/kg	1.1E-002	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-002	mg/kg-day	3.0E-001	mg/kg-day	8.6E-002
				Manganese	967	mg/kg	4.5E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-003	mg/kg-day	4.7E-002	mg/kg-day	2.3E-002
				Thallium	1.00	mg/kg	4.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.3E-005					1.6E-001
			Dermal Absorption	Acenaphthylene	0.27	mg/kg	6.5E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-007	mg/kg-day	2.5E-002	mg/kg-day	6.1E-006
				Benzo(a)anthracene	0.80	mg/kg	1.9E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.4E-007	4.5E-007	mg/kg-day	2.5E-002	mg/kg-day	1.8E-005
				Benzo(a)pyrene	0.84	mg/kg	2.0E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.5E-006	4.8E-007	mg/kg-day	2.5E-002	mg/kg-day	1.9E-005
				Benzo(b)fluoranthene	0.87	mg/kg	2.1E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.5E-007	4.9E-007	mg/kg-day	2.5E-002	mg/kg-day	2.0E-005
				Benzo(ghi)perylene	0.53	mg/kg	1.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-007	mg/kg-day	2.5E-002	mg/kg-day	1.2E-005
				Dibenzo(a,h)anthracene	0.26	mg/kg	6.3E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	4.6E-007	1.5E-007	mg/kg-day	5.0E-002	mg/kg-day	3.0E-006
				Indeno(1,2,3-cd)pyrene	0.65	mg/kg	1.6E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.2E-007	3.7E-007	mg/kg-day	2.5E-002	mg/kg-day	1.5E-005
				Phenanthrene	0.89	mg/kg	2.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.1E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	2.4E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.5E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	6.7E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.0E-006	1.6E-006	mg/kg-day	3.0E-004	mg/kg-day	5.2E-003
				Chromium	15.1	mg/kg	2.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.6E-007	mg/kg-day	7.5E-005	mg/kg-day	8.8E-003
				Iron	23,516	mg/kg	4.4E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-003	mg/kg-day	3.0E-001	mg/kg-day	3.4E-003
				Manganese	967	mg/kg	1.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.2E-005	mg/kg-day	1.9E-003	mg/kg-day	2.2E-002
				Thallium	1.00	mg/kg	1.9E-008	mg/kg-day	-	(mg/kg-day)-1	-	4.4E-008	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								3.4E-006					4.0E-002
			Inhalation	Acenaphthylene	0.27	mg/kg	1.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	0.80	mg/kg	1.2E-008	mg/kg-day	3.1E-001	(mg/kg-day)-1	3.6E-009	2.7E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	0.84	mg/kg	7.3E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	2.3E-008	1.7E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	0.87	mg/kg	2.1E-008	mg/kg-day	3.1E-001	(mg/kg-day)-1	6.5E-009	4.9E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	0.53	mg/kg	2.7E-009	mg/kg-day	-	(mg/kg-day)-1	-	6.3E-009	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.26	mg/kg	1.5E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	4.8E-009	3.6E-009	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	0.65	mg/kg	4.3E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.3E-009	1.0E-008	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.89	mg/kg	4.5E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	6.4E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	6.1E-008	mg/kg-day	1.5E+001	(mg/kg-day)-1	9.1E-007	1.4E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	15.1	mg/kg	7.7E-008	mg/kg-day	4.2E-001	(mg/kg-day)-1	3.2E-008	1.8E-007	mg/kg-day	2.9E-005	mg/kg-day	6.2E-003

TABLE 7.5 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	RRAA Surface Soil	Inhalation	Iron	23,516	mg/kg	1.2E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.8E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	967	mg/kg	4.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-005	mg/kg-day	1.4E-005	mg/kg-day	8.0E-001
				Thallium	1.00	mg/kg	5.1E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-008	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								9.8E-007					8.1E-001
		Exposure Point Total									1.7E-005					1.0E+000
	Exposure Medium Total										1.7E-005					1.0E+000
Medium Total											1.7E-005					1.0E+000
											Total of Receptor Risks Across All Media (1) 5.4E-005					Total of Receptor Hazards Across All Media 1.0E+000

Footnote:

(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

TABLE 7.5 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	RRAA Surface Soil	Incidental Ingestion	Acenaphthylene	0.27	mg/kg	4.7E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.7E-007	mg/kg-day	2.5E-002	mg/kg-day	1.5E-005
				Benzo(a)anthracene	0.80	mg/kg	1.4E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.0E-007	1.1E-006	mg/kg-day	2.5E-002	mg/kg-day	4.4E-005
				Benzo(a)pyrene	0.84	mg/kg	1.5E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.1E-006	1.1E-006	mg/kg-day	2.5E-002	mg/kg-day	4.6E-005
				Benzo(b)fluoranthene	0.87	mg/kg	1.5E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.1E-007	1.2E-006	mg/kg-day	2.5E-002	mg/kg-day	4.8E-005
				Benzo(ghi)perylene	0.53	mg/kg	9.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	7.3E-007	mg/kg-day	2.5E-002	mg/kg-day	2.9E-005
				Dibenzo(a,h)anthracene	0.26	mg/kg	4.6E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	3.3E-007	3.6E-007	mg/kg-day	5.0E-002	mg/kg-day	7.1E-006
				Indeno(1,2,3-cd)pyrene	0.65	mg/kg	1.1E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	8.3E-008	8.9E-007	mg/kg-day	2.5E-002	mg/kg-day	3.6E-005
				Phenanthrene	0.89	mg/kg	1.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	2.2E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-002	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	2.1E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.1E-006	1.6E-005	mg/kg-day	3.0E-004	mg/kg-day	5.4E-002
				Chromium	15.1	mg/kg	2.7E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-005	mg/kg-day	3.00E-003	mg/kg-day	6.9E-003
				Iron	23,516	mg/kg	4.1E-003	mg/kg-day	-	(mg/kg-day)-1	-	3.2E-002	mg/kg-day	3.0E-001	mg/kg-day	1.1E-001
				Manganese	967	mg/kg	1.7E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-003	mg/kg-day	4.7E-002	mg/kg-day	2.8E-002
				Thallium	1.00	mg/kg	1.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								4.9E-006					2.0E-001
			Dermal Absorption	Acenaphthylene	0.27	mg/kg	3.5E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-008	mg/kg-day	2.5E-002	mg/kg-day	1.1E-006
				Benzo(a)anthracene	0.80	mg/kg	1.0E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	7.6E-009	8.1E-008	mg/kg-day	2.5E-002	mg/kg-day	3.2E-006
				Benzo(a)pyrene	0.84	mg/kg	1.1E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	8.0E-008	8.5E-008	mg/kg-day	2.5E-002	mg/kg-day	3.4E-006
				Benzo(b)fluoranthene	0.87	mg/kg	1.1E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	8.3E-009	8.8E-008	mg/kg-day	2.5E-002	mg/kg-day	3.5E-006
				Benzo(ghi)perylene	0.53	mg/kg	7.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	5.4E-008	mg/kg-day	2.5E-002	mg/kg-day	2.2E-006
				Dibenzo(a,h)anthracene	0.26	mg/kg	3.4E-009	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.5E-008	2.6E-008	mg/kg-day	5.0E-002	mg/kg-day	5.3E-007
				Indeno(1,2,3-cd)pyrene	0.65	mg/kg	8.5E-009	mg/kg-day	7.3E-001	(mg/kg-day)-1	6.2E-009	6.6E-008	mg/kg-day	2.5E-002	mg/kg-day	2.6E-006
				Phenanthrene	0.89	mg/kg	1.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	9.0E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	1.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	9.9E-005	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	3.6E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	5.4E-008	2.8E-007	mg/kg-day	3.0E-004	mg/kg-day	9.3E-004
				Chromium	15.1	mg/kg	1.5E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-007	mg/kg-day	7.5E-005	mg/kg-day	1.6E-003
				Iron	23,516	mg/kg	2.4E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-004	mg/kg-day	3.0E-001	mg/kg-day	6.1E-004
				Manganese	967	mg/kg	9.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.6E-006	mg/kg-day	1.9E-003	mg/kg-day	4.0E-003
				Thallium	1.00	mg/kg	1.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	7.8E-009	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.8E-007					7.1E-003
			Inhalation	Acenaphthylene	0.27	mg/kg	4.9E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.8E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	0.80	mg/kg	4.4E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.4E-009	3.4E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	0.84	mg/kg	2.5E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	7.6E-009	1.9E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	0.87	mg/kg	8.7E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	2.7E-009	6.8E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	0.53	mg/kg	6.6E-010	mg/kg-day	-	(mg/kg-day)-1	-	5.3E-009	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.26	mg/kg	4.3E-010	mg/kg-day	3.1E+000	(mg/kg-day)-1	1.3E-009	3.4E-009	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	0.65	mg/kg	1.3E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	4.0E-010	1.0E-008	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.89	mg/kg	1.1E-009	mg/kg-day	-	(mg/kg-day)-1	-	8.8E-009	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	1.6E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	1.5E-008	mg/kg-day	1.5E+001	(mg/kg-day)-1	2.3E-007	1.2E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	15.1	mg/kg	1.9E-008	mg/kg-day	4.2E-001	(mg/kg-day)-1	8.1E-009	1.5E-007	mg/kg-day	2.9E-005	mg/kg-day	5.2E-003

TABLE 7.5 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	RRAA Surface Soil	Inhalation	Iron	23,516	mg/kg	3.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	967	mg/kg	1.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	9.6E-006	mg/kg-day	1.4E-005	mg/kg-day	6.7E-001
				Thallium	1.00	mg/kg	1.3E-009	mg/kg-day	-	(mg/kg-day)-1	-	9.9E-009	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								2.5E-007					6.7E-001
		Exposure Point Total									5.3E-006					8.8E-001
	Exposure Medium Total										5.3E-006					8.8E-001
Medium Total											5.3E-006					8.8E-001
										Total of Receptor Risks Across All Media (1)	3.7E-005				Total of Receptor Hazards Across All Media	8.8E-001

Footnote:

(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

TABLE 7.6 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	RRAA Surface Soil	Incidental Ingestion	Acenaphthylene	0.27	mg/kg	2.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-006	mg/kg-day	2.5E-002	mg/kg-day	1.4E-004
				Benzo(a)anthracene	0.80	mg/kg	8.7E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	6.4E-007	1.0E-005	mg/kg-day	2.5E-002	mg/kg-day	4.1E-004
				Benzo(a)pyrene	0.84	mg/kg	9.2E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	6.7E-006	1.1E-005	mg/kg-day	2.5E-002	mg/kg-day	4.3E-004
				Benzo(b)fluoranthene	0.87	mg/kg	9.5E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	7.0E-007	1.1E-005	mg/kg-day	2.5E-002	mg/kg-day	4.4E-004
				Benzo(ghi)perylene	0.53	mg/kg	5.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.8E-006	mg/kg-day	2.5E-002	mg/kg-day	2.7E-004
				Dibenzo(a,h)anthracene	0.26	mg/kg	2.9E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.1E-006	3.3E-006	mg/kg-day	5.0E-002	mg/kg-day	6.7E-005
				Indeno(1,2,3-cd)pyrene	0.65	mg/kg	7.1E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	5.2E-007	8.3E-006	mg/kg-day	2.5E-002	mg/kg-day	3.3E-004
				Phenanthrene	0.89	mg/kg	9.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	1.4E-002	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-001	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	1.3E-005	mg/kg-day	1.5E+000	(mg/kg-day)-1	2.0E-005	1.5E-004	mg/kg-day	3.0E-004	mg/kg-day	5.1E-001
				Chromium	15.1	mg/kg	1.7E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-004	mg/kg-day	3.00E-003	mg/kg-day	6.4E-002
				Iron	23,516	mg/kg	2.6E-002	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-001	mg/kg-day	3.0E-001	mg/kg-day	1.0E+000
				Manganese	967	mg/kg	1.1E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-002	mg/kg-day	4.7E-002	mg/kg-day	2.6E-001
				Thallium	1.00	mg/kg	1.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								3.0E-005					1.6E+000
			Dermal Absorption	Acenaphthylene	0.27	mg/kg	1.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-006	mg/kg-day	2.5E-002	mg/kg-day	5.0E-005
				Benzo(a)anthracene	0.80	mg/kg	3.2E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.3E-007	3.7E-006	mg/kg-day	2.5E-002	mg/kg-day	1.5E-004
				Benzo(a)pyrene	0.84	mg/kg	3.3E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.4E-006	3.9E-006	mg/kg-day	2.5E-002	mg/kg-day	1.6E-004
				Benzo(b)fluoranthene	0.87	mg/kg	3.5E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.5E-007	4.0E-006	mg/kg-day	2.5E-002	mg/kg-day	1.6E-004
				Benzo(ghi)perylene	0.53	mg/kg	2.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-006	mg/kg-day	2.5E-002	mg/kg-day	1.0E-004
				Dibenzo(a,h)anthracene	0.26	mg/kg	1.0E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	7.6E-007	1.2E-006	mg/kg-day	5.0E-002	mg/kg-day	2.4E-005
				Indeno(1,2,3-cd)pyrene	0.65	mg/kg	2.6E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.9E-007	3.0E-006	mg/kg-day	2.5E-002	mg/kg-day	1.2E-004
				Phenanthrene	0.89	mg/kg	3.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	4.1E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	3.9E-004	mg/kg-day	-	(mg/kg-day)-1	-	4.5E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	1.1E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.6E-006	1.3E-005	mg/kg-day	3.0E-004	mg/kg-day	4.3E-002
				Chromium	15.1	mg/kg	4.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.4E-006	mg/kg-day	7.5E-005	mg/kg-day	7.2E-002
				Iron	23,516	mg/kg	7.2E-004	mg/kg-day	-	(mg/kg-day)-1	-	8.4E-003	mg/kg-day	3.0E-001	mg/kg-day	2.8E-002
				Manganese	967	mg/kg	3.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.5E-004	mg/kg-day	1.9E-003	mg/kg-day	1.8E-001
				Thallium	1.00	mg/kg	3.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.6E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								5.5E-006					3.3E-001
			Inhalation	Acenaphthylene	0.27	mg/kg	1.4E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	0.80	mg/kg	1.2E-008	mg/kg-day	3.1E-001	(mg/kg-day)-1	3.8E-009	1.4E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	0.84	mg/kg	6.5E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	2.0E-008	7.6E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	0.87	mg/kg	2.5E-008	mg/kg-day	3.1E-001	(mg/kg-day)-1	7.6E-009	2.9E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	0.53	mg/kg	1.6E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-008	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.26	mg/kg	1.1E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	3.3E-009	1.3E-008	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	0.65	mg/kg	3.3E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.0E-009	3.8E-008	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.89	mg/kg	2.7E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.1E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	3.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.4E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	3.6E-008	mg/kg-day	1.5E+001	(mg/kg-day)-1	5.4E-007	4.2E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	15.1	mg/kg	4.5E-008	mg/kg-day	4.2E-001	(mg/kg-day)-1	1.9E-008	5.3E-007	mg/kg-day	2.9E-005	mg/kg-day	1.8E-002

TABLE 7.6 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	RRAA Surface Soil	Inhalation	Iron	23,516	mg/kg	7.1E-005	mg/kg-day	-	(mg/kg-day)-1	-	8.2E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	967	mg/kg	2.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-005	mg/kg-day	1.4E-005	mg/kg-day	2.4E+000
				Thallium	1.00	mg/kg	3.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.5E-008	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								5.9E-007					2.4E+000
		Exposure Point Total									3.6E-005					4.6E+000
	Exposure Medium Total										3.6E-005					4.6E+000
Medium Total											3.6E-005					4.6E+000
										Total of Receptor Risks Across All Media	3.6E-005				Total of Receptor Hazards Across All Media	4.6E+000

TABLE 7.6 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	RRAA Surface Soil	Incidental Ingestion	Acenaphthylene	0.27	mg/kg	2.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-006	mg/kg-day	2.5E-002	mg/kg-day	1.4E-004
				Benzo(a)anthracene	0.80	mg/kg	8.7E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	6.4E-007	1.0E-005	mg/kg-day	2.5E-002	mg/kg-day	4.1E-004
				Benzo(a)pyrene	0.84	mg/kg	9.2E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	6.7E-006	1.1E-005	mg/kg-day	2.5E-002	mg/kg-day	4.3E-004
				Benzo(b)fluoranthene	0.87	mg/kg	9.5E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	7.0E-007	1.1E-005	mg/kg-day	2.5E-002	mg/kg-day	4.4E-004
				Benzo(ghi)perylene	0.53	mg/kg	5.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.8E-006	mg/kg-day	2.5E-002	mg/kg-day	2.7E-004
				Dibenzo(a,h)anthracene	0.26	mg/kg	2.9E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.1E-006	3.3E-006	mg/kg-day	5.0E-002	mg/kg-day	6.7E-005
				Indeno(1,2,3-cd)pyrene	0.65	mg/kg	7.1E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	5.2E-007	8.3E-006	mg/kg-day	2.5E-002	mg/kg-day	3.3E-004
				Phenanthrene	0.89	mg/kg	9.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	1.4E-002	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-001	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	1.3E-005	mg/kg-day	1.5E+000	(mg/kg-day)-1	2.0E-005	1.5E-004	mg/kg-day	3.0E-004	mg/kg-day	5.1E-001
				Chromium	15.1	mg/kg	1.7E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-004	mg/kg-day	3.00E-003	mg/kg-day	6.4E-002
				Iron	23,516	mg/kg	2.6E-002	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-001	mg/kg-day	3.0E-001	mg/kg-day	1.0E+000
				Manganese	967	mg/kg	1.1E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-002	mg/kg-day	4.7E-002	mg/kg-day	2.6E-001
				Thallium	1.00	mg/kg	1.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								3.0E-005					1.6E+000
			Dermal Absorption	Acenaphthylene	0.27	mg/kg	2.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-007	mg/kg-day	2.5E-002	mg/kg-day	1.0E-005
				Benzo(a)anthracene	0.80	mg/kg	6.4E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	4.6E-008	7.4E-007	mg/kg-day	2.5E-002	mg/kg-day	3.0E-005
				Benzo(a)pyrene	0.84	mg/kg	6.7E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	4.9E-007	7.8E-007	mg/kg-day	2.5E-002	mg/kg-day	3.1E-005
				Benzo(b)fluoranthene	0.87	mg/kg	6.9E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	5.1E-008	8.1E-007	mg/kg-day	2.5E-002	mg/kg-day	3.2E-005
				Benzo(ghi)perylene	0.53	mg/kg	4.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.0E-007	mg/kg-day	2.5E-002	mg/kg-day	2.0E-005
				Dibenzo(a,h)anthracene	0.26	mg/kg	2.1E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.5E-007	2.4E-007	mg/kg-day	5.0E-002	mg/kg-day	4.8E-006
				Indeno(1,2,3-cd)pyrene	0.65	mg/kg	5.2E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	3.8E-008	6.0E-007	mg/kg-day	2.5E-002	mg/kg-day	2.4E-005
				Phenanthrene	0.89	mg/kg	7.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.3E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	7.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	9.1E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	2.2E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.3E-007	2.6E-006	mg/kg-day	3.0E-004	mg/kg-day	8.5E-003
				Chromium	15.1	mg/kg	9.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	7.5E-005	mg/kg-day	1.4E-002
				Iron	23,516	mg/kg	1.4E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-003	mg/kg-day	3.0E-001	mg/kg-day	5.6E-003
				Manganese	967	mg/kg	5.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	6.9E-005	mg/kg-day	1.9E-003	mg/kg-day	3.6E-002
				Thallium	1.00	mg/kg	6.1E-009	mg/kg-day	-	(mg/kg-day)-1	-	7.2E-008	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.1E-006					6.5E-002
			Inhalation	Acenaphthylene	0.27	mg/kg	9.5E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	0.80	mg/kg	8.2E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	2.5E-009	9.6E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	0.84	mg/kg	4.4E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	1.4E-008	5.1E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	0.87	mg/kg	1.6E-008	mg/kg-day	3.1E-001	(mg/kg-day)-1	5.1E-009	1.9E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	0.53	mg/kg	1.1E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-008	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.26	mg/kg	7.2E-010	mg/kg-day	3.1E+000	(mg/kg-day)-1	2.2E-009	8.3E-009	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	0.65	mg/kg	2.2E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	6.8E-010	2.5E-008	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.89	mg/kg	1.8E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	2.5E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	2.4E-008	mg/kg-day	1.5E+001	(mg/kg-day)-1	3.6E-007	2.8E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	15.1	mg/kg	3.0E-008	mg/kg-day	4.2E-001	(mg/kg-day)-1	1.3E-008	3.5E-007	mg/kg-day	2.9E-005	mg/kg-day	1.2E-002

TABLE 7.6 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	RRAA Surface Soil	Inhalation	Iron	23,516	mg/kg	4.7E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.5E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	967	mg/kg	1.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-005	mg/kg-day	1.4E-005	mg/kg-day	1.6E+000
				Thallium	1.00	mg/kg	2.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-008	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								4.0E-007					1.6E+000
		Exposure Point Total									3.2E-005					3.5E+000
	Exposure Medium Total										3.2E-005					3.5E+000
Medium Total											3.2E-005					3.5E+000
										Total of Receptor Risks Across All Media	3.2E-005				Total of Receptor Hazards Across All Media	3.5E+000

TABLE 7.7 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	BIA Surface Soil	Incidental Ingestion	Benzo(ghi)perylene	0.06	mg/kg	2.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	6.6E-008	mg/kg-day	2.5E-002	mg/kg-day	2.6E-006
				Phenanthrene	0.065	mg/kg	3.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	7.1E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	7.7E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-002	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	5.4E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	8.0E-006	1.2E-005	mg/kg-day	3.0E-004	mg/kg-day	4.2E-002
				Chromium	17.5	mg/kg	8.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-005	mg/kg-day	3.00E-003	mg/kg-day	6.4E-003
				Iron	21,952	mg/kg	1.0E-002	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-002	mg/kg-day	3.0E-001	mg/kg-day	8.0E-002
				Manganese	652	mg/kg	3.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	7.1E-004	mg/kg-day	4.7E-002	mg/kg-day	1.5E-002
				Thallium	17.6	mg/kg	8.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-005	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								8.0E-006					1.4E-001
			Dermal Absorption	Benzo(ghi)perylene	0.06	mg/kg	1.5E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-008	mg/kg-day	2.5E-002	mg/kg-day	1.4E-006
				Phenanthrene	0.065	mg/kg	1.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.7E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	3.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	7.2E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	6.4E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	9.6E-007	1.5E-006	mg/kg-day	3.0E-004	mg/kg-day	5.0E-003
				Chromium	17.5	mg/kg	3.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.7E-007	mg/kg-day	7.5E-005	mg/kg-day	1.0E-002
				Iron	21,952	mg/kg	4.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	9.6E-004	mg/kg-day	3.0E-001	mg/kg-day	3.2E-003
				Manganese	652	mg/kg	1.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.8E-005	mg/kg-day	1.9E-003	mg/kg-day	1.5E-002
				Thallium	17.6	mg/kg	3.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.7E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								9.6E-007					3.3E-002
			Inhalation	Benzo(ghi)perylene	0.06	mg/kg	9.3E-010	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-009	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.065	mg/kg	1.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-009	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	2.6E-004	mg/kg-day	-	(mg/kg-day)-1	-	6.0E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	1.8E-007	mg/kg-day	1.5E+001	(mg/kg-day)-1	2.7E-006	4.1E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	17.5	mg/kg	2.7E-007	mg/kg-day	4.2E-001	(mg/kg-day)-1	1.1E-007	6.3E-007	mg/kg-day	2.9E-005	mg/kg-day	2.2E-002
				Iron	21,952	mg/kg	3.4E-004	mg/kg-day	-	(mg/kg-day)-1	-	8.0E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	652	mg/kg	1.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-005	mg/kg-day	1.4E-005	mg/kg-day	1.7E+000
				Thallium	17.6	mg/kg	2.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.4E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								2.8E-006					1.7E+000
		Exposure Point Total									1.2E-005					1.9E+000
	Exposure Medium Total										1.2E-005					1.9E+000
Medium Total											1.2E-005					1.9E+000
											Total of Receptor Risks Across All Media (1)	3.4E-005		Total of Receptor Hazards Across All Media		1.9E+000

Footnote:

(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

TABLE 7.7 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	BIA Surface Soil	Incidental Ingestion	Benzo(ghi)perylene	0.06	mg/kg	1.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.2E-008	mg/kg-day	2.5E-002	mg/kg-day	3.3E-006
				Phenanthrene	0.065	mg/kg	1.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.9E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	2.9E-003	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-002	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	2.0E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.0E-006	1.6E-005	mg/kg-day	3.0E-004	mg/kg-day	5.2E-002
				Chromium	17.5	mg/kg	3.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-005	mg/kg-day	3.00E-003	mg/kg-day	8.0E-003
				Iron	21,952	mg/kg	3.9E-003	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-002	mg/kg-day	3.0E-001	mg/kg-day	1.0E-001
				Manganese	652	mg/kg	1.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	8.9E-004	mg/kg-day	4.7E-002	mg/kg-day	1.9E-002
				Thallium	17.6	mg/kg	3.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-005	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								3.0E-006					1.8E-001
			Dermal Absorption	Benzo(ghi)perylene	0.06	mg/kg	7.8E-010	mg/kg-day	-	(mg/kg-day)-1	-	6.1E-009	mg/kg-day	2.5E-002	mg/kg-day	2.4E-007
				Phenanthrene	0.065	mg/kg	8.5E-010	mg/kg-day	-	(mg/kg-day)-1	-	6.6E-009	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	1.7E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	3.4E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	5.2E-008	2.7E-007	mg/kg-day	3.0E-004	mg/kg-day	8.9E-004
				Chromium	17.5	mg/kg	1.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-007	mg/kg-day	7.5E-005	mg/kg-day	1.8E-003
				Iron	21,952	mg/kg	2.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-004	mg/kg-day	3.0E-001	mg/kg-day	5.7E-004
				Manganese	652	mg/kg	6.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.1E-006	mg/kg-day	1.9E-003	mg/kg-day	2.7E-003
				Thallium	17.6	mg/kg	1.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								5.2E-008					6.0E-003
			Inhalation	Benzo(ghi)perylene	0.06	mg/kg	2.3E-010	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-009	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.065	mg/kg	2.5E-010	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-009	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	6.4E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.0E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	4.4E-008	mg/kg-day	1.5E+001	(mg/kg-day)-1	6.7E-007	3.4E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	17.5	mg/kg	6.8E-008	mg/kg-day	4.2E-001	(mg/kg-day)-1	2.9E-008	5.3E-007	mg/kg-day	2.9E-005	mg/kg-day	1.8E-002
				Iron	21,952	mg/kg	8.5E-005	mg/kg-day	-	(mg/kg-day)-1	-	6.6E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	652	mg/kg	2.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-005	mg/kg-day	1.4E-005	mg/kg-day	1.4E+000
				Thallium	17.6	mg/kg	6.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.3E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								6.9E-007					1.4E+000
		Exposure Point Total									3.8E-006					1.6E+000
	Exposure Medium Total										3.8E-006					1.6E+000
Medium Total											3.8E-006					1.6E+000
											Total of Receptor Risks Across All Media (1)	2.4E-005		Total of Receptor Hazards Across All Media		1.6E+000

Footnote:

(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

TABLE 7.8 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Incidental Ingestion	Trichloroethylene	53.4	mg/kg	2.5E-005	mg/kg-day	4.0E-001	(mg/kg-day)-1	1.0E-005	5.8E-005	mg/kg-day	3.0E-004	mg/kg-day	1.9E-001
				Acenaphthylene	1.90	mg/kg	8.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-006	mg/kg-day	2.5E-002	mg/kg-day	8.3E-005
				Benzo(a)anthracene	29	mg/kg	1.4E-005	mg/kg-day	7.3E-001	(mg/kg-day)-1	9.9E-006	3.2E-005	mg/kg-day	2.5E-002	mg/kg-day	1.3E-003
				Benzo(a)pyrene	29	mg/kg	1.4E-005	mg/kg-day	7.3E+000	(mg/kg-day)-1	9.9E-005	3.2E-005	mg/kg-day	2.5E-002	mg/kg-day	1.3E-003
				Benzo(b)fluoranthene	44	mg/kg	2.1E-005	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.5E-005	4.8E-005	mg/kg-day	2.5E-002	mg/kg-day	1.9E-003
				Benzo(ghi)perylene	8.3	mg/kg	3.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	9.1E-006	mg/kg-day	2.5E-002	mg/kg-day	3.6E-004
				Benzo(k)fluoranthene	18	mg/kg	8.5E-006	mg/kg-day	7.3E-002	(mg/kg-day)-1	6.2E-007	2.0E-005	mg/kg-day	2.5E-002	mg/kg-day	7.9E-004
				Dibenzo(a,h)anthracene	0.94	mg/kg	4.4E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	3.2E-006	1.0E-006	mg/kg-day	5.0E-002	mg/kg-day	2.1E-005
				Indeno(1,2,3-cd)pyrene	10	mg/kg	4.7E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	3.4E-006	1.1E-005	mg/kg-day	2.5E-002	mg/kg-day	4.4E-004
				Naphthalene	8.50	mg/kg	4.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	9.3E-006	mg/kg-day	2.0E-002	mg/kg-day	4.7E-004
				Phenanthrene	20	mg/kg	9.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	4.5E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-002	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	1.7E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.0E-005	mg/kg-day	4.0E-004	mg/kg-day	1.0E-001
				Arsenic	23.4	mg/kg	1.1E-005	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.7E-005	2.6E-005	mg/kg-day	3.0E-004	mg/kg-day	8.6E-002
				Cadmium	16.3	mg/kg	7.7E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-005	mg/kg-day	1.0E-003	mg/kg-day	1.8E-002
				Chromium	392	mg/kg	1.8E-004	mg/kg-day	-	(mg/kg-day)-1	-	4.3E-004	mg/kg-day	3.0E-003	mg/kg-day	1.4E-001
				Copper	1,215	mg/kg	5.7E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-003	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	2.1E-002	mg/kg-day	-	(mg/kg-day)-1	-	4.9E-002	mg/kg-day	3.0E-001	mg/kg-day	1.6E-001
				Lead	416	mg/kg	2.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	4.6E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	5.6E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-003	mg/kg-day	4.7E-002	mg/kg-day	2.8E-002
				Mercury	2.15	mg/kg	1.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-006	mg/kg-day	3.0E-004	mg/kg-day	7.9E-003
				Nickel	518	mg/kg	2.4E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.7E-004	mg/kg-day	2.0E-002	mg/kg-day	2.8E-002
				Thallium	2.36	mg/kg	1.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-006	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	1.7E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.0E-005	mg/kg-day	7.0E-003	mg/kg-day	5.7E-003
			Exp. Route Total								1.6E-004					7.8E-001
			Dermal Absorption	Trichloroethylene	53.4	mg/kg	3.0E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	1.2E-006	7.0E-006	mg/kg-day	3.0E-004	mg/kg-day	2.3E-002
				Acenaphthylene	1.90	mg/kg	4.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	2.5E-002	mg/kg-day	4.3E-005
				Benzo(a)anthracene	29	mg/kg	7.1E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	5.2E-006	1.6E-005	mg/kg-day	2.5E-002	mg/kg-day	6.6E-004
				Benzo(a)pyrene	29	mg/kg	7.1E-006	mg/kg-day	7.3E+000	(mg/kg-day)-1	5.2E-005	1.6E-005	mg/kg-day	2.5E-002	mg/kg-day	6.6E-004
				Benzo(b)fluoranthene	44	mg/kg	1.1E-005	mg/kg-day	7.3E-001	(mg/kg-day)-1	7.8E-006	2.5E-005	mg/kg-day	2.5E-002	mg/kg-day	1.0E-003
				Benzo(ghi)perylene	8.3	mg/kg	2.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.7E-006	mg/kg-day	2.5E-002	mg/kg-day	1.9E-004
				Benzo(k)fluoranthene	18	mg/kg	4.4E-006	mg/kg-day	7.3E-002	(mg/kg-day)-1	3.2E-007	1.0E-005	mg/kg-day	2.5E-002	mg/kg-day	4.1E-004
				Dibenzo(a,h)anthracene	0.94	mg/kg	2.3E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.7E-006	5.3E-007	mg/kg-day	5.0E-002	mg/kg-day	1.1E-005
				Indeno(1,2,3-cd)pyrene	10	mg/kg	2.4E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.8E-006	5.7E-006	mg/kg-day	2.5E-002	mg/kg-day	2.3E-004
				Naphthalene	8.50	mg/kg	2.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.8E-006	mg/kg-day	2.0E-002	mg/kg-day	2.4E-004
				Phenanthrene	20	mg/kg	4.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	1.8E-004	mg/kg-day	-	(mg/kg-day)-1	-	4.2E-004	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	6.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-006	mg/kg-day	6.0E-005	mg/kg-day	2.7E-002
				Arsenic	23.4	mg/kg	1.3E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	2.0E-006	3.1E-006	mg/kg-day	3.0E-004	mg/kg-day	1.0E-002
				Cadmium	16.3	mg/kg	3.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.1E-007	mg/kg-day	2.5E-005	mg/kg-day	2.9E-002
				Chromium	392	mg/kg	7.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-005	mg/kg-day	7.5E-005	mg/kg-day	2.3E-001
				Copper	1,215	mg/kg	2.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.3E-005	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	8.4E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-003	mg/kg-day	3.0E-001	mg/kg-day	6.5E-003

TABLE 7.8 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Dermal Absorption	Lead	416	mg/kg	7.8E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	2.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.2E-005	mg/kg-day	1.9E-003	mg/kg-day	2.8E-002
				Mercury	2.15	mg/kg	4.0E-008	mg/kg-day	-	(mg/kg-day)-1	-	9.4E-008	mg/kg-day	2.1E-005	mg/kg-day	4.5E-003
				Nickel	518	mg/kg	9.7E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-005	mg/kg-day	8.0E-004	mg/kg-day	2.8E-002
				Thallium	2.36	mg/kg	4.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-007	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	6.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-006	mg/kg-day	1.8E-004	mg/kg-day	8.7E-003
			Exp. Route Total								7.2E-005					4.0E-001
			Inhalation	Trichloroethylene	53.4	mg/kg	1.9E-003	mg/kg-day	4.0E-001	(mg/kg-day)-1	7.4E-004	4.3E-003	mg/kg-day	1.0E-002	mg/kg-day	4.3E-001
				Acenaphthylene	1.90	mg/kg	1.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	29	mg/kg	7.3E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	2.3E-007	1.7E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	29	mg/kg	5.2E-007	mg/kg-day	3.1E+000	(mg/kg-day)-1	1.6E-006	1.2E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	44	mg/kg	1.7E-006	mg/kg-day	3.1E-001	(mg/kg-day)-1	5.2E-007	3.9E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	8.3	mg/kg	1.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(k)fluoranthene	18	mg/kg	2.9E-007	mg/kg-day	3.1E-002	(mg/kg-day)-1	8.9E-009	6.7E-007	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.94	mg/kg	1.3E-008	mg/kg-day	3.1E+000	(mg/kg-day)-1	4.2E-008	3.1E-008	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	10	mg/kg	1.6E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	5.0E-008	3.7E-007	mg/kg-day	-	mg/kg-day	-
				Naphthalene	8.50	mg/kg	1.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.1E-005	mg/kg-day	6.6E-004	mg/kg-day	4.6E-002
				Phenanthrene	20	mg/kg	2.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.1E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	1.3E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.9E-004	mg/kg-day	-	mg/kg-day	-
				Antimony	35.7	mg/kg	4.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	-	mg/kg-day	-
				Arsenic	23.4	mg/kg	3.1E-007	mg/kg-day	1.5E+001	(mg/kg-day)-1	4.6E-006	7.2E-007	mg/kg-day	-	mg/kg-day	-
				Cadmium	16.3	mg/kg	2.1E-007	mg/kg-day	6.3E+000	(mg/kg-day)-1	1.4E-006	5.0E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	392	mg/kg	5.2E-006	mg/kg-day	4.2E-001	(mg/kg-day)-1	2.2E-006	1.2E-005	mg/kg-day	2.9E-005	mg/kg-day	4.2E-001
				Copper	1,215	mg/kg	1.6E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.7E-005	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	5.9E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-003	mg/kg-day	-	mg/kg-day	-
				Lead	416	mg/kg	5.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	1.6E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.7E-005	mg/kg-day	1.4E-005	mg/kg-day	2.6E+000
				Mercury	2.15	mg/kg	2.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	6.6E-008	mg/kg-day	-	mg/kg-day	-
				Nickel	518	mg/kg	6.8E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-005	mg/kg-day	-	mg/kg-day	-
				Thallium	2.36	mg/kg	3.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	7.2E-006	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	4.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								7.5E-004					3.5E+000
		Exposure Point Total									9.8E-004					4.7E+000
	Exposure Medium Total										9.8E-004					4.7E+000
Medium Total											9.8E-004					4.7E+000
											Total of Receptor Risks Across All Media (1) 2.5E-003					Total of Receptor Hazards Across All Media 4.7E+000

Footnote:

(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

TABLE 7.8 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Incidental Ingestion	Trichloroethylene	53.4	mg/kg	9.4E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	3.8E-006	7.3E-005	mg/kg-day	3.0E-004	mg/kg-day	2.4E-001
				Acenaphthylene	1.90	mg/kg	3.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-006	mg/kg-day	2.5E-002	mg/kg-day	1.0E-004
				Benzo(a)anthracene	29	mg/kg	5.1E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	3.7E-006	4.0E-005	mg/kg-day	2.5E-002	mg/kg-day	1.6E-003
				Benzo(a)pyrene	29	mg/kg	5.1E-006	mg/kg-day	7.3E+000	(mg/kg-day)-1	3.7E-005	4.0E-005	mg/kg-day	2.5E-002	mg/kg-day	1.6E-003
				Benzo(b)fluoranthene	44	mg/kg	7.7E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	5.7E-006	6.0E-005	mg/kg-day	2.5E-002	mg/kg-day	2.4E-003
				Benzo(ghi)perylene	8.3	mg/kg	1.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-005	mg/kg-day	2.5E-002	mg/kg-day	4.5E-004
				Benzo(k)fluoranthene	18	mg/kg	3.2E-006	mg/kg-day	7.3E-002	(mg/kg-day)-1	2.3E-007	2.5E-005	mg/kg-day	2.5E-002	mg/kg-day	9.9E-004
				Dibenzo(a,h)anthracene	0.94	mg/kg	1.7E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.2E-006	1.3E-006	mg/kg-day	5.0E-002	mg/kg-day	2.6E-005
				Indeno(1,2,3-cd)pyrene	10	mg/kg	1.8E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.3E-006	1.4E-005	mg/kg-day	2.5E-002	mg/kg-day	5.5E-004
				Naphthalene	8.50	mg/kg	1.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-005	mg/kg-day	2.0E-002	mg/kg-day	5.8E-004
				Phenanthrene	20	mg/kg	3.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	1.7E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-002	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	6.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	5.0E-005	mg/kg-day	4.0E-004	mg/kg-day	1.3E-001
				Arsenic	23.4	mg/kg	4.1E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	6.2E-006	3.2E-005	mg/kg-day	3.0E-004	mg/kg-day	1.1E-001
				Cadmium	16.3	mg/kg	2.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-005	mg/kg-day	1.0E-003	mg/kg-day	2.2E-002
				Chromium	392	mg/kg	6.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.4E-004	mg/kg-day	3.0E-003	mg/kg-day	1.8E-001
				Copper	1,215	mg/kg	2.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-003	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	7.9E-003	mg/kg-day	-	(mg/kg-day)-1	-	6.1E-002	mg/kg-day	3.0E-001	mg/kg-day	2.0E-001
				Lead	416	mg/kg	7.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.7E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	2.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-003	mg/kg-day	4.7E-002	mg/kg-day	3.5E-002
				Mercury	2.15	mg/kg	3.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.9E-006	mg/kg-day	3.0E-004	mg/kg-day	9.8E-003
				Nickel	518	mg/kg	9.1E-005	mg/kg-day	-	(mg/kg-day)-1	-	7.1E-004	mg/kg-day	2.0E-002	mg/kg-day	3.5E-002
				Thallium	2.38	mg/kg	4.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.2E-006	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	6.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.9E-005	mg/kg-day	7.0E-003	mg/kg-day	7.1E-003
			Exp. Route Total								5.9E-005					9.8E-001
			Dermal Absorption	Trichloroethylene	53.4	mg/kg	1.6E-007	mg/kg-day	4.0E-001	(mg/kg-day)-1	6.4E-008	1.2E-006	mg/kg-day	3.0E-004	mg/kg-day	4.2E-003
				Acenaphthylene	1.90	mg/kg	2.5E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-007	mg/kg-day	2.5E-002	mg/kg-day	7.7E-006
				Benzo(a)anthracene	29	mg/kg	3.8E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.8E-007	2.9E-006	mg/kg-day	2.5E-002	mg/kg-day	1.2E-004
				Benzo(a)pyrene	29	mg/kg	3.8E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.8E-006	2.9E-006	mg/kg-day	2.5E-002	mg/kg-day	1.2E-004
				Benzo(b)fluoranthene	44	mg/kg	5.7E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	4.2E-007	4.5E-006	mg/kg-day	2.5E-002	mg/kg-day	1.8E-004
				Benzo(ghi)perylene	8.3	mg/kg	1.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	8.4E-007	mg/kg-day	2.5E-002	mg/kg-day	3.4E-005
				Benzo(k)fluoranthene	18	mg/kg	2.3E-007	mg/kg-day	7.3E-002	(mg/kg-day)-1	1.7E-008	1.8E-006	mg/kg-day	2.5E-002	mg/kg-day	7.3E-005
				Dibenzo(a,h)anthracene	0.94	mg/kg	1.2E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	9.0E-008	9.5E-008	mg/kg-day	5.0E-002	mg/kg-day	1.9E-006
				Indeno(1,2,3-cd)pyrene	10	mg/kg	1.3E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	9.5E-008	1.0E-006	mg/kg-day	2.5E-002	mg/kg-day	4.1E-005
				Naphthalene	8.50	mg/kg	1.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	8.6E-007	mg/kg-day	2.0E-002	mg/kg-day	4.3E-005
				Phenanthrene	20	mg/kg	2.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	9.6E-006	mg/kg-day	-	(mg/kg-day)-1	-	7.5E-005	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	3.7E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.9E-007	mg/kg-day	6.0E-005	mg/kg-day	4.8E-003
				Arsenic	23.4	mg/kg	7.1E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.1E-007	5.5E-007	mg/kg-day	3.0E-004	mg/kg-day	1.8E-003
				Cadmium	16.3	mg/kg	1.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-007	mg/kg-day	2.5E-005	mg/kg-day	5.1E-003
				Chromium	392	mg/kg	3.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.1E-006	mg/kg-day	7.5E-005	mg/kg-day	4.1E-002
				Copper	1,215	mg/kg	1.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	9.5E-006	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	4.5E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.5E-004	mg/kg-day	3.0E-001	mg/kg-day	1.2E-003

TABLE 7.8 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Dermal Absorption	Lead	416	mg/kg	4.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.2E-006	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	1.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	9.4E-006	mg/kg-day	1.9E-003	mg/kg-day	4.9E-003
				Mercury	2.15	mg/kg	2.2E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-008	mg/kg-day	2.1E-005	mg/kg-day	8.0E-004
				Nickel	518	mg/kg	5.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	4.0E-006	mg/kg-day	8.0E-004	mg/kg-day	5.1E-003
				Thallium	2.36	mg/kg	2.4E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-008	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	3.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.8E-007	mg/kg-day	1.8E-004	mg/kg-day	1.5E-003
			Exp. Route Total								3.8E-006					7.1E-002
			Inhalation	Trichloroethylene	53.4	mg/kg	8.4E-004	mg/kg-day	4.0E-001	(mg/kg-day)-1	3.4E-004	6.6E-003	mg/kg-day	1.00E-002	mg/kg-day	6.6E-001
				Acenaphthylene	1.90	mg/kg	4.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.5E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	29	mg/kg	2.6E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	7.9E-008	2.0E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	29	mg/kg	1.6E-007	mg/kg-day	3.1E+000	(mg/kg-day)-1	4.9E-007	1.2E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	44	mg/kg	6.4E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	2.0E-007	5.0E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	8.3	mg/kg	2.7E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(k)fluoranthene	18	mg/kg	8.2E-008	mg/kg-day	3.1E-002	(mg/kg-day)-1	2.6E-009	6.4E-007	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.94	mg/kg	3.6E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	1.1E-008	2.8E-008	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	10	mg/kg	4.6E-008	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.4E-008	3.6E-007	mg/kg-day	-	mg/kg-day	-
				Naphthalene	8.50	mg/kg	8.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	6.2E-005	mg/kg-day	8.6E-004	mg/kg-day	7.2E-002
				Phenanthrene	20	mg/kg	6.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.1E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	3.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-004	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	1.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	9.4E-007	mg/kg-day	-	mg/kg-day	-
				Arsenic	23.4	mg/kg	7.7E-008	mg/kg-day	1.5E+001	(mg/kg-day)-1	1.2E-006	6.0E-007	mg/kg-day	-	mg/kg-day	-
				Cadmium	16.3	mg/kg	5.4E-008	mg/kg-day	6.3E+000	(mg/kg-day)-1	3.4E-007	4.2E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	392	mg/kg	1.3E-006	mg/kg-day	4.2E-001	(mg/kg-day)-1	5.4E-007	1.0E-005	mg/kg-day	2.9E-005	mg/kg-day	3.5E-001
				Copper	1,215	mg/kg	4.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.1E-005	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	1.5E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-003	mg/kg-day	-	mg/kg-day	-
				Lead	416	mg/kg	1.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	3.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.1E-005	mg/kg-day	1.4E-005	mg/kg-day	2.1E+000
				Mercury	2.15	mg/kg	7.1E-009	mg/kg-day	-	(mg/kg-day)-1	-	5.5E-008	mg/kg-day	-	mg/kg-day	-
				Nickel	518	mg/kg	1.7E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	-	mg/kg-day	-
				Thallium	2.36	mg/kg	7.8E-009	mg/kg-day	-	(mg/kg-day)-1	-	6.0E-008	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	1.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	9.2E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								3.4E-004					3.2E+000
		Exposure Point Total									4.0E-004					4.3E+000
	Exposure Medium Total										4.0E-004					4.3E+000
Medium Total											4.0E-004					4.3E+000
										Total of Receptor Risks Across All Media	1.5E-003			Total of Receptor Hazards Across All Media		4.3E+000

Footnote:

(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

TABLE 7.9 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	SIA Surface Soil	Incidental Ingestion	Benzo(ghi)perylene	0.06	mg/kg	6.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	7.7E-007	mg/kg-day	2.5E-002	mg/kg-day	3.1E-005
				Phenanthrene	0.065	mg/kg	7.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.3E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	1.8E-002	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-001	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	1.2E-005	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.9E-005	1.5E-004	mg/kg-day	3.0E-004	mg/kg-day	4.9E-001
				Chromium	17.5	mg/kg	1.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-004	mg/kg-day	3.00E-003	mg/kg-day	7.5E-002
				Iron	21,952	mg/kg	2.4E-002	mg/kg-day	-	(mg/kg-day)-1	-	2.8E-001	mg/kg-day	3.0E-001	mg/kg-day	9.4E-001
				Manganese	652	mg/kg	7.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	8.3E-003	mg/kg-day	4.7E-002	mg/kg-day	1.8E-001
				Thallium	17.6	mg/kg	1.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-004	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.9E-005					1.7E+000
			Dermal Absorption	Benzo(ghi)perylene	0.06	mg/kg	2.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.8E-007	mg/kg-day	2.5E-002	mg/kg-day	1.1E-005
				Phenanthrene	0.065	mg/kg	2.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	5.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.9E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	1.0E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.6E-006	1.2E-005	mg/kg-day	3.0E-004	mg/kg-day	4.1E-002
				Chromium	17.5	mg/kg	5.4E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.3E-006	mg/kg-day	7.5E-005	mg/kg-day	8.4E-002
				Iron	21,952	mg/kg	6.7E-004	mg/kg-day	-	(mg/kg-day)-1	-	7.9E-003	mg/kg-day	3.0E-001	mg/kg-day	2.6E-002
				Manganese	652	mg/kg	2.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-004	mg/kg-day	1.9E-003	mg/kg-day	1.2E-001
				Thallium	17.6	mg/kg	5.4E-007	mg/kg-day	-	(mg/kg-day)-1		6.3E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.6E-006					2.7E-001
			Inhalation	Benzo(ghi)perylene	0.06	mg/kg	5.5E-010	mg/kg-day	-	(mg/kg-day)-1	-	6.4E-009	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.065	mg/kg	6.0E-010	mg/kg-day	-	(mg/kg-day)-1	-	7.0E-009	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	1.5E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	1.0E-007	mg/kg-day	1.5E+001	(mg/kg-day)-1	1.6E-006	1.2E-006	mg/kg-day	-	mg/kg-day	-
				Chromium	17.5	mg/kg	1.6E-007	mg/kg-day	4.2E-001	(mg/kg-day)-1	6.7E-008	1.9E-006	mg/kg-day	2.9E-005	mg/kg-day	6.5E-002
				Iron	21,952	mg/kg	2.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-003	mg/kg-day	-	mg/kg-day	-
				Manganese	652	mg/kg	6.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	7.0E-005	mg/kg-day	1.4E-005	mg/kg-day	4.9E+000
				Thallium	17.6	mg/kg	1.6E-007	mg/kg-day	-	(mg/kg-day)-1		1.9E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.6E-006					4.9E+000
		Exposure Point Total									2.2E-005					6.9E+000
	Exposure Medium Total										2.2E-005					6.9E+000
Medium Total											2.2E-005					6.9E+000
										Total of Receptor Risks Across All Media	2.2E-005				Total of Receptor Hazards Across All Media	6.9E+000

TABLE 7.9 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	BtA Surface Soil	Incidental Ingestion	Benzo(ghi)perylene	0.06	mg/kg	6.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	7.7E-007	mg/kg-day	2.5E-002	mg/kg-day	3.1E-005
				Phenanthrene	0.065	mg/kg	7.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.3E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	1.8E-002	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-001	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	1.2E-005	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.9E-005	1.5E-004	mg/kg-day	3.0E-004	mg/kg-day	4.9E-001
				Chromium	17.5	mg/kg	1.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-004	mg/kg-day	3.00E-003	mg/kg-day	7.5E-002
				Iron	21,952	mg/kg	2.4E-002	mg/kg-day	-	(mg/kg-day)-1	-	2.8E-001	mg/kg-day	3.0E-001	mg/kg-day	9.4E-001
				Manganese	652	mg/kg	7.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	8.3E-003	mg/kg-day	4.7E-002	mg/kg-day	1.8E-001
				Thallium	17.6	mg/kg	1.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-004	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.9E-005					1.7E+000
			Dermal Absorption	Benzo(ghi)perylene	0.06	mg/kg	4.8E-009	mg/kg-day	-	(mg/kg-day)-1	-	5.6E-008	mg/kg-day	2.5E-002	mg/kg-day	2.2E-006
				Phenanthrene	0.065	mg/kg	5.2E-009	mg/kg-day	-	(mg/kg-day)-1	-	6.1E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	1.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	2.1E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.1E-007	2.4E-006	mg/kg-day	3.0E-004	mg/kg-day	8.2E-003
				Chromium	17.5	mg/kg	1.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-006	mg/kg-day	7.5E-005	mg/kg-day	1.7E-002
				Iron	21,952	mg/kg	1.3E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-003	mg/kg-day	3.0E-001	mg/kg-day	5.2E-003
				Manganese	652	mg/kg	4.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.7E-005	mg/kg-day	1.9E-003	mg/kg-day	2.5E-002
				Thallium	17.6	mg/kg	1.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								3.1E-007					5.5E-002
			Inhalation	Benzo(ghi)perylene	0.06	mg/kg	3.7E-010	mg/kg-day	-	(mg/kg-day)-1	-	4.3E-009	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.065	mg/kg	4.0E-010	mg/kg-day	-	(mg/kg-day)-1	-	4.6E-009	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	1.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	7.0E-008	mg/kg-day	1.5E+001	(mg/kg-day)-1	1.0E-006	8.1E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	17.5	mg/kg	1.1E-007	mg/kg-day	4.2E-001	(mg/kg-day)-1	4.5E-008	1.2E-006	mg/kg-day	2.9E-005	mg/kg-day	4.3E-002
				Iron	21,952	mg/kg	1.3E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-003	mg/kg-day	-	mg/kg-day	-
				Manganese	652	mg/kg	4.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.6E-005	mg/kg-day	1.4E-005	mg/kg-day	3.3E+000
				Thallium	17.6	mg/kg	1.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.1E-006					3.3E+000
		Exposure Point Total									2.0E-005					5.0E+000
	Exposure Medium Total										2.0E-005					5.0E+000
Medium Total											2.0E-005					5.0E+000
										Total of Receptor Risks Across All Media	2.0E-005				Total of Receptor Hazards Across All Media	5.0E+000

TABLE 7.10 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Incidental Ingestion	Trichloroethylene	53.4	mg/kg	5.8E-005	mg/kg-day	4.00E-001	(mg/kg-day)-1	2.3E-005	6.8E-004	mg/kg-day	3.0E-004	mg/kg-day	2.3E+000
				Acenaphthylene	1.90	mg/kg	2.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-005	mg/kg-day	2.5E-002	mg/kg-day	9.7E-004
				Benzo(a)anthracene	29	mg/kg	3.2E-005	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.3E-005	3.7E-004	mg/kg-day	2.5E-002	mg/kg-day	1.5E-002
				Benzo(a)pyrene	29	mg/kg	3.2E-005	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.3E-004	3.7E-004	mg/kg-day	2.5E-002	mg/kg-day	1.5E-002
				Benzo(b)fluoranthene	44	mg/kg	4.8E-005	mg/kg-day	7.3E-001	(mg/kg-day)-1	3.5E-005	5.6E-004	mg/kg-day	2.5E-002	mg/kg-day	2.3E-002
				Benzo(ghi)perylene	8.3	mg/kg	9.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-004	mg/kg-day	2.5E-002	mg/kg-day	4.2E-003
				Benzo(k)fluoranthene	18	mg/kg	2.0E-005	mg/kg-day	7.3E-002	(mg/kg-day)-1	1.4E-006	2.3E-004	mg/kg-day	2.5E-002	mg/kg-day	9.2E-003
				Dibenzo(a,h)anthracene	0.94	mg/kg	1.0E-006	mg/kg-day	7.3E+000	(mg/kg-day)-1	7.5E-006	1.2E-005	mg/kg-day	5.0E-002	mg/kg-day	2.4E-004
				Indeno(1,2,3-cd)pyrene	10	mg/kg	1.1E-005	mg/kg-day	7.3E-001	(mg/kg-day)-1	8.0E-006	1.3E-004	mg/kg-day	2.5E-002	mg/kg-day	5.1E-003
				Naphthalene	8.50	mg/kg	9.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-004	mg/kg-day	2.0E-002	mg/kg-day	5.4E-003
				Phenanthrene	20	mg/kg	2.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-004	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	1.1E-002	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-001	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	4.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.7E-004	mg/kg-day	4.0E-004	mg/kg-day	1.2E+000
				Arsenic	23.4	mg/kg	2.6E-005	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.9E-005	3.0E-004	mg/kg-day	3.0E-004	mg/kg-day	1.0E+000
				Cadmium	16.3	mg/kg	1.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-004	mg/kg-day	1.0E-003	mg/kg-day	2.1E-001
				Chromium	392	mg/kg	4.3E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.0E-003	mg/kg-day	3.0E-003	mg/kg-day	1.7E+000
				Copper	1,215	mg/kg	1.3E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-002	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	4.9E-002	mg/kg-day	-	(mg/kg-day)-1	-	5.7E-001	mg/kg-day	3.0E-001	mg/kg-day	1.9E+000
				Lead	416	mg/kg	4.6E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.3E-003	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	1.3E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-002	mg/kg-day	4.7E-002	mg/kg-day	3.3E-001
				Mercury	2.15	mg/kg	2.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-005	mg/kg-day	3.0E-004	mg/kg-day	9.2E-002
				Nickel	518	mg/kg	5.7E-004	mg/kg-day	-	(mg/kg-day)-1	-	6.6E-003	mg/kg-day	2.0E-002	mg/kg-day	3.3E-001
				Thallium	2.36	mg/kg	2.6E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-005	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	4.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.6E-004	mg/kg-day	7.0E-003	mg/kg-day	6.6E-002
			Exp. Route Total								3.7E-004					9.1E+000
			Dermal Absorption	Trichloroethylene	53.4	mg/kg	4.9E-006	mg/kg-day	4.00E-001	(mg/kg-day)-1	2.0E-006	5.7E-005	mg/kg-day	3.0E-004	mg/kg-day	1.9E-001
				Acenaphthylene	1.90	mg/kg	7.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	8.8E-006	mg/kg-day	2.5E-002	mg/kg-day	3.5E-004
				Benzo(a)anthracene	29	mg/kg	1.2E-005	mg/kg-day	7.3E-001	(mg/kg-day)-1	8.4E-006	1.3E-004	mg/kg-day	2.5E-002	mg/kg-day	5.4E-003
				Benzo(a)pyrene	29	mg/kg	1.2E-005	mg/kg-day	7.3E+000	(mg/kg-day)-1	8.4E-005	1.3E-004	mg/kg-day	2.5E-002	mg/kg-day	5.4E-003
				Benzo(b)fluoranthene	44	mg/kg	1.8E-005	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.3E-005	2.0E-004	mg/kg-day	2.5E-002	mg/kg-day	8.2E-003
				Benzo(ghi)perylene	8.3	mg/kg	3.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.9E-005	mg/kg-day	2.5E-002	mg/kg-day	1.5E-003
				Benzo(k)fluoranthene	18	mg/kg	7.2E-006	mg/kg-day	7.3E-002	(mg/kg-day)-1	5.2E-007	8.4E-005	mg/kg-day	2.5E-002	mg/kg-day	3.4E-003
				Dibenzo(a,h)anthracene	0.94	mg/kg	3.7E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.7E-006	4.4E-006	mg/kg-day	5.0E-002	mg/kg-day	8.7E-005
				Indeno(1,2,3-cd)pyrene	10	mg/kg	4.0E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.9E-006	4.7E-005	mg/kg-day	2.5E-002	mg/kg-day	1.9E-003
				Naphthalene	8.50	mg/kg	3.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.0E-005	mg/kg-day	2.0E-002	mg/kg-day	2.0E-003
				Phenanthrene	20	mg/kg	8.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	9.3E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	2.9E-004	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-003	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	1.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	6.0E-005	mg/kg-day	2.2E-001
				Arsenic	23.4	mg/kg	2.2E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.2E-006	2.5E-005	mg/kg-day	3.0E-004	mg/kg-day	8.4E-002
				Cadmium	16.3	mg/kg	5.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.8E-006	mg/kg-day	2.5E-005	mg/kg-day	2.3E-001
				Chromium	392	mg/kg	1.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-004	mg/kg-day	7.5E-005	mg/kg-day	1.9E+000

TABLE 7.10 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Dermal Absorption	Copper	1,215	mg/kg	3.7E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.3E-004	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	1.4E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-002	mg/kg-day	3.0E-001	mg/kg-day	5.3E-002
				Lead	416	mg/kg	1.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	3.7E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.3E-004	mg/kg-day	1.9E-003	mg/kg-day	2.3E-001
				Mercury	2.15	mg/kg	6.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	7.7E-007	mg/kg-day	2.1E-005	mg/kg-day	3.7E-002
				Nickel	518	mg/kg	1.6E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-004	mg/kg-day	8.0E-004	mg/kg-day	2.3E-001
				Thallium	2.36	mg/kg	7.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.4E-007	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	1.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	1.8E-004	mg/kg-day	7.1E-002
			Exp. Route Total								1.2E-004					3.2E+000
			Inhalation	Trichloroethylene	53.4	mg/kg	2.4E-003	mg/kg-day	4.00E-001	(mg/kg-day)-1	9.6E-004	2.9E-002	mg/kg-day	1.00E-002	mg/kg-day	2.9E+000
				Acenaphthylene	1.90	mg/kg	1.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-005	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	29	mg/kg	6.9E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	2.1E-007	8.1E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	29	mg/kg	4.0E-007	mg/kg-day	3.1E+000	(mg/kg-day)-1	1.3E-006	4.7E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	44	mg/kg	1.8E-006	mg/kg-day	3.1E-001	(mg/kg-day)-1	5.5E-007	2.1E-005	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	8.3	mg/kg	6.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	7.5E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(k)fluoranthene	16	mg/kg	2.1E-007	mg/kg-day	3.1E-002	(mg/kg-day)-1	6.5E-009	2.4E-006	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.94	mg/kg	8.7E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	2.7E-008	1.0E-007	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	10	mg/kg	1.0E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	3.2E-008	1.2E-006	mg/kg-day	-	mg/kg-day	-
				Naphthalene	8.50	mg/kg	2.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-004	mg/kg-day	8.6E-004	mg/kg-day	3.1E-001
				Phenanthrene	20	mg/kg	1.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	7.4E-005	mg/kg-day	-	(mg/kg-day)-1	-	8.7E-004	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	2.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.3E-006	mg/kg-day	-	mg/kg-day	-
				Arsenic	23.4	mg/kg	1.8E-007	mg/kg-day	1.5E+001	(mg/kg-day)-1	2.7E-006	2.1E-006	mg/kg-day	-	mg/kg-day	-
				Cadmium	16.3	mg/kg	1.3E-007	mg/kg-day	6.3E+000	(mg/kg-day)-1	8.0E-007	1.5E-006	mg/kg-day	-	mg/kg-day	-
				Chromium	392	mg/kg	3.0E-006	mg/kg-day	4.2E-001	(mg/kg-day)-1	1.3E-006	3.6E-005	mg/kg-day	2.9E-005	mg/kg-day	1.2E+000
				Copper	1,215	mg/kg	9.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-004	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	3.5E-004	mg/kg-day	-	(mg/kg-day)-1	-	4.0E-003	mg/kg-day	-	mg/kg-day	-
				Lead	416	mg/kg	3.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.8E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	9.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-004	mg/kg-day	1.4E-005	mg/kg-day	7.6E+000
				Mercury	2.15	mg/kg	1.7E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-007	mg/kg-day	-	mg/kg-day	-
				Nickel	518	mg/kg	4.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.7E-005	mg/kg-day	-	mg/kg-day	-
				Thallium	2.36	mg/kg	1.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-007	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	2.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.3E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								9.8E-004					1.2E+001
		Exposure Point Total									1.5E-003					2.4E+001
	Exposure Medium Total										1.5E-003					2.4E+001
Medium Total											1.5E-003					2.4E+001
										Total of Receptor Risks Across All Media	1.5E-003				Total of Receptor Hazards Across All Media	2.4E+001

TABLE 7.10 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Incidental Ingestion	Trichloroethylene	53.4	mg/kg	5.8E-005	mg/kg-day	4.0E-001	(mg/kg-day)-1	2.3E-005	6.8E-004	mg/kg-day	3.0E-004	mg/kg-day	2.3E+000
				Acenaphthylene	1.90	mg/kg	2.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-005	mg/kg-day	2.5E-002	mg/kg-day	9.7E-004
				Benzo(a)anthracene	29	mg/kg	3.2E-005	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.3E-005	3.7E-004	mg/kg-day	2.5E-002	mg/kg-day	1.5E-002
				Benzo(a)pyrene	29	mg/kg	3.2E-005	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.3E-004	3.7E-004	mg/kg-day	2.5E-002	mg/kg-day	1.5E-002
				Benzo(b)fluoranthene	44	mg/kg	4.8E-005	mg/kg-day	7.3E-001	(mg/kg-day)-1	3.5E-005	5.6E-004	mg/kg-day	2.5E-002	mg/kg-day	2.3E-002
				Benzo(ghi)perylene	8.3	mg/kg	9.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-004	mg/kg-day	2.5E-002	mg/kg-day	4.2E-003
				Benzo(k)fluoranthene	18	mg/kg	2.0E-005	mg/kg-day	7.3E-002	(mg/kg-day)-1	1.4E-006	2.3E-004	mg/kg-day	2.5E-002	mg/kg-day	9.2E-003
				Dibenzo(a,h)anthracene	0.94	mg/kg	1.0E-006	mg/kg-day	7.3E+000	(mg/kg-day)-1	7.5E-006	1.2E-005	mg/kg-day	5.0E-002	mg/kg-day	2.4E-004
				Indeno(1,2,3-cd)pyrene	10	mg/kg	1.1E-005	mg/kg-day	7.3E-001	(mg/kg-day)-1	8.0E-006	1.3E-004	mg/kg-day	2.5E-002	mg/kg-day	5.1E-003
				Naphthalene	8.50	mg/kg	9.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-004	mg/kg-day	2.0E-002	mg/kg-day	5.4E-003
				Phenanthrene	20	mg/kg	2.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-004	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	1.1E-002	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-001	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	4.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.7E-004	mg/kg-day	4.0E-004	mg/kg-day	1.2E+000
				Arsenic	23.4	mg/kg	2.6E-005	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.9E-005	3.0E-004	mg/kg-day	3.0E-004	mg/kg-day	1.0E+000
				Cadmium	16.3	mg/kg	1.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-004	mg/kg-day	1.0E-003	mg/kg-day	2.1E-001
				Chromium	392	mg/kg	4.3E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.0E-003	mg/kg-day	3.0E-003	mg/kg-day	1.7E+000
				Copper	1,215	mg/kg	1.3E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-002	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	4.9E-002	mg/kg-day	-	(mg/kg-day)-1	-	5.7E-001	mg/kg-day	3.0E-001	mg/kg-day	1.9E+000
				Lead	416	mg/kg	4.6E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.3E-003	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	1.3E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-002	mg/kg-day	4.7E-002	mg/kg-day	3.3E-001
				Mercury	2.15	mg/kg	2.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-005	mg/kg-day	3.0E-004	mg/kg-day	9.2E-002
				Nickel	518	mg/kg	5.7E-004	mg/kg-day	-	(mg/kg-day)-1	-	6.6E-003	mg/kg-day	2.0E-002	mg/kg-day	3.3E-001
				Thallium	2.36	mg/kg	2.6E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-005	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	4.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.6E-004	mg/kg-day	7.0E-003	mg/kg-day	6.6E-002
			Exp. Route Total								3.7E-004					9.1E+000
			Dermal Absorption	Trichloroethylene	53.4	mg/kg	9.8E-007	mg/kg-day	4.0E-001	(mg/kg-day)-1	3.9E-007	1.1E-005	mg/kg-day	3.0E-004	mg/kg-day	3.8E-002
				Acenaphthylene	1.90	mg/kg	1.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-006	mg/kg-day	2.5E-002	mg/kg-day	7.1E-005
				Benzo(a)anthracene	29	mg/kg	2.3E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.7E-006	2.7E-005	mg/kg-day	2.5E-002	mg/kg-day	1.1E-003
				Benzo(a)pyrene	29	mg/kg	2.3E-006	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.7E-005	2.7E-005	mg/kg-day	2.5E-002	mg/kg-day	1.1E-003
				Benzo(b)fluoranthene	44	mg/kg	3.5E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.6E-006	4.1E-005	mg/kg-day	2.5E-002	mg/kg-day	1.6E-003
				Benzo(ghi)perylene	8.3	mg/kg	6.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.7E-006	mg/kg-day	2.5E-002	mg/kg-day	3.1E-004
				Benzo(k)fluoranthene	18	mg/kg	1.4E-006	mg/kg-day	7.3E-002	(mg/kg-day)-1	1.0E-007	1.7E-005	mg/kg-day	2.5E-002	mg/kg-day	6.7E-004
				Dibenzo(a,h)anthracene	0.94	mg/kg	7.5E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	5.5E-007	8.7E-007	mg/kg-day	5.0E-002	mg/kg-day	1.7E-005
				Indeno(1,2,3-cd)pyrene	10	mg/kg	8.0E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	5.8E-007	9.3E-006	mg/kg-day	2.5E-002	mg/kg-day	3.7E-004
				Naphthalene	8.50	mg/kg	6.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.9E-006	mg/kg-day	2.0E-002	mg/kg-day	4.0E-004
				Phenanthrene	20	mg/kg	1.6E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	5.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	6.9E-004	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	2.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-006	mg/kg-day	6.0E-005	mg/kg-day	4.4E-002
				Arsenic	23.4	mg/kg	4.3E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	6.5E-007	5.0E-006	mg/kg-day	3.0E-004	mg/kg-day	1.7E-002
				Cadmium	16.3	mg/kg	1.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-006	mg/kg-day	2.5E-005	mg/kg-day	4.7E-002
				Chromium	392	mg/kg	2.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-005	mg/kg-day	7.5E-005	mg/kg-day	3.7E-001

TABLE 7.10 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Dermal Absorption	Copper	1,215	mg/kg	7.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	8.7E-005	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	2.7E-004	mg/kg-day	-	(mg/kg-day)-1	-	3.2E-003	mg/kg-day	3.0E-001	mg/kg-day	1.1E-002
				Lead	416	mg/kg	2.6E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	7.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	8.6E-005	mg/kg-day	1.9E-003	mg/kg-day	4.5E-002
				Mercury	2.15	mg/kg	1.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-007	mg/kg-day	2.1E-005	mg/kg-day	7.3E-003
				Nickel	518	mg/kg	3.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.7E-005	mg/kg-day	8.0E-004	mg/kg-day	4.6E-002
				Thallium	2.36	mg/kg	1.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-007	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	2.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-006	mg/kg-day	1.8E-004	mg/kg-day	1.4E-002
			Exp. Route Total								2.3E-005					6.5E-001
			Inhalation	Trichloroethylene	53.4	mg/kg	1.6E-003	mg/kg-day	4.0E-001	(mg/kg-day)-1	6.5E-004	1.9E-002	mg/kg-day	1.00E-002	mg/kg-day	1.9E+000
				Acenaphthylene	1.90	mg/kg	8.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-005	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	29	mg/kg	4.6E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.4E-007	5.4E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	29	mg/kg	2.7E-007	mg/kg-day	3.1E+000	(mg/kg-day)-1	8.4E-007	3.1E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	44	mg/kg	1.2E-006	mg/kg-day	3.1E-001	(mg/kg-day)-1	3.7E-007	1.4E-005	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	8.3	mg/kg	4.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.0E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(k)fluoranthene	18	mg/kg	1.4E-007	mg/kg-day	3.1E-002	(mg/kg-day)-1	4.3E-009	1.6E-006	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.94	mg/kg	5.8E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	1.8E-008	6.7E-008	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	10	mg/kg	6.9E-008	mg/kg-day	3.1E-001	(mg/kg-day)-1	2.2E-008	8.1E-007	mg/kg-day	-	mg/kg-day	-
				Naphthalene	8.50	mg/kg	1.5E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-004	mg/kg-day	8.6E-004	mg/kg-day	2.1E-001
				Phenanthrene	20	mg/kg	1.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	5.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.8E-004	mg/kg-day	-	mg/kg-day	-
				Antimony	38.7	mg/kg	1.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-006	mg/kg-day	-	mg/kg-day	-
				Arsenic	23.4	mg/kg	1.2E-007	mg/kg-day	1.5E+001	(mg/kg-day)-1	1.8E-006	1.4E-006	mg/kg-day	-	mg/kg-day	-
				Cadmium	16.3	mg/kg	8.5E-008	mg/kg-day	6.3E+000	(mg/kg-day)-1	5.3E-007	9.9E-007	mg/kg-day	-	mg/kg-day	-
				Chromium	392	mg/kg	2.0E-006	mg/kg-day	4.2E-001	(mg/kg-day)-1	8.5E-007	2.4E-005	mg/kg-day	2.9E-005	mg/kg-day	8.3E-001
				Copper	1,215	mg/kg	6.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	7.3E-005	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	2.3E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-003	mg/kg-day	-	mg/kg-day	-
				Lead	416	mg/kg	2.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	6.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	7.2E-005	mg/kg-day	1.4E-005	mg/kg-day	5.1E+000
				Mercury	2.15	mg/kg	1.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-007	mg/kg-day	-	mg/kg-day	-
				Nickel	518	mg/kg	2.7E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.1E-005	mg/kg-day	-	mg/kg-day	-
				Thallium	2.36	mg/kg	1.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-007	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	1.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								6.6E-004					6.0E+000
		Exposure Point Total									1.0E-003					1.8E+001
	Exposure Medium Total										1.0E-003					1.8E+001
Medium Total											1.0E-003					1.8E+001
										Total of Receptor Risks Across All Media	1.0E-003			Total of Receptor Hazards Across All Media		1.8E+001

TABLE 7.11 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent (12-18 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	BtA Surface Soil	Incidental Ingestion	Benzo(ghi)perylene	0.06	mg/kg	5.1E-009	mg/kg-day	-	(mg/kg-day)-1	-	6.0E-008	mg/kg-day	2.5E-002	mg/kg-day	2.4E-006
				Phenanthrene	0.065	mg/kg	5.6E-009	mg/kg-day	-	(mg/kg-day)-1	-	6.5E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	1.4E-003	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-002	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	9.7E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.5E-006	1.1E-005	mg/kg-day	3.0E-004	mg/kg-day	3.6E-002
				Chromium	17.5	mg/kg	1.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-005	mg/kg-day	3.00E-003	mg/kg-day	5.8E-003
				Iron	21,952	mg/kg	1.9E-003	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-002	mg/kg-day	3.0E-001	mg/kg-day	7.3E-002
				Manganese	652	mg/kg	5.6E-005	mg/kg-day	-	(mg/kg-day)-1	-	6.5E-004	mg/kg-day	4.7E-002	mg/kg-day	1.4E-002
				Thallium	17.6	mg/kg	1.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-005	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.5E-006					1.3E-001
			Dermal Absorption	Benzo(ghi)perylene	0.06	mg/kg	3.5E-009	mg/kg-day	-	(mg/kg-day)-1	-	4.0E-008	mg/kg-day	2.5E-002	mg/kg-day	1.6E-006
				Phenanthrene	0.065	mg/kg	3.7E-009	mg/kg-day	-	(mg/kg-day)-1	-	4.4E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	7.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	8.5E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	1.5E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	2.3E-007	1.8E-006	mg/kg-day	3.0E-004	mg/kg-day	5.9E-003
				Chromium	17.5	mg/kg	7.7E-008	mg/kg-day	-	(mg/kg-day)-1	-	9.0E-007	mg/kg-day	7.5E-005	mg/kg-day	1.2E-002
				Iron	21,952	mg/kg	9.7E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-003	mg/kg-day	3.0E-001	mg/kg-day	3.8E-003
				Manganese	652	mg/kg	2.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-005	mg/kg-day	1.9E-003	mg/kg-day	1.8E-002
				Thallium	17.6	mg/kg	7.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	9.1E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								2.3E-007					3.9E-002
			Inhalation	Benzo(ghi)perylene	0.06	mg/kg	7.1E-012	mg/kg-day	-	(mg/kg-day)-1	-	8.2E-011	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.065	mg/kg	7.7E-012	mg/kg-day	-	(mg/kg-day)-1	-	8.9E-011	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	1.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-005	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	1.3E-009	mg/kg-day	1.5E+001	(mg/kg-day)-1	2.0E-008	1.6E-008	mg/kg-day	-	mg/kg-day	-
				Chromium	17.5	mg/kg	2.1E-009	mg/kg-day	4.2E-001	(mg/kg-day)-1	8.7E-010	2.4E-008	mg/kg-day	2.9E-005	mg/kg-day	8.3E-004
				Iron	21,952	mg/kg	2.6E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	652	mg/kg	7.7E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.9E-007	mg/kg-day	1.4E-005	mg/kg-day	6.3E-002
				Thallium	17.6	mg/kg	2.1E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-008	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								2.1E-008					6.3E-002
		Exposure Point Total									1.7E-006					2.3E-001
		CCA Surface Soil	Incidental Ingestion	Trichloroethylene	53.4	mg/kg	4.6E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	1.8E-006	5.3E-005	mg/kg-day	3.0E-004	mg/kg-day	1.8E-001
				Acenaphthylene	1.90	mg/kg	1.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-006	mg/kg-day	2.5E-002	mg/kg-day	7.6E-005
				Benzo(a)anthracene	29	mg/kg	2.5E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.8E-006	2.9E-005	mg/kg-day	2.5E-002	mg/kg-day	1.2E-003
				Benzo(a)pyrene	29	mg/kg	2.5E-006	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.8E-005	2.9E-005	mg/kg-day	2.5E-002	mg/kg-day	1.2E-003
				Benzo(b)fluoranthene	44	mg/kg	3.8E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.7E-006	4.4E-005	mg/kg-day	2.5E-002	mg/kg-day	1.8E-003
				Benzo(ghi)perylene	8.3	mg/kg	7.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	8.3E-006	mg/kg-day	2.5E-002	mg/kg-day	3.3E-004
				Benzo(k)fluoranthene	18	mg/kg	1.5E-006	mg/kg-day	7.3E-002	(mg/kg-day)-1	1.1E-007	1.8E-005	mg/kg-day	2.5E-002	mg/kg-day	7.2E-004
				Dibenzo(a,h)anthracene	0.94	mg/kg	8.0E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	5.9E-007	9.4E-007	mg/kg-day	5.0E-002	mg/kg-day	1.9E-005
				Indeno(1,2,3-cd)pyrene	10	mg/kg	8.5E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	6.2E-007	1.0E-005	mg/kg-day	2.5E-002	mg/kg-day	4.0E-004
				Naphthalene	8.50	mg/kg	7.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	8.5E-006	mg/kg-day	2.0E-002	mg/kg-day	4.2E-004
				Phenanthrene	20	mg/kg	1.7E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	8.2E-004	mg/kg-day	-	(mg/kg-day)-1	-	9.6E-003	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	3.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.7E-005	mg/kg-day	4.0E-004	mg/kg-day	9.2E-002
				Arsenic	23.4	mg/kg	2.0E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.0E-006	2.3E-005	mg/kg-day	3.0E-004	mg/kg-day	7.8E-002

TABLE 7.11 RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent (12-16 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Incidental Ingestion	Cadmium	16.3	mg/kg	1.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-005	mg/kg-day	1.0E-003	mg/kg-day	1.6E-002
				Chromium	392	mg/kg	3.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.9E-004	mg/kg-day	3.0E-003	mg/kg-day	1.3E-001
				Copper	1,215	mg/kg	1.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-003	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	3.8E-003	mg/kg-day	-	(mg/kg-day)-1	-	4.4E-002	mg/kg-day	3.0E-001	mg/kg-day	1.5E-001
				Lead	416	mg/kg	3.6E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.1E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	1.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-003	mg/kg-day	4.7E-002	mg/kg-day	2.5E-002
				Mercury	2.15	mg/kg	1.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-006	mg/kg-day	3.0E-004	mg/kg-day	7.1E-003
				Nickel	518	mg/kg	4.4E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.2E-004	mg/kg-day	2.0E-002	mg/kg-day	2.6E-002
				Thallium	2.36	mg/kg	2.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-006	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	3.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	3.6E-005	mg/kg-day	7.0E-003	mg/kg-day	5.1E-003
			Exp. Route Total								2.9E-005					7.1E-001
			Dermal Absorption	Trichloroethylene	53.4	mg/kg	7.1E-007	mg/kg-day	4.0E-001	(mg/kg-day)-1	2.8E-007	8.3E-006	mg/kg-day	3.0E-004	mg/kg-day	2.8E-002
				Acenaphthylene	1.90	mg/kg	1.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-006	mg/kg-day	2.5E-002	mg/kg-day	5.1E-005
				Benzo(a)anthracene	29	mg/kg	1.7E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.2E-006	1.9E-005	mg/kg-day	2.5E-002	mg/kg-day	7.8E-004
				Benzo(a)pyrene	29	mg/kg	1.7E-006	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.2E-005	1.9E-005	mg/kg-day	2.5E-002	mg/kg-day	7.8E-004
				Benzo(b)fluoranthene	44	mg/kg	2.5E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.8E-006	3.0E-005	mg/kg-day	2.5E-002	mg/kg-day	1.2E-003
				Benzo(ghi)perylene	8.3	mg/kg	4.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.6E-006	mg/kg-day	2.5E-002	mg/kg-day	2.2E-004
				Benzo(k)fluoranthene	18	mg/kg	1.0E-006	mg/kg-day	7.3E-002	(mg/kg-day)-1	7.6E-008	1.2E-005	mg/kg-day	2.5E-002	mg/kg-day	4.8E-004
				Dibenzo(a,h)anthracene	0.94	mg/kg	5.4E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	3.9E-007	6.3E-007	mg/kg-day	5.0E-002	mg/kg-day	1.3E-005
				Indeno(1,2,3-cd)pyrene	10	mg/kg	5.8E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	4.2E-007	6.7E-006	mg/kg-day	2.5E-002	mg/kg-day	2.7E-004
				Naphthalene	8.50	mg/kg	4.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.7E-006	mg/kg-day	2.0E-002	mg/kg-day	2.9E-004
				Phenanthrene	20	mg/kg	1.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	4.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.9E-004	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	1.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-006	mg/kg-day	6.0E-005	mg/kg-day	3.2E-002
				Arsenic	23.4	mg/kg	3.1E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	4.7E-007	3.6E-006	mg/kg-day	3.0E-004	mg/kg-day	1.2E-002
				Cadmium	16.3	mg/kg	7.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.4E-007	mg/kg-day	2.5E-005	mg/kg-day	3.4E-002
				Chromium	392	mg/kg	1.7E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-005	mg/kg-day	7.5E-005	mg/kg-day	2.7E-001
				Copper	1,215	mg/kg	5.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	6.3E-005	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	2.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-003	mg/kg-day	3.0E-001	mg/kg-day	7.7E-003
				Lead	416	mg/kg	1.8E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	5.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	6.2E-005	mg/kg-day	1.9E-003	mg/kg-day	3.3E-002
				Mercury	2.15	mg/kg	9.5E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-007	mg/kg-day	2.1E-005	mg/kg-day	5.3E-003
				Nickel	518	mg/kg	2.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-005	mg/kg-day	8.0E-004	mg/kg-day	3.3E-002
				Thallium	2.36	mg/kg	1.0E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-007	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	1.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-006	mg/kg-day	1.8E-004	mg/kg-day	1.0E-002
			Exp. Route Total								1.7E-005					4.7E-001
			Inhalation	Trichloroethylene	53.4	mg/kg	3.1E-005	mg/kg-day	4.0E-001	(mg/kg-day)-1	1.3E-005	3.7E-004	mg/kg-day	1.0E-002	mg/kg-day	3.7E-002
				Acenaphthylene	1.90	mg/kg	1.7E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	29	mg/kg	8.9E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	2.7E-009	1.0E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	29	mg/kg	5.2E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	1.6E-008	6.1E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	44	mg/kg	2.3E-008	mg/kg-day	3.1E-001	(mg/kg-day)-1	7.1E-009	2.7E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	8.3	mg/kg	8.3E-010	mg/kg-day	-	(mg/kg-day)-1	-	9.6E-009	mg/kg-day	-	mg/kg-day	-
				Benzo(k)fluoranthene	18	mg/kg	2.7E-009	mg/kg-day	3.1E-002	(mg/kg-day)-1	8.3E-011	3.1E-008	mg/kg-day	-	mg/kg-day	-

TABLE 7.11 RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent (12-18 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
							Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
					Value	Units	Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Inhalation	Dibenzo(a,h)anthracene	0.94	mg/kg	1.1E-010	mg/kg-day	3.1E+000	(mg/kg-day)-1	3.4E-010	1.3E-009	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	10	mg/kg	1.3E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	4.1E-010	1.6E-008	mg/kg-day	-	mg/kg-day	-
				Naphthalene	8.50	mg/kg	3.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.5E-006	mg/kg-day	8.6E-004	mg/kg-day	4.0E-003
				Phenanthrene	20	mg/kg	2.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	9.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-005	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	3.7E-009	mg/kg-day	-	(mg/kg-day)-1	-	4.3E-008	mg/kg-day	-	mg/kg-day	-
				Arsenic	23.4	mg/kg	2.3E-009	mg/kg-day	1.5E+001	(mg/kg-day)-1	3.5E-008	2.7E-008	mg/kg-day	-	mg/kg-day	-
				Cadmium	16.3	mg/kg	1.6E-009	mg/kg-day	6.3E+000	(mg/kg-day)-1	1.0E-008	1.9E-008	mg/kg-day	-	mg/kg-day	-
				Chromium	392	mg/kg	3.9E-008	mg/kg-day	4.2E-001	(mg/kg-day)-1	1.6E-008	4.6E-007	mg/kg-day	2.9E-005	mg/kg-day	1.6E-002
				Copper	1,215	mg/kg	1.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-006	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	4.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	5.2E-005	mg/kg-day	-	mg/kg-day	-
				Lead	416	mg/kg	4.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	4.8E-007	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	1.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-006	mg/kg-day	1.4E-005	mg/kg-day	9.8E-002
				Mercury	2.15	mg/kg	2.1E-010	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-009	mg/kg-day	-	mg/kg-day	-
				Nickel	518	mg/kg	5.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	6.0E-007	mg/kg-day	-	mg/kg-day	-
				Thallium	2.36	mg/kg	2.3E-010	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-009	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	3.6E-009	mg/kg-day	-	(mg/kg-day)-1	-	4.2E-008	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.3E-005					1.5E-001
		Exposure Point Total									5.8E-005					1.3E+000
	Exposure Medium Total										6.0E-005					1.6E+000
Medium Total											6.0E-005					1.6E+000
										Total of Receptor Risks Across All Media	6.0E-005				Total of Receptor Hazards Across All Media	1.6E+000

TABLE 7.11 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent (12-18 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	BIA Surface Soil	Incidental Ingestion	Benzo(ghi)perylene	0.06	mg/kg	2.6E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-008	mg/kg-day	2.5E-002	mg/kg-day	1.2E-006
				Phenanthrene	0.065	mg/kg	2.8E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.2E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	7.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	8.2E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	4.9E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	7.3E-007	5.7E-006	mg/kg-day	3.0E-004	mg/kg-day	1.9E-002
				Chromium	17.5	mg/kg	7.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	8.7E-006	mg/kg-day	3.00E-003	mg/kg-day	2.9E-003
				Iron	21,952	mg/kg	9.4E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-002	mg/kg-day	3.0E-001	mg/kg-day	3.6E-002
				Manganese	652	mg/kg	2.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.2E-004	mg/kg-day	4.7E-002	mg/kg-day	6.9E-003
				Thallium	17.6	mg/kg	7.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	8.8E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								7.3E-007					6.5E-002
			Dermal Absorption	Benzo(ghi)perylene	0.06	mg/kg	3.5E-010	mg/kg-day	-	(mg/kg-day)-1	-	4.0E-009	mg/kg-day	2.5E-002	mg/kg-day	1.6E-007
				Phenanthrene	0.065	mg/kg	3.7E-010	mg/kg-day	-	(mg/kg-day)-1	-	4.4E-009	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	7.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.5E-005	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	1.5E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	2.3E-008	1.8E-007	mg/kg-day	3.0E-004	mg/kg-day	5.9E-004
				Chromium	17.5	mg/kg	7.7E-009	mg/kg-day	-	(mg/kg-day)-1	-	9.0E-008	mg/kg-day	7.5E-005	mg/kg-day	1.2E-003
				Iron	21,952	mg/kg	9.7E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-004	mg/kg-day	3.0E-001	mg/kg-day	3.6E-004
				Manganese	652	mg/kg	2.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-006	mg/kg-day	1.9E-003	mg/kg-day	1.8E-003
				Thallium	17.6	mg/kg	7.8E-009	mg/kg-day	-	(mg/kg-day)-1		9.1E-008	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								2.3E-008					3.9E-003
			Inhalation	Benzo(ghi)perylene	0.06	mg/kg	3.5E-012	mg/kg-day	-	(mg/kg-day)-1	-	4.1E-011	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.065	mg/kg	3.8E-012	mg/kg-day	-	(mg/kg-day)-1	-	4.5E-011	mg/kg-day	-	mg/kg-day	-
				Aluminum	16,437	mg/kg	9.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-005	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.4	mg/kg	6.7E-010	mg/kg-day	1.5E+001	(mg/kg-day)-1	1.0E-008	7.8E-009	mg/kg-day	-	mg/kg-day	-
				Chromium	17.5	mg/kg	1.0E-009	mg/kg-day	4.2E-001	(mg/kg-day)-1	4.3E-010	1.2E-008	mg/kg-day	2.9E-005	mg/kg-day	4.1E-004
				Iron	21,952	mg/kg	1.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	652	mg/kg	3.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	4.5E-007	mg/kg-day	1.4E-005	mg/kg-day	3.1E-002
				Thallium	17.6	mg/kg	1.0E-009	mg/kg-day	-	(mg/kg-day)-1		1.2E-008	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.1E-008					3.2E-002
		Exposure Point Total									7.6E-007					1.0E-001
		CCA Surface Soil	Incidental Ingestion	Trichloroethylene	53.4	mg/kg	2.3E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	9.1E-007	2.7E-005	mg/kg-day	3.0E-004	mg/kg-day	8.9E-002
				Acenaphthylene	1.90	mg/kg	8.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	9.5E-007	mg/kg-day	2.5E-002	mg/kg-day	3.8E-005
				Benzo(a)anthracene	29	mg/kg	1.2E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	9.0E-007	1.4E-005	mg/kg-day	2.5E-002	mg/kg-day	5.8E-004
				Benzo(a)pyrene	29	mg/kg	1.2E-006	mg/kg-day	7.3E+000	(mg/kg-day)-1	9.0E-006	1.4E-005	mg/kg-day	2.5E-002	mg/kg-day	5.8E-004
				Benzo(b)fluoranthene	44	mg/kg	1.9E-006	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.4E-006	2.2E-005	mg/kg-day	2.5E-002	mg/kg-day	8.8E-004
				Benzo(ghi)perylene	8.3	mg/kg	3.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	4.1E-006	mg/kg-day	2.5E-002	mg/kg-day	1.7E-004
				Benzo(k)fluoranthene	16	mg/kg	7.7E-007	mg/kg-day	7.3E-002	(mg/kg-day)-1	5.6E-008	9.0E-006	mg/kg-day	2.5E-002	mg/kg-day	3.6E-004
				Dibenzo(a,h)anthracene	0.94	mg/kg	4.0E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.9E-007	4.7E-007	mg/kg-day	5.0E-002	mg/kg-day	9.4E-006
				Indeno(1,2,3-cd)pyrene	10	mg/kg	4.3E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	3.1E-007	5.0E-006	mg/kg-day	2.5E-002	mg/kg-day	2.0E-004
				Naphthalene	8.50	mg/kg	3.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	4.2E-006	mg/kg-day	2.0E-002	mg/kg-day	2.1E-004
				Phenanthrene	20	mg/kg	8.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	4.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	4.8E-003	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	1.6E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-005	mg/kg-day	4.0E-004	mg/kg-day	4.6E-002
				Arsenic	23.4	mg/kg	1.0E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.5E-006	1.2E-005	mg/kg-day	3.0E-004	mg/kg-day	3.9E-002

TABLE 7.11 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent (12-18 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Incidental Ingestion	Cadmium	16.3	mg/kg	7.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	8.1E-006	mg/kg-day	1.0E-003	mg/kg-day	8.1E-003
				Chromium	392	mg/kg	1.7E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-004	mg/kg-day	3.0E-003	mg/kg-day	6.5E-002
				Copper	1,215	mg/kg	5.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	6.1E-004	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	1.9E-003	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-002	mg/kg-day	3.0E-001	mg/kg-day	7.4E-002
				Lead	416	mg/kg	1.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	5.1E-005	mg/kg-day	-	(mg/kg-day)-1	-	6.0E-004	mg/kg-day	4.7E-002	mg/kg-day	1.3E-002
				Mercury	2.15	mg/kg	9.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	3.0E-004	mg/kg-day	3.6E-003
				Nickel	518	mg/kg	2.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-004	mg/kg-day	2.0E-002	mg/kg-day	1.3E-002
				Thallium	2.36	mg/kg	1.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-006	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	1.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-005	mg/kg-day	7.0E-003	mg/kg-day	2.6E-003
			Exp. Route Total								1.4E-005					3.6E-001
			Dermal Absorption	Trichloroethylene	53.4	mg/kg	7.1E-008	mg/kg-day	4.0E-001	(mg/kg-day)-1	2.8E-008	8.3E-007	mg/kg-day	3.0E-004	mg/kg-day	2.8E-003
				Acenaphthylene	1.90	mg/kg	1.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-007	mg/kg-day	2.5E-002	mg/kg-day	5.1E-006
				Benzo(a)anthracene	29	mg/kg	1.7E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.2E-007	1.9E-006	mg/kg-day	2.5E-002	mg/kg-day	7.8E-005
				Benzo(a)pyrene	29	mg/kg	1.7E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.2E-006	1.9E-006	mg/kg-day	2.5E-002	mg/kg-day	7.8E-005
				Benzo(b)fluoranthene	44	mg/kg	2.5E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.8E-007	3.0E-006	mg/kg-day	2.5E-002	mg/kg-day	1.2E-004
				Benzo(ghi)perylene	8.3	mg/kg	4.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.6E-007	mg/kg-day	2.5E-002	mg/kg-day	2.2E-005
				Benzo(k)fluoranthene	16	mg/kg	1.0E-007	mg/kg-day	7.3E-002	(mg/kg-day)-1	7.6E-009	1.2E-006	mg/kg-day	2.5E-002	mg/kg-day	4.8E-005
				Dibenzo(a,h)anthracene	0.94	mg/kg	5.4E-009	mg/kg-day	7.3E+000	(mg/kg-day)-1	3.9E-008	6.3E-008	mg/kg-day	5.0E-002	mg/kg-day	1.3E-006
				Indeno(1,2,3-cd)pyrene	10	mg/kg	5.8E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	4.2E-008	6.7E-007	mg/kg-day	2.5E-002	mg/kg-day	2.7E-005
				Naphthalene	8.50	mg/kg	4.9E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.7E-007	mg/kg-day	2.0E-002	mg/kg-day	2.9E-005
				Phenanthrene	20	mg/kg	1.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	4.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.9E-005	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	1.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-007	mg/kg-day	6.0E-005	mg/kg-day	3.2E-003
				Arsenic	23.4	mg/kg	3.1E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	4.7E-008	3.6E-007	mg/kg-day	3.0E-004	mg/kg-day	1.2E-003
				Cadmium	16.3	mg/kg	7.2E-009	mg/kg-day	-	(mg/kg-day)-1	-	8.4E-008	mg/kg-day	2.5E-005	mg/kg-day	3.4E-003
				Chromium	392	mg/kg	1.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-006	mg/kg-day	7.5E-005	mg/kg-day	2.7E-002
				Copper	1,215	mg/kg	5.4E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.3E-006	mg/kg-day	-	mg/kg-day	-
				Iron	44,607	mg/kg	2.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-004	mg/kg-day	3.0E-001	mg/kg-day	7.7E-004
				Lead	416	mg/kg	1.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-006	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	5.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.2E-006	mg/kg-day	1.9E-003	mg/kg-day	3.3E-003
				Mercury	2.15	mg/kg	9.5E-010	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-008	mg/kg-day	2.1E-005	mg/kg-day	5.3E-004
				Nickel	518	mg/kg	2.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-006	mg/kg-day	8.0E-004	mg/kg-day	3.3E-003
				Thallium	2.36	mg/kg	1.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-008	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	1.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-007	mg/kg-day	1.8E-004	mg/kg-day	1.0E-003
			Exp. Route Total								1.7E-006					4.7E-002
			Inhalation	Trichloroethylene	53.4	mg/kg	1.6E-005	mg/kg-day	4.0E-001	(mg/kg-day)-1	6.3E-006	1.8E-004	mg/kg-day	1.0E-002	mg/kg-day	1.8E-002
				Acenaphthylene	1.90	mg/kg	8.4E-009	mg/kg-day	-	(mg/kg-day)-1	-	9.8E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	29	mg/kg	4.4E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.4E-009	5.2E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	29	mg/kg	2.6E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	8.0E-009	3.0E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	44	mg/kg	1.1E-008	mg/kg-day	3.1E-001	(mg/kg-day)-1	3.5E-009	1.3E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	8.3	mg/kg	4.1E-010	mg/kg-day	-	(mg/kg-day)-1	-	4.8E-009	mg/kg-day	-	mg/kg-day	-

TABLE 7.11 CT
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent (12-18 years)

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA Surface Soil	Inhalation	Benzo(k)fluoranthene	18	mg/kg	1.3E-009	mg/kg-day	3.1E-002	(mg/kg-day)-1	4.2E-011	1.6E-008	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.94	mg/kg	5.6E-011	mg/kg-day	3.1E+000	(mg/kg-day)-1	1.7E-010	6.5E-010	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	10	mg/kg	6.7E-010	mg/kg-day	3.1E-001	(mg/kg-day)-1	2.1E-010	7.8E-009	mg/kg-day	-	mg/kg-day	-
				Naphthalene	8.50	mg/kg	1.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-006	mg/kg-day	6.6E-004	mg/kg-day	2.0E-003
				Phenanthrene	20	mg/kg	1.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,590	mg/kg	4.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.6E-006	mg/kg-day	-	mg/kg-day	-
				Antimony	36.7	mg/kg	1.8E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-008	mg/kg-day	-	mg/kg-day	-
				Arsenic	23.4	mg/kg	1.2E-009	mg/kg-day	1.5E+001	(mg/kg-day)-1	1.8E-008	1.4E-008	mg/kg-day	-	mg/kg-day	-
				Cadmium	16.3	mg/kg	8.1E-010	mg/kg-day	6.3E+000	(mg/kg-day)-1	5.1E-009	9.5E-009	mg/kg-day	-	mg/kg-day	-
				Chromium	392	mg/kg	2.0E-008	mg/kg-day	4.2E-001	(mg/kg-day)-1	8.2E-009	2.3E-007	mg/kg-day	2.9E-005	mg/kg-day	8.0E-003
				Copper	1,215	mg/kg	6.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	7.1E-007	mg/kg-day	-	mg/kg-day	-
				Iron	44,807	mg/kg	2.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-005	mg/kg-day	-	mg/kg-day	-
				Lead	416	mg/kg	2.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-007	mg/kg-day	-	mg/kg-day	-
				Manganese	1,198	mg/kg	6.0E-008	mg/kg-day	-	(mg/kg-day)-1	-	7.0E-007	mg/kg-day	1.4E-005	mg/kg-day	4.9E-002
				Mercury	2.15	mg/kg	1.1E-010	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-009	mg/kg-day	-	mg/kg-day	-
				Nickel	518	mg/kg	2.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-007	mg/kg-day	-	mg/kg-day	-
				Thallium	2.36	mg/kg	1.2E-010	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-009	mg/kg-day	-	mg/kg-day	-
				Vanadium	36.1	mg/kg	1.8E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-008	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								6.3E-006					7.7E-002
		Exposure Point Total									2.2E-005					4.8E-001
	Exposure Medium Total										2.3E-005					5.8E-001
Medium Total											2.3E-005					5.8E-001
										Total of Receptor Risks Across All Media	2.3E-005				Total of Receptor Hazards Across All Media	5.8E-001

TABLE 7.12 RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Shoreline Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Sediment	Sediment	Little Valley Creek and Tributaries	Incidental Ingestion	Benzo(a)anthracene	1.80	mg/kg	3.1E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.3E-007	7.3E-007	mg/kg-day	2.5E-002	mg/kg-day	2.9E-005
				Benzo(a)pyrene	2.00	mg/kg	3.5E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.6E-006	8.1E-007	mg/kg-day	2.5E-002	mg/kg-day	3.3E-005
				Benzo(b)fluoranthene	1.70	mg/kg	3.0E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.2E-007	6.9E-007	mg/kg-day	2.5E-002	mg/kg-day	2.8E-005
				Benzo(ghi)perylene	0.90	mg/kg	1.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.7E-007	mg/kg-day	2.5E-002	mg/kg-day	1.5E-005
				Bis(2-ethylhexyl)phthalate (BEHP)	40	mg/kg	7.0E-006	mg/kg-day	1.4E-002	(mg/kg-day)-1	9.8E-008	1.6E-005	mg/kg-day	2.0E-002	mg/kg-day	8.1E-004
				Indeno(1,2,3-cd)pyrene	1.20	mg/kg	2.1E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.5E-007	4.9E-007	mg/kg-day	2.5E-002	mg/kg-day	2.0E-005
				Phenanthrene	1.80	mg/kg	3.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	7.3E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,300	mg/kg	2.0E-003	mg/kg-day	-	(mg/kg-day)-1	-	4.6E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	9.10	mg/kg	1.6E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	2.4E-006	3.7E-006	mg/kg-day	3.0E-004	mg/kg-day	1.2E-002
				Iron	21,900	mg/kg	3.8E-003	mg/kg-day	-	(mg/kg-day)-1	-	8.9E-003	mg/kg-day	3.0E-001	mg/kg-day	3.0E-002
				Manganese	417	mg/kg	7.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-004	mg/kg-day	4.7E-002	mg/kg-day	3.6E-003
			Exp. Route Total								5.6E-006					4.7E-002
			Dermal Absorption	Benzo(a)anthracene	1.80	mg/kg	1.6E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.2E-007	3.8E-007	mg/kg-day	2.5E-002	mg/kg-day	1.5E-005
				Benzo(a)pyrene	2.00	mg/kg	1.8E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.3E-006	4.2E-007	mg/kg-day	2.5E-002	mg/kg-day	1.7E-005
				Benzo(b)fluoranthene	1.70	mg/kg	1.5E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.1E-007	3.6E-007	mg/kg-day	2.5E-002	mg/kg-day	1.4E-005
				Benzo(ghi)perylene	0.90	mg/kg	8.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-007	mg/kg-day	2.5E-002	mg/kg-day	7.6E-006
				Bis(2-ethylhexyl)phthalate (BEHP)	40	mg/kg	2.8E-006	mg/kg-day	1.4E-002	(mg/kg-day)-1	3.9E-008	6.5E-006	mg/kg-day	2.0E-002	mg/kg-day	3.2E-004
				Indeno(1,2,3-cd)pyrene	1.20	mg/kg	1.1E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	7.9E-008	2.5E-007	mg/kg-day	2.5E-002	mg/kg-day	1.0E-005
				Phenanthrene	1.80	mg/kg	1.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.8E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,300	mg/kg	7.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	9.10	mg/kg	1.9E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	2.9E-007	4.4E-007	mg/kg-day	3.0E-004	mg/kg-day	1.5E-003
				Iron	21,900	mg/kg	1.5E-004	mg/kg-day	-	(mg/kg-day)-1	-	3.6E-004	mg/kg-day	3.0E-001	mg/kg-day	1.2E-003
				Manganese	417	mg/kg	2.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	6.8E-006	mg/kg-day	1.9E-003	mg/kg-day	3.6E-003
			Exp. Route Total								2.0E-006					6.6E-003
		Exposure Point Total									7.6E-006					5.3E-002
	Exposure Medium Total										7.6E-006					5.3E-002
Surface Water	Surface Water	Little Valley Creek and Tributaries	Incidental Ingestion	1,2-Dichloroethane	0.5	ug/l	8.7E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-007	mg/kg-day	2.0E-002	mg/kg-day	1.0E-005
				cis-1,2-Dichloroethylene	12	ug/l	2.1E-006	mg/kg-day	9.0E-002	(mg/kg-day)-1	1.9E-007	4.9E-006	mg/kg-day	1.0E-002	mg/kg-day	4.9E-004
				Methyl chloride (chloromethane)	5.54	ug/l	9.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-006	mg/kg-day	2.0E-003	mg/kg-day	1.1E-003
				Trichloroethylene	9.09	ug/l	1.6E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	6.3E-007	3.7E-006	mg/kg-day	3.0E-004	mg/kg-day	1.2E-002
				Bis(2-ethylhexyl)phthalate (BEHP)	5.5	ug/l	9.8E-007	mg/kg-day	1.4E-002	(mg/kg-day)-1	1.3E-008	2.2E-006	mg/kg-day	2.0E-002	mg/kg-day	1.1E-004
				Iron	2,655	ug/l	4.6E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-003	mg/kg-day	3.0E-001	mg/kg-day	3.6E-003
				Lead	6.12	ug/l	1.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-006	mg/kg-day	-	mg/kg-day	-
				Manganese	241	ug/l	4.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	9.8E-005	mg/kg-day	4.7E-002	mg/kg-day	2.1E-003
			Exp. Route Total								8.4E-007					2.0E-002
			Dermal Absorption	1,2-Dichloroethane	0.5	ug/l	5.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-006	mg/kg-day	2.0E-002	mg/kg-day	6.7E-005
				cis-1,2-Dichloroethylene	12	ug/l	-	mg/kg-day	9.0E-002	(mg/kg-day)-1	-	-	mg/kg-day	1.0E-002	mg/kg-day	-
				Methyl chloride (chloromethane)	5.54	ug/l	1.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-006	mg/kg-day	2.0E-003	mg/kg-day	1.3E-003
				Trichloroethylene	9.09	ug/l	6.6E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	2.7E-006	1.5E-005	mg/kg-day	3.0E-004	mg/kg-day	5.3E-002
				Bis(2-ethylhexyl)phthalate (BEHP)	5.5	ug/l	1.7E-005	mg/kg-day	1.4E-002	(mg/kg-day)-1	2.4E-007	4.1E-005	mg/kg-day	2.0E-002	mg/kg-day	2.0E-003
				Iron	2,655	ug/l	5.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-004	mg/kg-day	3.0E-001	mg/kg-day	4.1E-004
				Lead	6.12	ug/l	1.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.8E-006	mg/kg-day	-	mg/kg-day	-
				Manganese	241	ug/l	4.8E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-005	mg/kg-day	1.9E-003	mg/kg-day	5.9E-003
			Exp. Route Total								3.0E-006					6.3E-002
		Exposure Point Total									3.8E-006					8.3E-002
	Exposure Medium Total										3.8E-006					8.3E-002
										Total of Receptor Risks Across All Media	1.1E-005				Total of Receptor Hazards Across All Media	1.4E-001

TABLE 7.12 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Shoreline Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Sediment	Sediment	Little Valley Creek and Tributaries	Incidental Ingestion	Benzo(a)anthracene	1.80	mg/kg	4.7E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	3.4E-008	3.7E-007	mg/kg-day	2.5E-002	mg/kg-day	1.5E-005
				Benzo(a)pyrene	2.00	mg/kg	5.2E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	3.8E-007	4.1E-007	mg/kg-day	2.5E-002	mg/kg-day	1.6E-005
				Benzo(b)fluoranthene	1.70	mg/kg	4.4E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	3.2E-008	3.5E-007	mg/kg-day	2.5E-002	mg/kg-day	1.4E-005
				Benzo(ghi)perylene	0.90	mg/kg	2.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-007	mg/kg-day	2.5E-002	mg/kg-day	7.3E-006
				Bis(2-ethylhexyl)phthalate (BEHP)	40	mg/kg	1.0E-006	mg/kg-day	1.4E-002	(mg/kg-day)-1	1.5E-008	8.1E-006	mg/kg-day	2.0E-002	mg/kg-day	4.1E-004
				Indeno(1,2,3-cd)pyrene	1.20	mg/kg	3.1E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.3E-008	2.4E-007	mg/kg-day	2.5E-002	mg/kg-day	9.8E-006
				Phenanthrene	1.80	mg/kg	4.7E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.7E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,300	mg/kg	3.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	9.10	mg/kg	2.4E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.6E-007	1.9E-006	mg/kg-day	3.0E-004	mg/kg-day	6.2E-003
				Iron	21,900	mg/kg	5.7E-004	mg/kg-day	-	(mg/kg-day)-1	-	4.5E-003	mg/kg-day	3.0E-001	mg/kg-day	1.5E-002
				Manganese	417	mg/kg	1.1E-005	mg/kg-day	-	(mg/kg-day)-1	-	8.5E-005	mg/kg-day	4.7E-002	mg/kg-day	1.8E-003
			Exp. Route Total								8.4E-007					2.3E-002
			Dermal Absorption	Benzo(a)anthracene	1.80	mg/kg	3.5E-009	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.5E-009	2.7E-008	mg/kg-day	2.5E-002	mg/kg-day	1.1E-006
				Benzo(a)pyrene	2.00	mg/kg	3.9E-009	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.8E-008	3.0E-008	mg/kg-day	2.5E-002	mg/kg-day	1.2E-006
				Benzo(b)fluoranthene	1.70	mg/kg	3.3E-009	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.4E-009	2.6E-008	mg/kg-day	2.5E-002	mg/kg-day	1.0E-006
				Benzo(ghi)perylene	0.90	mg/kg	1.7E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-008	mg/kg-day	2.5E-002	mg/kg-day	5.4E-007
				Bis(2-ethylhexyl)phthalate (BEHP)	40	mg/kg	6.0E-008	mg/kg-day	1.4E-002	(mg/kg-day)-1	8.4E-010	4.6E-007	mg/kg-day	2.0E-002	mg/kg-day	2.3E-005
				Indeno(1,2,3-cd)pyrene	1.20	mg/kg	2.3E-009	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.7E-009	1.8E-008	mg/kg-day	2.5E-002	mg/kg-day	7.2E-007
				Phenanthrene	1.80	mg/kg	3.5E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,300	mg/kg	1.7E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	-	mg/kg-day	-
				Arsenic	9.10	mg/kg	4.1E-009	mg/kg-day	1.5E+000	(mg/kg-day)-1	6.1E-009	3.2E-008	mg/kg-day	3.0E-004	mg/kg-day	1.1E-004
				Iron	21,900	mg/kg	3.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-005	mg/kg-day	3.0E-001	mg/kg-day	8.5E-005
				Manganese	417	mg/kg	6.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	4.8E-007	mg/kg-day	1.9E-003	mg/kg-day	2.5E-004
			Exp. Route Total								4.2E-008					4.7E-004
		Exposure Point Total									8.9E-007					2.4E-002
	Exposure Medium Total										8.9E-007					2.4E-002
Surface Water	Surface Water	Little Valley Creek and Tributaries	Incidental Ingestion	1,2-Dichloroethane	0.5	ug/l	1.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-007	mg/kg-day	2.0E-002	mg/kg-day	5.1E-006
				cis-1,2-Dichloroethylene	12	ug/l	3.1E-007	mg/kg-day	9.0E-002	(mg/kg-day)-1	2.8E-008	2.4E-006	mg/kg-day	1.0E-002	mg/kg-day	2.4E-004
				Methyl chloride (chloromethane)	5.54	ug/l	1.4E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	2.0E-003	mg/kg-day	5.6E-004
				Trichloroethylene	9.09	ug/l	2.4E-007	mg/kg-day	4.0E-001	(mg/kg-day)-1	9.5E-008	1.9E-006	mg/kg-day	3.0E-004	mg/kg-day	6.2E-003
				Bis(2-ethylhexyl)phthalate (BEHP)	5.5	ug/l	1.4E-007	mg/kg-day	1.4E-002	(mg/kg-day)-1	2.0E-009	1.1E-006	mg/kg-day	2.0E-002	mg/kg-day	5.6E-005
				Iron	2,655	ug/l	6.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.4E-004	mg/kg-day	3.0E-001	mg/kg-day	1.8E-003
				Lead	6.12	ug/l	1.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-006	mg/kg-day	-	mg/kg-day	-
				Manganese	241	ug/l	6.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.9E-005	mg/kg-day	4.7E-002	mg/kg-day	1.0E-003
			Exp. Route Total								1.3E-007					9.9E-003
			Dermal Absorption	1,2-Dichloroethane	0.5	ug/l	6.6E-008	mg/kg-day	-	(mg/kg-day)-1	-	6.7E-007	mg/kg-day	2.0E-002	mg/kg-day	3.4E-005
				cis-1,2-Dichloroethylene	12	ug/l	-	mg/kg-day	9.0E-002	(mg/kg-day)-1	-	-	mg/kg-day	1.0E-002	mg/kg-day	-
				Methyl chloride (chloromethane)	5.54	ug/l	1.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-006	mg/kg-day	2.0E-003	mg/kg-day	6.4E-004
				Trichloroethylene	9.09	ug/l	1.0E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	4.1E-007	8.0E-006	mg/kg-day	3.0E-004	mg/kg-day	2.7E-002
				Bis(2-ethylhexyl)phthalate (BEHP)	5.5	ug/l	2.6E-006	mg/kg-day	1.4E-002	(mg/kg-day)-1	3.7E-008	2.0E-005	mg/kg-day	2.0E-002	mg/kg-day	1.0E-003
				Iron	2,655	ug/l	7.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	6.2E-005	mg/kg-day	3.0E-001	mg/kg-day	2.1E-004
				Lead	6.12	ug/l	1.8E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-008	mg/kg-day	-	mg/kg-day	-
				Manganese	241	ug/l	7.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.6E-006	mg/kg-day	1.9E-003	mg/kg-day	2.9E-003
			Exp. Route Total								4.5E-007					3.1E-002
		Exposure Point Total									5.7E-007					4.1E-002
	Exposure Medium Total										5.7E-007					4.1E-002
										Total of Receptor Risks Across All Media	1.5E-006			Total of Receptor Hazards Across All Media		6.5E-002

TABLE 7.13 RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Shoreline Resident
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Sediment	Sediment	Little Valley Creek and Tributaries	Incidental Ingestion	Benzo(a)anthracene	1.60	mg/kg	5.9E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	4.3E-007	6.8E-006	mg/kg-day	2.5E-002	mg/kg-day	2.7E-004
				Benzo(a)pyrene	2.00	mg/kg	6.5E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	4.8E-006	7.6E-006	mg/kg-day	2.5E-002	mg/kg-day	3.0E-004
				Benzo(b)fluoranthene	1.70	mg/kg	5.5E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	4.0E-007	6.5E-006	mg/kg-day	2.5E-002	mg/kg-day	2.6E-004
				Benzo(ghi)perylene	0.90	mg/kg	2.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-006	mg/kg-day	2.5E-002	mg/kg-day	1.4E-004
				Bis(2-ethylhexyl)phthalate (BEHP)	40	mg/kg	1.3E-005	mg/kg-day	1.4E-002	(mg/kg-day)-1	1.8E-007	1.5E-004	mg/kg-day	2.0E-002	mg/kg-day	7.6E-003
				Indeno(1,2,3-cd)pyrene	1.20	mg/kg	3.9E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.9E-007	4.6E-006	mg/kg-day	2.5E-002	mg/kg-day	1.8E-004
				Phenanthrene	1.80	mg/kg	5.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.8E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,300	mg/kg	3.7E-003	mg/kg-day	-	(mg/kg-day)-1	-	4.3E-002	mg/kg-day	-	mg/kg-day	-
				Arsenic	9.10	mg/kg	3.0E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	4.4E-006	3.5E-005	mg/kg-day	3.0E-004	mg/kg-day	1.2E-001
				Iron	21,900	mg/kg	7.1E-003	mg/kg-day	-	(mg/kg-day)-1	-	8.3E-002	mg/kg-day	3.0E-001	mg/kg-day	2.8E-001
				Manganese	417	mg/kg	1.4E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-003	mg/kg-day	4.7E-002	mg/kg-day	3.4E-002
			Exp. Route Total								1.0E-005					4.4E-001
			Dermal Absorption	Benzo(a)anthracene	1.60	mg/kg	2.1E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.6E-007	2.5E-006	mg/kg-day	2.5E-002	mg/kg-day	1.0E-004
				Benzo(a)pyrene	2.00	mg/kg	2.4E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.7E-006	2.8E-006	mg/kg-day	2.5E-002	mg/kg-day	1.1E-004
				Benzo(b)fluoranthene	1.70	mg/kg	2.0E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.5E-007	2.4E-006	mg/kg-day	2.5E-002	mg/kg-day	9.4E-005
				Benzo(ghi)perylene	0.90	mg/kg	1.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-006	mg/kg-day	2.5E-002	mg/kg-day	5.0E-005
				Bis(2-ethylhexyl)phthalate (BEHP)	40	mg/kg	3.6E-006	mg/kg-day	1.4E-002	(mg/kg-day)-1	5.1E-008	4.3E-005	mg/kg-day	2.0E-002	mg/kg-day	2.1E-003
				Indeno(1,2,3-cd)pyrene	1.20	mg/kg	1.4E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.0E-007	1.7E-006	mg/kg-day	2.5E-002	mg/kg-day	6.6E-005
				Phenanthrene	1.80	mg/kg	2.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,300	mg/kg	1.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	9.10	mg/kg	2.5E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.7E-007	2.9E-006	mg/kg-day	3.0E-004	mg/kg-day	9.7E-003
				Iron	21,900	mg/kg	2.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-003	mg/kg-day	3.0E-001	mg/kg-day	7.6E-003
				Manganese	417	mg/kg	3.8E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.4E-005	mg/kg-day	1.9E-003	mg/kg-day	2.3E-002
			Exp. Route Total								2.6E-006					4.3E-002
		Exposure Point Total									1.3E-005					4.8E-001
	Exposure Medium Total										1.3E-005					4.8E-001
Surface Water	Surface Water	Little Valley Creek and Tributaries	Incidental Ingestion	1,2-Dichloroethane	0.5	ug/l	8.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	9.5E-007	mg/kg-day	2.0E-002	mg/kg-day	4.7E-005
				cis-1,2-Dichloroethylene	12	ug/l	2.0E-006	mg/kg-day	9.0E-002	(mg/kg-day)-1	1.8E-007	2.3E-005	mg/kg-day	1.0E-002	mg/kg-day	2.3E-003
				Methyl chloride (chloromethane)	5.54	ug/l	9.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-005	mg/kg-day	2.0E-003	mg/kg-day	5.3E-003
				Trichloroethylene	9.09	ug/l	1.5E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	5.9E-007	1.7E-005	mg/kg-day	3.0E-004	mg/kg-day	5.8E-002
				Bis(2-ethylhexyl)phthalate (BEHP)	5.5	ug/l	9.0E-007	mg/kg-day	1.4E-002	(mg/kg-day)-1	1.3E-008	1.0E-005	mg/kg-day	2.0E-002	mg/kg-day	5.2E-004
				Iron	2,655	ug/l	4.3E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.0E-003	mg/kg-day	3.0E-001	mg/kg-day	1.7E-002
				Lead	6.12	ug/l	1.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	241	ug/l	3.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.6E-004	mg/kg-day	4.7E-002	mg/kg-day	9.7E-003
			Exp. Route Total								7.6E-007					9.2E-002
			Dermal Absorption	1,2-Dichloroethane	0.5	ug/l	2.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.1E-006	mg/kg-day	2.0E-002	mg/kg-day	1.5E-004
				cis-1,2-Dichloroethylene	12	ug/l	-	mg/kg-day	9.0E-002	(mg/kg-day)-1	-	-	mg/kg-day	1.0E-002	mg/kg-day	-
				Methyl chloride (chloromethane)	5.54	ug/l	5.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.9E-006	mg/kg-day	2.0E-003	mg/kg-day	2.9E-003
				Trichloroethylene	9.09	ug/l	3.1E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	1.3E-006	3.7E-005	mg/kg-day	3.0E-004	mg/kg-day	1.2E-001
				Bis(2-ethylhexyl)phthalate (BEHP)	5.5	ug/l	8.0E-006	mg/kg-day	1.4E-002	(mg/kg-day)-1	1.1E-007	9.3E-005	mg/kg-day	2.0E-002	mg/kg-day	4.7E-003
				Iron	2,655	ug/l	2.4E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.8E-004	mg/kg-day	3.0E-001	mg/kg-day	9.4E-004
				Lead	6.12	ug/l	5.6E-009	mg/kg-day	-	(mg/kg-day)-1	-	6.5E-008	mg/kg-day	-	mg/kg-day	-
				Manganese	241	ug/l	2.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-005	mg/kg-day	1.9E-003	mg/kg-day	1.3E-002
			Exp. Route Total								1.4E-006					1.4E-001
		Exposure Point Total									2.1E-006					2.4E-001
	Exposure Medium Total										2.1E-006					2.4E-001
										Total of Receptor Risks Across All Media	1.5E-005			Total of Receptor Hazards Across All Media		7.1E-001

TABLE 7.13 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Shoreline Resident
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Sediment	Sediment	Little Valley Creek and Tributaries	Incidental Ingestion	Benzo(a)anthracene	1.80	mg/kg	2.9E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.1E-007	3.4E-006	mg/kg-day	2.5E-002	mg/kg-day	1.4E-004
				Benzo(a)pyrene	2.00	mg/kg	3.3E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.4E-006	3.8E-006	mg/kg-day	2.5E-002	mg/kg-day	1.5E-004
				Benzo(b)fluoranthene	1.70	mg/kg	2.8E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.0E-007	3.2E-006	mg/kg-day	2.5E-002	mg/kg-day	1.3E-004
				Benzo(ghi)perylene	0.90	mg/kg	1.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-006	mg/kg-day	2.5E-002	mg/kg-day	6.8E-005
				Bis(2-ethylhexyl)phthalate (BEHP)	40	mg/kg	6.5E-006	mg/kg-day	1.4E-002	(mg/kg-day)-1	9.1E-008	7.6E-005	mg/kg-day	2.0E-002	mg/kg-day	3.8E-003
				Indeno(1,2,3-cd)pyrene	1.20	mg/kg	2.0E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.4E-007	2.3E-006	mg/kg-day	2.5E-002	mg/kg-day	9.1E-005
				Phenanthrene	1.80	mg/kg	2.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,300	mg/kg	1.8E-003	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-002	mg/kg-day	-	mg/kg-day	-
				Arsenic	9.10	mg/kg	1.5E-006	mg/kg-day	1.5E+000	(mg/kg-day)-1	2.2E-006	1.7E-005	mg/kg-day	3.0E-004	mg/kg-day	5.8E-002
				Iron	21,900	mg/kg	3.6E-003	mg/kg-day	-	(mg/kg-day)-1	-	4.2E-002	mg/kg-day	3.0E-001	mg/kg-day	1.4E-001
				Manganese	417	mg/kg	6.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	7.9E-004	mg/kg-day	4.7E-002	mg/kg-day	1.7E-002
			Exp. Route Total								5.2E-006					2.2E-001
			Dermal Absorption	Benzo(a)anthracene	1.80	mg/kg	2.1E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.6E-008	2.5E-007	mg/kg-day	2.5E-002	mg/kg-day	1.0E-005
				Benzo(a)pyrene	2.00	mg/kg	2.4E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.7E-007	2.8E-007	mg/kg-day	2.5E-002	mg/kg-day	1.1E-005
				Benzo(b)fluoranthene	1.70	mg/kg	2.0E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.5E-008	2.4E-007	mg/kg-day	2.5E-002	mg/kg-day	9.4E-006
				Benzo(ghi)perylene	0.90	mg/kg	1.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-007	mg/kg-day	2.5E-002	mg/kg-day	5.0E-006
				Bis(2-ethylhexyl)phthalate (BEHP)	40	mg/kg	3.6E-007	mg/kg-day	1.4E-002	(mg/kg-day)-1	5.1E-009	4.3E-006	mg/kg-day	2.0E-002	mg/kg-day	2.1E-004
				Indeno(1,2,3-cd)pyrene	1.20	mg/kg	1.4E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.0E-008	1.7E-007	mg/kg-day	2.5E-002	mg/kg-day	6.6E-006
				Phenanthrene	1.80	mg/kg	2.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,300	mg/kg	1.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	9.10	mg/kg	2.5E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	3.7E-008	2.9E-007	mg/kg-day	3.0E-004	mg/kg-day	9.7E-004
				Iron	21,900	mg/kg	2.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-004	mg/kg-day	3.0E-001	mg/kg-day	7.8E-004
				Manganese	417	mg/kg	3.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	4.4E-006	mg/kg-day	1.9E-003	mg/kg-day	2.3E-003
			Exp. Route Total								2.6E-007					4.3E-003
		Exposure Point Total									5.5E-006					2.2E-001
	Exposure Medium Total										5.5E-006					2.2E-001
Surface Water	Surface Water	Little Valley Creek and Tributaries	Incidental Ingestion	1,2-Dichloroethane	0.5	ug/l	4.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	4.7E-007	mg/kg-day	2.0E-002	mg/kg-day	2.4E-005
				cis-1,2-Dichloroethylene	12	ug/l	9.8E-007	mg/kg-day	9.0E-002	(mg/kg-day)-1	8.8E-008	1.1E-005	mg/kg-day	1.0E-002	mg/kg-day	1.1E-003
				Methyl chloride (chloromethane)	5.54	ug/l	4.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.3E-006	mg/kg-day	2.0E-003	mg/kg-day	2.6E-003
				Trichloroethylene	9.09	ug/l	7.4E-007	mg/kg-day	4.0E-001	(mg/kg-day)-1	3.0E-007	8.6E-006	mg/kg-day	3.0E-004	mg/kg-day	2.9E-002
				Bis(2-ethylhexyl)phthalate (BEHP)	5.5	ug/l	4.5E-007	mg/kg-day	1.4E-002	(mg/kg-day)-1	6.3E-009	5.2E-006	mg/kg-day	2.0E-002	mg/kg-day	2.6E-004
				Iron	2,655	ug/l	2.2E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-003	mg/kg-day	3.0E-001	mg/kg-day	8.4E-003
				Lead	6.12	ug/l	5.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.8E-006	mg/kg-day	-	mg/kg-day	-
				Manganese	241	ug/l	2.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-004	mg/kg-day	4.7E-002	mg/kg-day	4.9E-003
			Exp. Route Total								3.9E-007					4.6E-002
			Dermal Absorption	1,2-Dichloroethane	0.5	ug/l	1.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-006	mg/kg-day	2.0E-002	mg/kg-day	7.7E-005
				cis-1,2-Dichloroethylene	12	ug/l	-	mg/kg-day	9.0E-002	(mg/kg-day)-1	-	-	mg/kg-day	1.0E-002	mg/kg-day	-
				Methyl chloride (chloromethane)	5.54	ug/l	2.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.9E-006	mg/kg-day	2.0E-003	mg/kg-day	1.5E-003
				Trichloroethylene	9.09	ug/l	1.6E-006	mg/kg-day	4.0E-001	(mg/kg-day)-1	6.3E-007	1.8E-005	mg/kg-day	3.0E-004	mg/kg-day	6.1E-002
				Bis(2-ethylhexyl)phthalate (BEHP)	5.5	ug/l	4.0E-006	mg/kg-day	1.4E-002	(mg/kg-day)-1	5.6E-008	4.7E-005	mg/kg-day	2.0E-002	mg/kg-day	2.3E-003
				Iron	2,655	ug/l	1.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-004	mg/kg-day	3.0E-001	mg/kg-day	4.7E-004
				Lead	6.12	ug/l	2.8E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.3E-008	mg/kg-day	-	mg/kg-day	-
				Manganese	241	ug/l	1.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	1.9E-003	mg/kg-day	6.7E-003
			Exp. Route Total								6.8E-007					7.2E-002
		Exposure Point Total									1.1E-006					1.2E-001
	Exposure Medium Total										1.1E-006					1.2E-001
										Total of Receptor Risks Across All Media	6.6E-006			Total of Receptor Hazards Across All Media		3.4E-001

TABLE 7.14 RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	BIA All Soil	Incidental Ingestion	Benzene	0.004	mg/kg	1.3E-010	mg/kg-day	5.5E-002	(mg/kg-day)-1	7.3E-012	9.3E-009	mg/kg-day	4.0E-003	mg/kg-day	2.3E-006
				Trichloroethylene	0.018	mg/kg	6.1E-010	mg/kg-day	4.0E-001	(mg/kg-day)-1	2.4E-010	4.3E-008	mg/kg-day	3.0E-004	mg/kg-day	1.4E-004
				Benzo(a)pyrene	0.12	mg/kg	4.0E-009	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.9E-008	2.8E-007	mg/kg-day	2.5E-002	mg/kg-day	1.1E-005
				Benzo(ghi)perylene	0.06	mg/kg	2.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-007	mg/kg-day	2.5E-002	mg/kg-day	5.6E-006
				Phenanthrene	0.13	mg/kg	4.2E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,391	mg/kg	3.8E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-002	mg/kg-day	-	mg/kg-day	-
				Arsenic	13.27	mg/kg	4.4E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	6.6E-007	3.1E-005	mg/kg-day	3.0E-004	mg/kg-day	1.0E-001
				Barium	193	mg/kg	6.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.5E-004	mg/kg-day	7.0E-002	mg/kg-day	6.4E-003
				Chromium	24	mg/kg	8.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	5.7E-005	mg/kg-day	3.0E-003	mg/kg-day	1.9E-002
				Iron	23,761	mg/kg	7.9E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.5E-002	mg/kg-day	3.0E-001	mg/kg-day	1.8E-001
				Manganese	654	mg/kg	2.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-003	mg/kg-day	4.7E-002	mg/kg-day	3.2E-002
				Thallium	12.5	mg/kg	4.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.9E-005	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								6.9E-007					3.4E-001
			Dermal Absorption	Benzene	0.004	mg/kg	2.0E-013	mg/kg-day	5.5E-002	(mg/kg-day)-1	1.1E-014	1.4E-011	mg/kg-day	4.0E-003	mg/kg-day	3.5E-009
				Trichloroethylene	0.018	mg/kg	5.5E-011	mg/kg-day	4.0E-001	(mg/kg-day)-1	2.2E-011	3.8E-009	mg/kg-day	3.0E-004	mg/kg-day	1.3E-005
				Benzo(a)pyrene	0.12	mg/kg	1.5E-009	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.1E-008	1.1E-007	mg/kg-day	2.5E-002	mg/kg-day	4.3E-006
				Benzo(ghi)perylene	0.06	mg/kg	7.8E-010	mg/kg-day	-	(mg/kg-day)-1	-	5.4E-008	mg/kg-day	2.5E-002	mg/kg-day	2.2E-006
				Phenanthrene	0.13	mg/kg	1.7E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,391	mg/kg	1.1E-005	mg/kg-day	-	(mg/kg-day)-1	-	7.9E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	13.27	mg/kg	4.0E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	6.0E-008	2.8E-006	mg/kg-day	3.0E-004	mg/kg-day	9.3E-003
				Barium	193	mg/kg	1.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	4.9E-003	mg/kg-day	2.7E-003
				Chromium	24	mg/kg	2.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-006	mg/kg-day	7.5E-005	mg/kg-day	2.3E-002
				Iron	23,761	mg/kg	2.4E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-003	mg/kg-day	3.0E-001	mg/kg-day	5.5E-003
				Manganese	654	mg/kg	6.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	4.6E-005	mg/kg-day	1.9E-003	mg/kg-day	2.4E-002
				Thallium	12.5	mg/kg	1.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.7E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								7.1E-008					6.4E-002
			Inhalation	Benzene	0.004	mg/kg	2.3E-008	mg/kg-day	2.7E-002	(mg/kg-day)-1	6.2E-010	1.6E-006	mg/kg-day	8.6E-003	mg/kg-day	1.9E-004
				Trichloroethylene	0.018	mg/kg	8.9E-008	mg/kg-day	4.0E-001	(mg/kg-day)-1	3.6E-008	6.2E-006	mg/kg-day	1.0E-002	mg/kg-day	6.2E-004
				Benzo(a)pyrene	0.12	mg/kg	1.2E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	3.9E-009	8.7E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	0.06	mg/kg	6.8E-010	mg/kg-day	-	(mg/kg-day)-1	-	4.1E-008	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.13	mg/kg	1.2E-009	mg/kg-day	-	(mg/kg-day)-1	-	8.7E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,391	mg/kg	1.1E-004	mg/kg-day	-	(mg/kg-day)-1	-	7.8E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	13.27	mg/kg	1.3E-007	mg/kg-day	1.5E+001	(mg/kg-day)-1	1.9E-006	9.1E-006	mg/kg-day	-	mg/kg-day	-
				Barium	193	mg/kg	1.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-004	mg/kg-day	-	mg/kg-day	-
				Chromium	24	mg/kg	2.4E-007	mg/kg-day	4.2E-001	(mg/kg-day)-1	1.0E-007	1.7E-005	mg/kg-day	2.9E-005	mg/kg-day	5.8E-001
				Iron	23,761	mg/kg	2.3E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-002	mg/kg-day	-	mg/kg-day	-
				Manganese	654	mg/kg	6.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.5E-004	mg/kg-day	1.4E-005	mg/kg-day	3.1E+001
				Thallium	12.5	mg/kg	1.2E-007	mg/kg-day	-	(mg/kg-day)-1	-	8.6E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								2.1E-006					3.2E+001
		Exposure Point Total									2.8E-006					3.2E+001
	Exposure Medium Total										2.8E-006					3.2E+001
Medium Total											2.8E-006					3.2E+001
											Total of Receptor Risks Across All Media	2.8E-006				Total of Receptor Hazards Across All Media	3.2E+001

TABLE 7.14 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	BIA All Soil	Dermal Absorption	Benzene	0.004	mg/kg	2.0E-013	mg/kg-day	5.5E-002	(mg/kg-day)-1	1.1E-014	1.4E-011	mg/kg-day	4.0E-003	mg/kg-day	3.5E-009
				Trichloroethylene	0.018	mg/kg	5.5E-011	mg/kg-day	4.0E-001	(mg/kg-day)-1	2.2E-011	3.8E-009	mg/kg-day	3.0E-004	mg/kg-day	1.3E-005
				Benzo(a)pyrene	0.12	mg/kg	1.5E-009	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.1E-008	1.1E-007	mg/kg-day	2.5E-002	mg/kg-day	4.3E-006
				Benzo(ghi)perylene	0.06	mg/kg	7.8E-010	mg/kg-day	-	(mg/kg-day)-1	-	5.4E-008	mg/kg-day	2.5E-002	mg/kg-day	2.2E-006
				Phenanthrene	0.13	mg/kg	1.7E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,391	mg/kg	1.1E-005	mg/kg-day	-	(mg/kg-day)-1	-	7.9E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	13.27	mg/kg	4.0E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	6.0E-008	2.8E-006	mg/kg-day	3.0E-004	mg/kg-day	9.3E-003
				Barium	193	mg/kg	1.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	4.9E-003	mg/kg-day	2.7E-003
				Chromium	24	mg/kg	2.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-006	mg/kg-day	7.5E-005	mg/kg-day	2.3E-002
				Iron	23,761	mg/kg	2.4E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-003	mg/kg-day	3.0E-001	mg/kg-day	5.5E-003
				Manganese	654	mg/kg	6.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	4.6E-005	mg/kg-day	1.9E-003	mg/kg-day	2.4E-002
				Thallium	12.5	mg/kg	1.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.7E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								7.1E-008					6.4E-002
			Inhalation	Benzene	0.004	mg/kg	1.4E-008	mg/kg-day	2.7E-002	(mg/kg-day)-1	3.7E-010	9.6E-007	mg/kg-day	8.6E-003	mg/kg-day	1.1E-004
				Trichloroethylene	0.018	mg/kg	5.3E-008	mg/kg-day	4.0E-001	(mg/kg-day)-1	2.1E-008	3.7E-006	mg/kg-day	1.0E-002	mg/kg-day	3.7E-004
				Benzo(a)pyrene	0.12	mg/kg	7.5E-010	mg/kg-day	3.1E+000	(mg/kg-day)-1	2.3E-009	5.2E-008	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	0.06	mg/kg	3.7E-010	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-008	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.13	mg/kg	7.5E-010	mg/kg-day	-	(mg/kg-day)-1	-	5.2E-008	mg/kg-day	-	mg/kg-day	-
				Aluminum	11,391	mg/kg	6.7E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.7E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	13.27	mg/kg	7.6E-008	mg/kg-day	1.5E+001	(mg/kg-day)-1	1.2E-006	5.4E-006	mg/kg-day	-	mg/kg-day	-
				Barium	193	mg/kg	1.1E-006	mg/kg-day	-	(mg/kg-day)-1	-	7.9E-005	mg/kg-day	-	mg/kg-day	-
				Chromium	24	mg/kg	1.4E-007	mg/kg-day	4.2E-001	(mg/kg-day)-1	6.0E-008	1.0E-005	mg/kg-day	2.9E-005	mg/kg-day	3.5E-001
				Iron	23,761	mg/kg	1.4E-004	mg/kg-day	-	(mg/kg-day)-1	-	9.7E-003	mg/kg-day	-	mg/kg-day	-
				Manganese	654	mg/kg	3.8E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-004	mg/kg-day	1.4E-005	mg/kg-day	1.9E+001
				Thallium	12.5	mg/kg	7.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.1E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.3E-006					1.9E+001
		Exposure Point Total									1.3E-006					1.9E+001
	Exposure Medium Total										1.3E-006					1.9E+001
Medium Total											1.3E-006					1.9E+001
										Total of Receptor Risks Across All Media	1.3E-006			Total of Receptor Hazards Across All Media		1.9E+001

TABLE 7.15 RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA All Soil	Incidental Ingestion	Benzene	0.001	mg/kg	3.3E-011	mg/kg-day	5.5E-002	(mg/kg-day)-1	1.8E-012	2.3E-009	mg/kg-day	4.0E-003	mg/kg-day	5.8E-007
				Methylcyclohexane	0.43	mg/kg	1.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-006	mg/kg-day	-	mg/kg-day	-
				Trichloroethylene	27.8	mg/kg	9.2E-007	mg/kg-day	4.0E-001	(mg/kg-day)-1	3.7E-007	6.5E-005	mg/kg-day	3.0E-004	mg/kg-day	2.2E-001
				Acenaphthylene	1.90	mg/kg	6.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	4.4E-006	mg/kg-day	2.5E-002	mg/kg-day	1.8E-004
				Benzo(a)anthracene	17.1	mg/kg	5.7E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	4.1E-007	4.0E-005	mg/kg-day	2.5E-002	mg/kg-day	1.6E-003
				Benzo(a)pyrene	16.9	mg/kg	5.6E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	4.1E-006	3.9E-005	mg/kg-day	2.5E-002	mg/kg-day	1.6E-003
				Benzo(b)fluoranthene	25.4	mg/kg	8.4E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	6.1E-007	5.9E-005	mg/kg-day	2.5E-002	mg/kg-day	2.4E-003
				Benzo(ghi)perylene	5.64	mg/kg	1.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	2.5E-002	mg/kg-day	5.2E-004
				Benzo(k)fluoranthene	10.8	mg/kg	3.6E-007	mg/kg-day	7.3E-002	(mg/kg-day)-1	2.6E-008	2.5E-005	mg/kg-day	2.5E-002	mg/kg-day	1.0E-003
				Dibenzo(a,h)anthracene	0.94	mg/kg	3.1E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.3E-007	2.2E-006	mg/kg-day	5.0E-002	mg/kg-day	4.4E-005
				Indeno(1,2,3-cd)pyrene	6.53	mg/kg	2.2E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.6E-007	1.5E-005	mg/kg-day	2.5E-002	mg/kg-day	6.1E-004
				Naphthalene	5.69	mg/kg	1.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.3E-005	mg/kg-day	2.0E-002	mg/kg-day	6.6E-004
				Phenanthrene	15.2	mg/kg	5.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.5E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,525	mg/kg	3.2E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-002	mg/kg-day	-	mg/kg-day	-
				Antimony	14.5	mg/kg	4.8E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-005	mg/kg-day	4.0E-004	mg/kg-day	8.4E-002
				Arsenic	22.2	mg/kg	7.4E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.1E-006	5.2E-005	mg/kg-day	3.0E-004	mg/kg-day	1.7E-001
				Cadmium	30	mg/kg	1.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	7.0E-005	mg/kg-day	1.0E-003	mg/kg-day	7.0E-002
				Chromium	287	mg/kg	9.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	6.7E-004	mg/kg-day	3.0E-003	mg/kg-day	2.2E-001
				Copper	1,780	mg/kg	5.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	4.1E-003	mg/kg-day	-	mg/kg-day	-
				Iron	39,194	mg/kg	1.3E-003	mg/kg-day	-	(mg/kg-day)-1	-	9.1E-002	mg/kg-day	3.0E-001	mg/kg-day	3.0E-001
				Lead	310	mg/kg	1.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	7.2E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	1,320	mg/kg	4.4E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.1E-003	mg/kg-day	4.7E-002	mg/kg-day	6.5E-002
				Mercury	1.57	mg/kg	5.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.6E-006	mg/kg-day	3.0E-004	mg/kg-day	1.2E-002
				Nickel	373	mg/kg	1.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	8.7E-004	mg/kg-day	2.0E-002	mg/kg-day	4.3E-002
				Thallium	2.42	mg/kg	8.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.6E-006	mg/kg-day	-	mg/kg-day	-
				Vanadium	28.2	mg/kg	9.4E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.5E-005	mg/kg-day	7.0E-003	mg/kg-day	9.4E-003
			Exp. Route Total								7.0E-006					1.2E+000
			Dermal Absorption	Benzene	0.001	mg/kg	5.0E-014	mg/kg-day	5.5E-002	(mg/kg-day)-1	2.7E-015	3.5E-012	mg/kg-day	4.0E-003	mg/kg-day	8.7E-010
				Methylcyclohexane	0.43	mg/kg	4.3E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-007	mg/kg-day	-	mg/kg-day	-
				Trichloroethylene	27.8	mg/kg	8.3E-008	mg/kg-day	4.0E-001	(mg/kg-day)-1	3.3E-008	5.8E-006	mg/kg-day	3.0E-004	mg/kg-day	1.9E-002
				Acenaphthylene	1.90	mg/kg	2.5E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-006	mg/kg-day	2.5E-002	mg/kg-day	6.9E-005
				Benzo(a)anthracene	17.1	mg/kg	2.2E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.6E-007	1.6E-005	mg/kg-day	2.5E-002	mg/kg-day	6.2E-004
				Benzo(a)pyrene	16.9	mg/kg	2.2E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.6E-006	1.5E-005	mg/kg-day	2.5E-002	mg/kg-day	6.1E-004
				Benzo(b)fluoranthene	25.4	mg/kg	3.3E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.4E-007	2.3E-005	mg/kg-day	2.5E-002	mg/kg-day	9.2E-004
				Benzo(ghi)perylene	5.64	mg/kg	7.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.1E-006	mg/kg-day	2.5E-002	mg/kg-day	2.0E-004
				Benzo(k)fluoranthene	10.8	mg/kg	1.4E-007	mg/kg-day	7.3E-002	(mg/kg-day)-1	1.0E-008	9.8E-006	mg/kg-day	2.5E-002	mg/kg-day	3.9E-004
				Dibenzo(a,h)anthracene	0.94	mg/kg	1.2E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	8.9E-008	8.5E-007	mg/kg-day	5.0E-002	mg/kg-day	1.7E-005
				Indeno(1,2,3-cd)pyrene	6.53	mg/kg	8.5E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	6.2E-008	5.9E-006	mg/kg-day	2.5E-002	mg/kg-day	2.4E-004
				Naphthalene	5.69	mg/kg	7.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.2E-006	mg/kg-day	2.0E-002	mg/kg-day	2.6E-004
				Phenanthrene	15.2	mg/kg	2.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,525	mg/kg	9.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	6.6E-004	mg/kg-day	-	mg/kg-day	-

TABLE 7.15 RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA All Soil	Dermal Absorption	Antimony	14.5	mg/kg	1.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-006	mg/kg-day	6.0E-005	mg/kg-day	1.7E-002
				Arsenic	22.2	mg/kg	6.6E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.0E-007	4.6E-006	mg/kg-day	3.0E-004	mg/kg-day	1.5E-002
				Cadmium	30	mg/kg	3.0E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-006	mg/kg-day	2.5E-005	mg/kg-day	8.4E-002
				Chromium	287	mg/kg	2.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-005	mg/kg-day	7.5E-005	mg/kg-day	2.7E-001
				Copper	1,780	mg/kg	1.6E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-004	mg/kg-day	-	mg/kg-day	-
				Iron	39,194	mg/kg	3.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-003	mg/kg-day	3.0E-001	mg/kg-day	9.1E-003
				Lead	310	mg/kg	3.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	1,320	mg/kg	1.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	9.2E-005	mg/kg-day	1.9E-003	mg/kg-day	4.8E-002
				Mercury	1.57	mg/kg	1.6E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-007	mg/kg-day	2.1E-005	mg/kg-day	5.2E-003
				Nickel	373	mg/kg	3.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-005	mg/kg-day	8.0E-004	mg/kg-day	3.2E-002
				Thallium	2.42	mg/kg	2.4E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-007	mg/kg-day	-	mg/kg-day	-
				Vanadium	28.2	mg/kg	2.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-006	mg/kg-day	1.8E-004	mg/kg-day	1.1E-002
			Exp. Route Total								2.3E-006					5.1E-001
			Inhalation	Benzene	0.001	mg/kg	4.8E-009	mg/kg-day	2.7E-002	(mg/kg-day)-1	1.3E-010	3.4E-007	mg/kg-day	8.6E-003	mg/kg-day	3.9E-005
				Methylcyclohexane	0.43	mg/kg	5.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.1E-004	mg/kg-day	8.6E-001	mg/kg-day	4.8E-004
				Trichloroethylene	27.8	mg/kg	1.1E-004	mg/kg-day	4.0E-001	(mg/kg-day)-1	4.5E-005	8.0E-003	mg/kg-day	1.0E-002	mg/kg-day	8.0E-001
				Acenaphthylene	1.90	mg/kg	1.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	9.3E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	17.1	mg/kg	1.7E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	5.4E-008	1.2E-005	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	16.9	mg/kg	1.6E-007	mg/kg-day	3.1E+000	(mg/kg-day)-1	4.8E-007	1.1E-005	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	25.4	mg/kg	2.9E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	9.1E-008	2.1E-005	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	5.64	mg/kg	4.9E-008	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(k)fluoranthene	10.8	mg/kg	9.7E-008	mg/kg-day	3.1E-002	(mg/kg-day)-1	3.0E-009	6.8E-006	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.94	mg/kg	8.3E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	2.6E-008	5.8E-007	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	6.53	mg/kg	5.8E-008	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.8E-008	4.1E-006	mg/kg-day	-	mg/kg-day	-
				Naphthalene	5.69	mg/kg	1.4E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-004	mg/kg-day	8.6E-004	mg/kg-day	1.2E-001
				Phenanthrene	15.2	mg/kg	1.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	9.2E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,525	mg/kg	8.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	5.8E-003	mg/kg-day	-	mg/kg-day	-
				Antimony	14.5	mg/kg	1.3E-007	mg/kg-day	-	(mg/kg-day)-1	-	8.6E-006	mg/kg-day	-	mg/kg-day	-
				Arsenic	22.2	mg/kg	1.9E-007	mg/kg-day	1.5E+001	(mg/kg-day)-1	2.9E-006	1.3E-005	mg/kg-day	-	mg/kg-day	-
				Cadmium	30	mg/kg	2.6E-007	mg/kg-day	6.3E+000	(mg/kg-day)-1	1.6E-006	1.8E-005	mg/kg-day	-	mg/kg-day	-
				Chromium	287	mg/kg	2.5E-006	mg/kg-day	4.2E-001	(mg/kg-day)-1	1.0E-006	1.7E-004	mg/kg-day	2.9E-005	mg/kg-day	6.1E+000
				Copper	1,780	mg/kg	1.5E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-003	mg/kg-day	-	mg/kg-day	-
				Iron	39,194	mg/kg	3.4E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.4E-002	mg/kg-day	-	mg/kg-day	-
				Lead	310	mg/kg	2.7E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	1,320	mg/kg	1.1E-005	mg/kg-day	-	(mg/kg-day)-1	-	8.0E-004	mg/kg-day	1.4E-005	mg/kg-day	5.6E+001
				Mercury	1.57	mg/kg	1.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	9.5E-007	mg/kg-day	-	mg/kg-day	-
				Nickel	373	mg/kg	3.2E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-004	mg/kg-day	-	mg/kg-day	-
				Thallium	2.42	mg/kg	2.1E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-006	mg/kg-day	-	mg/kg-day	-
				Vanadium	28.2	mg/kg	2.4E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-005	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								5.2E-005					6.3E+001
		Exposure Point Total									6.1E-005					6.5E+001
	Exposure Medium Total										6.1E-005					6.5E+001
Medium Total											6.1E-005					6.5E+001
										Total of Receptor Risks Across All Media	6.1E-005			Total of Receptor Hazards Across All Media		6.5E+001

TABLE 7.15 CT
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA All Soil	Dermal Absorption	Benzene	0.001	mg/kg	5.0E-014	mg/kg-day	5.5E-002	(mg/kg-day)-1	2.7E-015	3.5E-012	mg/kg-day	4.0E-003	mg/kg-day	8.7E-010
				Methylcyclohexane	0.43	mg/kg	4.3E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.0E-007	mg/kg-day	-	mg/kg-day	-
				Trichloroethylene	27.8	mg/kg	8.3E-008	mg/kg-day	4.0E-001	(mg/kg-day)-1	3.3E-008	5.8E-006	mg/kg-day	3.0E-004	mg/kg-day	1.9E-002
				Acenaphthylene	1.90	mg/kg	2.5E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-006	mg/kg-day	2.5E-002	mg/kg-day	6.9E-005
				Benzo(a)anthracene	17.1	mg/kg	2.2E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.6E-007	1.6E-005	mg/kg-day	2.5E-002	mg/kg-day	6.2E-004
				Benzo(a)pyrene	16.9	mg/kg	2.2E-007	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.6E-006	1.5E-005	mg/kg-day	2.5E-002	mg/kg-day	6.1E-004
				Benzo(b)fluoranthene	25.4	mg/kg	3.3E-007	mg/kg-day	7.3E-001	(mg/kg-day)-1	2.4E-007	2.3E-005	mg/kg-day	2.5E-002	mg/kg-day	9.2E-004
				Benzo(ghi)perylene	5.64	mg/kg	7.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.1E-006	mg/kg-day	2.5E-002	mg/kg-day	2.0E-004
				Benzo(k)fluoranthene	10.8	mg/kg	1.4E-007	mg/kg-day	7.3E-002	(mg/kg-day)-1	1.0E-008	9.8E-006	mg/kg-day	2.5E-002	mg/kg-day	3.9E-004
				Dibenzo(a,h)anthracene	0.94	mg/kg	1.2E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	8.9E-008	8.5E-007	mg/kg-day	5.0E-002	mg/kg-day	1.7E-005
				Indeno(1,2,3-cd)pyrene	6.53	mg/kg	8.5E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	6.2E-008	5.9E-006	mg/kg-day	2.5E-002	mg/kg-day	2.4E-004
				Naphthalene	5.69	mg/kg	7.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.2E-006	mg/kg-day	2.0E-002	mg/kg-day	2.6E-004
				Phenanthrene	15.2	mg/kg	2.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-005	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,525	mg/kg	9.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	6.6E-004	mg/kg-day	-	mg/kg-day	-
				Antimony	14.5	mg/kg	1.4E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-006	mg/kg-day	6.0E-005	mg/kg-day	1.7E-002
				Arsenic	22.2	mg/kg	6.6E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	1.0E-007	4.6E-006	mg/kg-day	3.0E-004	mg/kg-day	1.5E-002
				Cadmium	30	mg/kg	3.0E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-006	mg/kg-day	2.5E-005	mg/kg-day	8.4E-002
				Chromium	287	mg/kg	2.9E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-005	mg/kg-day	7.5E-005	mg/kg-day	2.7E-001
				Copper	1,780	mg/kg	1.8E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.2E-004	mg/kg-day	-	mg/kg-day	-
				Iron	39,194	mg/kg	3.9E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.7E-003	mg/kg-day	3.0E-001	mg/kg-day	9.1E-003
				Lead	310	mg/kg	3.1E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-005	mg/kg-day	-	mg/kg-day	-
				Manganese	1,320	mg/kg	1.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	9.2E-005	mg/kg-day	1.9E-003	mg/kg-day	4.8E-002
				Mercury	1.57	mg/kg	1.6E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-007	mg/kg-day	2.1E-005	mg/kg-day	5.2E-003
				Nickel	373	mg/kg	3.7E-007	mg/kg-day	-	(mg/kg-day)-1	-	2.6E-005	mg/kg-day	8.0E-004	mg/kg-day	3.2E-002
				Thallium	2.42	mg/kg	2.4E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.7E-007	mg/kg-day	-	mg/kg-day	-
				Vanadium	28.2	mg/kg	2.8E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.0E-006	mg/kg-day	1.8E-004	mg/kg-day	1.1E-002
			Exp. Route Total								2.3E-006					5.1E-001
			Inhalation	Benzene	0.001	mg/kg	2.9E-009	mg/kg-day	2.7E-002	(mg/kg-day)-1	7.9E-011	2.0E-007	mg/kg-day	8.6E-003	mg/kg-day	2.4E-005
				Methylcyclohexane	0.43	mg/kg	3.5E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-004	mg/kg-day	8.6E-001	mg/kg-day	2.9E-004
				Trichloroethylene	27.8	mg/kg	6.8E-005	mg/kg-day	4.0E-001	(mg/kg-day)-1	2.7E-005	4.8E-003	mg/kg-day	1.0E-002	mg/kg-day	4.8E-001
				Acenaphthylene	1.90	mg/kg	7.9E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.6E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	17.1	mg/kg	1.0E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	3.2E-008	7.2E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	16.9	mg/kg	9.4E-008	mg/kg-day	3.1E+000	(mg/kg-day)-1	2.9E-007	6.6E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	25.4	mg/kg	1.8E-007	mg/kg-day	3.1E-001	(mg/kg-day)-1	5.5E-008	1.2E-005	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	5.64	mg/kg	2.9E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.1E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(k)fluoranthene	10.8	mg/kg	5.8E-008	mg/kg-day	3.1E-002	(mg/kg-day)-1	1.8E-009	4.1E-006	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.94	mg/kg	5.0E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	1.5E-008	3.5E-007	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	6.53	mg/kg	3.5E-008	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.1E-008	2.4E-006	mg/kg-day	-	mg/kg-day	-
				Naphthalene	5.69	mg/kg	8.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.0E-005	mg/kg-day	8.6E-004	mg/kg-day	7.0E-002
				Phenanthrene	15.2	mg/kg	7.9E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.5E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	9,525	mg/kg	5.0E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.5E-003	mg/kg-day	-	mg/kg-day	-
				Antimony	14.5	mg/kg	7.5E-008	mg/kg-day	-	(mg/kg-day)-1	-	5.3E-006	mg/kg-day	-	mg/kg-day	-
				Arsenic	22.2	mg/kg	1.2E-007	mg/kg-day	1.5E+001	(mg/kg-day)-1	1.7E-006	8.1E-006	mg/kg-day	-	mg/kg-day	-
				Cadmium	30	mg/kg	1.6E-007	mg/kg-day	6.3E+000	(mg/kg-day)-1	9.8E-007	1.1E-005	mg/kg-day	-	mg/kg-day	-
				Chromium	287	mg/kg	1.5E-006	mg/kg-day	4.2E-001	(mg/kg-day)-1	6.3E-007	1.0E-004	mg/kg-day	2.9E-005	mg/kg-day	3.7E+000

TABLE 7.15 CT
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	CCA All Soil	Inhalation	Copper	1,780	mg/kg	9.3E-006	mg/kg-day	-	(mg/kg-day)-1	-	6.5E-004	mg/kg-day	-	mg/kg-day	-
				Iron	39,194	mg/kg	2.0E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-002	mg/kg-day	-	mg/kg-day	-
				Lead	310	mg/kg	1.6E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-004	mg/kg-day	-	mg/kg-day	-
				Manganese	1,320	mg/kg	6.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.8E-004	mg/kg-day	1.4E-005	mg/kg-day	3.4E+001
				Mercury	1.57	mg/kg	8.1E-009	mg/kg-day	-	(mg/kg-day)-1	-	5.7E-007	mg/kg-day	-	mg/kg-day	-
				Nickel	373	mg/kg	1.9E-006	mg/kg-day	-	(mg/kg-day)-1	-	1.4E-004	mg/kg-day	-	mg/kg-day	-
				Thallium	2.42	mg/kg	1.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.6E-007	mg/kg-day	-	mg/kg-day	-
				Vanadium	28.2	mg/kg	1.5E-007	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-005	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								3.1E-005					3.8E+001
		Exposure Point Total									3.3E-005					3.8E+001
	Exposure Medium Total										3.3E-005					3.8E+001
Medium Total											3.3E-005					3.8E+001
										Total of Receptor Risks Across All Media	3.3E-005				Total of Receptor Hazards Across All Media	3.8E+001

TABLE 7.16.RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
							Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
					Value	Units	Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	RRAA All Soil	Incidental Ingestion	Acenaphthylene	0.27	mg/kg	9.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	6.3E-007	mg/kg-day	2.5E-002	mg/kg-day	2.5E-005
				Benzo(a)anthracene	0.57	mg/kg	1.9E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.4E-008	1.3E-006	mg/kg-day	2.5E-002	mg/kg-day	5.3E-005
				Benzo(a)pyrene	0.58	mg/kg	1.9E-008	mg/kg-day	7.3E+000	(mg/kg-day)-1	1.4E-007	1.3E-006	mg/kg-day	2.5E-002	mg/kg-day	5.4E-005
				Benzo(b)fluoranthene	0.57	mg/kg	1.9E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.4E-008	1.3E-006	mg/kg-day	2.5E-002	mg/kg-day	5.3E-005
				Benzo(ghi)perylene	0.37	mg/kg	1.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	8.6E-007	mg/kg-day	2.5E-002	mg/kg-day	3.4E-005
				Dibenzo(a,h)anthracene	0.24	mg/kg	8.0E-009	mg/kg-day	7.3E+000	(mg/kg-day)-1	5.8E-008	5.6E-007	mg/kg-day	5.0E-002	mg/kg-day	1.1E-005
				Indeno(1,2,3-cd)pyrene	0.47	mg/kg	1.6E-008	mg/kg-day	7.3E-001	(mg/kg-day)-1	1.1E-008	1.1E-006	mg/kg-day	2.5E-002	mg/kg-day	4.4E-005
				Phenanthrene	0.65	mg/kg	2.2E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.5E-006	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	4.2E-004	mg/kg-day	-	(mg/kg-day)-1	-	2.9E-002	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	4.0E-007	mg/kg-day	1.5E+000	(mg/kg-day)-1	5.9E-007	2.8E-005	mg/kg-day	3.0E-004	mg/kg-day	9.2E-002
				Chromium	15.1	mg/kg	5.0E-007	mg/kg-day	-	(mg/kg-day)-1	-	3.5E-005	mg/kg-day	3.0E-003	mg/kg-day	1.2E-002
				Iron	23,516	mg/kg	7.8E-004	mg/kg-day	-	(mg/kg-day)-1	-	5.5E-002	mg/kg-day	3.00E-001	mg/kg-day	1.8E-001
				Manganese	967	mg/kg	3.2E-005	mg/kg-day	-	(mg/kg-day)-1	-	2.2E-003	mg/kg-day	4.7E-002	mg/kg-day	4.8E-002
				Thallium	1.00	mg/kg	3.3E-008	mg/kg-day	-	(mg/kg-day)-1	-	2.3E-006	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								8.3E-007					3.3E-001
			Dermal Absorption	Acenaphthylene	0.27	mg/kg	3.5E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-007	mg/kg-day	2.5E-002	mg/kg-day	9.8E-006
				Benzo(a)anthracene	0.57	mg/kg	7.3E-009	mg/kg-day	7.3E-001	(mg/kg-day)-1	5.4E-009	5.1E-007	mg/kg-day	2.5E-002	mg/kg-day	2.1E-005
				Benzo(a)pyrene	0.58	mg/kg	7.5E-009	mg/kg-day	7.3E+000	(mg/kg-day)-1	5.4E-008	5.2E-007	mg/kg-day	2.5E-002	mg/kg-day	2.1E-005
				Benzo(b)fluoranthene	0.57	mg/kg	7.4E-009	mg/kg-day	7.3E-001	(mg/kg-day)-1	5.4E-009	5.2E-007	mg/kg-day	2.5E-002	mg/kg-day	2.1E-005
				Benzo(ghi)perylene	0.37	mg/kg	4.8E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-007	mg/kg-day	2.5E-002	mg/kg-day	1.3E-005
				Dibenzo(a,h)anthracene	0.24	mg/kg	3.1E-009	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.3E-008	2.2E-007	mg/kg-day	5.0E-002	mg/kg-day	4.3E-006
				Indeno(1,2,3-cd)pyrene	0.47	mg/kg	6.1E-009	mg/kg-day	7.3E-001	(mg/kg-day)-1	4.4E-009	4.2E-007	mg/kg-day	2.5E-002	mg/kg-day	1.7E-005
				Phenanthrene	0.65	mg/kg	8.4E-009	mg/kg-day	-	(mg/kg-day)-1	-	5.9E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	1.6E-005	mg/kg-day	-	(mg/kg-day)-1	-	8.8E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	3.6E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	5.3E-008	2.5E-006	mg/kg-day	3.0E-004	mg/kg-day	8.3E-003
				Chromium	15.1	mg/kg	1.5E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	7.5E-005	mg/kg-day	1.4E-002
				Iron	23,516	mg/kg	2.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-003	mg/kg-day	3.0E-001	mg/kg-day	5.5E-003
				Manganese	967	mg/kg	9.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.7E-005	mg/kg-day	1.9E-003	mg/kg-day	3.6E-002
				Thallium	1.00	mg/kg	1.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	7.0E-008	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.5E-007					6.3E-002
			Inhalation	Acenaphthylene	0.27	mg/kg	1.5E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.0E-006	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	0.57	mg/kg	4.5E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.4E-009	3.2E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	0.58	mg/kg	4.2E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	1.3E-008	3.0E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	0.57	mg/kg	5.2E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.6E-009	3.7E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	0.37	mg/kg	2.6E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.8E-007	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.24	mg/kg	1.7E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	5.2E-009	1.2E-007	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	0.47	mg/kg	3.3E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	1.0E-009	2.3E-007	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.65	mg/kg	4.5E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.1E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	8.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	6.1E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	8.2E-008	mg/kg-day	1.5E+001	(mg/kg-day)-1	1.2E-006	5.8E-006	mg/kg-day	-	mg/kg-day	-
				Chromium	15.1	mg/kg	1.0E-007	mg/kg-day	4.2E-001	(mg/kg-day)-1	4.4E-008	7.3E-006	mg/kg-day	2.9E-005	mg/kg-day	2.5E-001
				Iron	23,516	mg/kg	1.6E-004	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-002	mg/kg-day	-	mg/kg-day	-
				Manganese	967	mg/kg	6.7E-006	mg/kg-day	-	(mg/kg-day)-1	-	4.7E-004	mg/kg-day	1.4E-005	mg/kg-day	3.3E+001
				Thallium	1.00	mg/kg	6.9E-009	mg/kg-day	-	(mg/kg-day)-1	-	4.8E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.3E-006					3.3E+001
		Exposure Point Total									2.3E-006					3.3E+001
	Exposure Medium Total										2.3E-006					3.3E+001
Medium Total											2.3E-006					3.3E+001
										Total of Receptor Risks Across All Media	2.3E-006				Total of Receptor Hazards Across All Media	3.3E+001

TABLE 7.16 CT

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	RRAA All Soil	Dermal Absorption	Acenaphthylene	0.27	mg/kg	3.5E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.5E-007	mg/kg-day	2.5E-002	mg/kg-day	9.8E-006
				Benzo(a)anthracene	0.57	mg/kg	7.3E-009	mg/kg-day	7.3E-001	(mg/kg-day)-1	5.4E-009	5.1E-007	mg/kg-day	2.5E-002	mg/kg-day	2.1E-005
				Benzo(a)pyrene	0.58	mg/kg	7.5E-009	mg/kg-day	7.3E+000	(mg/kg-day)-1	5.4E-008	5.2E-007	mg/kg-day	2.5E-002	mg/kg-day	2.1E-005
				Benzo(b)fluoranthene	0.57	mg/kg	7.4E-009	mg/kg-day	7.3E-001	(mg/kg-day)-1	5.4E-009	5.2E-007	mg/kg-day	2.5E-002	mg/kg-day	2.1E-005
				Benzo(ghi)perylene	0.37	mg/kg	4.8E-009	mg/kg-day	-	(mg/kg-day)-1	-	3.4E-007	mg/kg-day	2.5E-002	mg/kg-day	1.3E-005
				Dibenzo(a,h)anthracene	0.24	mg/kg	3.1E-009	mg/kg-day	7.3E+000	(mg/kg-day)-1	2.3E-008	2.2E-007	mg/kg-day	5.0E-002	mg/kg-day	4.3E-006
				Indeno(1,2,3-cd)pyrene	0.47	mg/kg	6.1E-009	mg/kg-day	7.3E-001	(mg/kg-day)-1	4.4E-009	4.2E-007	mg/kg-day	2.5E-002	mg/kg-day	1.7E-005
				Phenanthrene	0.65	mg/kg	8.4E-009	mg/kg-day	-	(mg/kg-day)-1	-	5.9E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	1.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	8.8E-004	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	3.6E-008	mg/kg-day	1.5E+000	(mg/kg-day)-1	5.3E-008	2.5E-006	mg/kg-day	3.0E-004	mg/kg-day	8.3E-003
				Chromium	15.1	mg/kg	1.5E-008	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-006	mg/kg-day	7.5E-005	mg/kg-day	1.4E-002
				Iron	23,516	mg/kg	2.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	1.6E-003	mg/kg-day	3.0E-001	mg/kg-day	5.5E-003
				Manganese	967	mg/kg	9.6E-007	mg/kg-day	-	(mg/kg-day)-1	-	6.7E-005	mg/kg-day	1.9E-003	mg/kg-day	3.6E-002
				Thallium	1.00	mg/kg	1.0E-009	mg/kg-day	-	(mg/kg-day)-1	-	7.0E-008	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								1.5E-007					6.3E-002
			Inhalation	Acenaphthylene	0.27	mg/kg	6.6E-009	mg/kg-day	-	(mg/kg-day)-1	-	6.2E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(a)anthracene	0.57	mg/kg	2.7E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	8.5E-010	1.9E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(a)pyrene	0.58	mg/kg	2.5E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	7.9E-009	1.8E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(b)fluoranthene	0.57	mg/kg	3.1E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	9.7E-010	2.2E-007	mg/kg-day	-	mg/kg-day	-
				Benzo(ghi)perylene	0.37	mg/kg	1.5E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.1E-007	mg/kg-day	-	mg/kg-day	-
				Dibenzo(a,h)anthracene	0.24	mg/kg	1.0E-009	mg/kg-day	3.1E+000	(mg/kg-day)-1	3.1E-009	7.1E-008	mg/kg-day	-	mg/kg-day	-
				Indeno(1,2,3-cd)pyrene	0.47	mg/kg	2.0E-009	mg/kg-day	3.1E-001	(mg/kg-day)-1	6.2E-010	1.4E-007	mg/kg-day	-	mg/kg-day	-
				Phenanthrene	0.65	mg/kg	2.7E-009	mg/kg-day	-	(mg/kg-day)-1	-	1.9E-007	mg/kg-day	-	mg/kg-day	-
				Aluminum	12,672	mg/kg	5.3E-005	mg/kg-day	-	(mg/kg-day)-1	-	3.7E-003	mg/kg-day	-	mg/kg-day	-
				Arsenic	11.9	mg/kg	4.9E-008	mg/kg-day	1.5E+001	(mg/kg-day)-1	7.4E-007	3.5E-006	mg/kg-day	-	mg/kg-day	-
				Chromium	15.1	mg/kg	6.3E-008	mg/kg-day	4.2E-001	(mg/kg-day)-1	2.6E-008	4.4E-006	mg/kg-day	2.9E-005	mg/kg-day	1.5E-001
				Iron	23,516	mg/kg	9.8E-005	mg/kg-day	-	(mg/kg-day)-1	-	6.8E-003	mg/kg-day	-	mg/kg-day	-
				Manganese	967	mg/kg	4.0E-006	mg/kg-day	-	(mg/kg-day)-1	-	2.8E-004	mg/kg-day	1.4E-005	mg/kg-day	2.0E+001
				Thallium	1.00	mg/kg	4.2E-009	mg/kg-day	-	(mg/kg-day)-1	-	2.9E-007	mg/kg-day	-	mg/kg-day	-
			Exp. Route Total								7.8E-007					2.0E+001
		Exposure Point Total									9.3E-007					2.0E+001
	Exposure Medium Total										9.3E-007					2.0E+001
Medium Total											9.3E-007					2.0E+001
										Total of Receptor Risks Across All Media	9.3E-007			Total of Receptor Hazards Across All Media		2.0E+001

Table 7.17 Screening Groundwater Analy the Vapor Intrusion to Indoor Air Pathway

[Based on "Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils" (11/29/2002)]

	Target Indoor Air Concentration Parameters (Guidance page D-4)							Target Indoor Air Calculations (Pg. D-4)			Target Groundwater Concentration Parameters		Target Groundwater Calculations	Table 2c Default Screening Level
Parameter Symbol	TCR	THQ	ATc	EF	ED	URF	RfC	Ccancer	Cnon-cancer	Ctarget,ia	H	alpha	Cgw	Cgw
Parameter	Target Cancer Risk	Target Hazard Quotient	Averaging Time (Carc)	Exposure Frequency	Exposure Duration	Unit Risk Factor	Reference Concentration	Target Indoor Air Concentration	Target Indoor Air Concentration	Target Indoor Air Concentration	Henry's Law Constant (1)	Attenuation Factors (4)	Target Risk-Based Groundwater Concentration	Published Groundwater Screening Level
Units	(unitless)	(unitless)	(days)	(days/year)	(years)	(mg/m3)-1	(mg/m3)	(mg/m3)	(mg/m3)	(mg/m3)	(unitless)	(unitless)	(mg/L)	(mg/L)
Parameter Value	1.0E-006	1.0	25,550	350	30	Chemical Specific	Chemical Specific	Calculated	Calculated	Calculated	Chemical Specific	Default Policy	Calculated	Reference (MCLs)
Benzene	1.0E-006	1.0	25,550	350	30	7.80E-003	3.00E-002	0.00031	0.030	0.00031	0.228	0.001	0.0014	5 [MCL]
cis-1,2-Dichloroethylene (5)	1.0E-006	1.0	25,550	350	30	None	3.50E-002	No Value	0.035	0.035	0.167	0.001	0.210	0.210
Tetrachloroethylene (6)	1.0E-006	1.0	25,550	350	30	5.90E-003	None	0.00041	No Value	0.00041	0.754	0.001	0.00055	5 [MCL]
Trichloroethylene (NCEA Tox (2))	1.0E-006	1.0	25,550	350	30	1.10E-001	3.50E-002	0.00002	0.035	0.00002	0.422	0.001	0.000052	5 [MCL]
Trichloroethylene (CalEPA Tox (3))	1.0E-006	1.0	25,550	350	30	2.00E-003	6.00E-001	0.00122	0.600	0.00122	0.422	0.001	0.0029	5 [MCL]

Footnotes:

TCR - Target Cancer Risk

THQ - Target Hazard Quotient

ATc - Averaging Time (Carc)

EF - Exposure Frequency

ED - Exposure Duration

URF - Unit Risk Factor

RfC - Reference Concentration

mg/m^3 - milligrams per cubic meter

MCL - Maximum Contaminant Level

(1) Values taken from the database used to develop the Soil Screening Guidance criteria.

(2) NCEA toxicity values are from the National Center for Environmental Assessment - Washington Office (2001) EPA/600/P-01/002A, "External Review Draft - Trichloroethylene Health Risk Assessment: Synthesis and Characterization".

(3) CalEPA toxicity values are from the california EPA's Office of Environmental Health Hazard Assessment (OEHHA) database. The RfC presented is the Chronic Reference Exposure Level (REL).

(4) Site-specific attenuation factors for the Bush Industries Area, Cattaraugus Cutlery Area and Railroad Avenue Area where occupiable buildings exist or are likely to be built in the future are projected to be in the range of 1E-4 to 4E-4 for these COCs and the soil type and depth to groundwater present at these locations based assuming default building parameters and Johnson and Ettinger modeling calculations.

(5) Toxicity value (RfC) from the Health Effects Assessment Summary Tables (HEAST).

(6) Toxicity value (URF) is the California EPA Unit Risk Estimate (URE) value.

TABLE 9.1 RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial 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
Soil	Soil	BIA Surface Soil	Arsenic	3.0E-006	2.0E-006	1.2E-006	-	6.2E-006	Skin	1.9E-002	-	7.4E-003	2.6E-002
			Manganese	-	-	-	-	-	CNS	6.8E-003	1.5E+000	2.2E-002	1.5E+000
			Chemical Total	3.0E-006	2.0E-006	1.2E-006	-	6.2E-006		2.5E-002	1.5E+000	3.0E-002	1.5E+000
		Exposure Point Total						6.2E-006					1.5E+000
	Exposure Medium Total							6.2E-006					1.5E+000
Medium Total								6.2E-006					1.5E+000
Receptor Total							Receptor Risk Total	6.2E-006				Receptor HI Total	1.5E+000

Total Skin HI Across All Media =	2.6E-002
Total CNS HI Across All Media =	1.5E+000

TABLE 9.1 CT
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial 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
Soil	Soil	BIA Surface Soil	Arsenic	9.4E-007	3.8E-007	3.7E-008	-	1.4E-006	Skin	1.6E-002	-	6.4E-004	1.7E-002
			Chemical Total	9.4E-007	3.8E-007	3.7E-008	-	1.4E-006		1.6E-002	-	6.4E-004	1.7E-002
		Exposure Point Total						1.4E-006					1.7E-002
	Exposure Medium Total							1.4E-006					1.7E-002
Medium Total								1.4E-006					1.7E-002
Receptor Total							Receptor Risk Total	1.4E-006				Receptor HI Total	1.7E-002

TABLE 9.2 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial 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
Soil	Soil	CCA Surface Soil	Trichloroethylene	3.7E-006	6.1E-004	1.5E-006	-	6.1E-004	Liver	8.7E-002	4.2E-001	3.4E-002	5.5E-001
			Benzo(a)anthracene	3.7E-006	1.8E-007	6.3E-006	-	1.0E-005	Body Weight, Liver, Kidney	5.7E-004	-	9.7E-004	1.5E-003
			Benzo(a)pyrene	3.7E-005	1.2E-006	6.3E-005	-	1.0E-004	Body Weight, Liver, Kidney	5.7E-004	-	9.7E-004	1.5E-003
			Benzo(b)fluoranthene	5.6E-006	4.1E-007	9.6E-006	-	1.6E-005	Body Weight, Liver, Kidney	8.6E-004	-	1.5E-003	2.3E-003
			Dibenzo(a,h)anthracene	1.2E-006	3.1E-008	2.1E-006	-	3.3E-006	Body Weight	9.2E-006	-	1.6E-005	2.5E-005
			Indeno(1,2,3-cd)pyrene	1.3E-006	3.6E-008	2.2E-006	-	3.5E-006	Body Weight, Liver, Kidney	2.0E-004	-	3.4E-004	5.3E-004
			Arsenic	6.1E-006	3.5E-006	2.4E-006	-	1.2E-005	Skin	3.8E-002	-	1.5E-002	5.3E-002
			Cadmium	-	1.0E-006	-	-	1.0E-006	Kidney	8.0E-003	-	4.2E-002	5.0E-002
			Chromium	-	1.6E-006	-	-	1.6E-006	Lungs	6.4E-002	3.8E-001	3.4E-001	7.8E-001
			Manganese	-	-	-	-	-	CNS	1.2E-002	2.3E+000	4.1E-002	2.4E+000
			Chemical Total	5.9E-005	6.1E-004	8.8E-005	-	7.6E-004		2.1E-001	3.1E+000	4.7E-001	3.8E+000
		Exposure Point Total						7.6E-004					3.8E+000
	Exposure Medium Total							7.6E-004					3.8E+000
Medium Total								7.6E-004					3.8E+000
Receptor Total							Receptor Risk Total	7.6E-004				Receptor HI Total	3.8E+000

Total Skin HI Across All Media =	5.3E-002
Total CNS HI Across All Media =	2.4E+000
Total Kidney HI Across All Media =	5.6E-002
Total Lungs HI Across All Media =	7.8E-001
Total Liver HI Across All Media	6.0E-003
Total Body Weight HI Across All Media =	6.0E-003

TABLE 9.2 CT

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial 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
Soil	Soil	CCA Surface Soil	Trichloroethylene	1.2E-006	1.9E-004	4.7E-008	-	1.9E-004	Liver	7.6E-002	3.7E-001	3.0E-003	4.5E-001
			Benzo(a)anthracene	1.2E-006	4.5E-008	2.0E-007	-	1.4E-006	Body Weight, Liver, Kidney	5.0E-004	-	8.5E-005	5.8E-004
			Benzo(a)pyrene	1.2E-005	2.8E-007	2.0E-006	-	1.4E-005	Body Weight, Liver, Kidney	5.0E-004	-	8.5E-005	5.8E-004
			Benzo(b)fluoranthene	1.8E-006	1.1E-007	3.0E-007	-	2.2E-006	Body Weight, Liver, Kidney	7.5E-004	-	1.3E-004	8.8E-004
			Arsenic	1.9E-006	6.6E-007	7.7E-008	-	2.7E-006	Skin	3.3E-002	-	1.3E-003	3.5E-002
			Manganese	-	-	-	-	-	CNS	1.1E-002	1.2E+000	3.6E-003	1.2E+000
			Chemical Total	1.8E-005	1.9E-004	2.6E-006	-	2.1E-004		1.2E-001	1.6E+000	8.2E-003	1.7E+000
		Exposure Point Total						2.1E-004					1.7E+000
	Exposure Medium Total							2.1E-004					1.7E+000
Medium Total								2.1E-004					1.7E+000
Receptor Total							Receptor Risk Total	2.1E-004				Receptor HI Total	1.7E+000

Total Skin HI Across All Media =	3.5E-002
Total CNS HI Across All Media =	1.2E+000
Total Liver HI Across All Media =	4.5E-001
Total Body Weight HI Across All Media =	2.0E-003
Total Kidney HI Across All Media =	2.0E-003

TABLE 9.3 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial 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
Groundwater	Groundwater	Process Water	Trichloroethylene	1.3E-006	2.5E-004	4.2E-006	-	2.6E-004	Liver	3.0E-002	1.8E-001	9.8E-002	3.0E-001
		(Washdown Scenario)	Chemical Total	1.3E-006	2.5E-004	4.2E-006	-	2.6E-004		3.0E-002	1.8E-001	9.8E-002	3.0E-001
		Exposure Point Total						2.6E-004					3.0E-001
	Exposure Medium Total							2.6E-004					3.0E-001
Medium Total								2.6E-004					3.0E-001
Receptor Total							Receptor Risk Total	2.6E-004				Receptor HI Total	3.0E-001

TABLE 9.3 CT

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial 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
Groundwater	Groundwater	Process Water (Washdown Scenario)	Trichloroethylene	4.0E-007	4.8E-005	1.3E-006	-	5.0E-005	Liver	2.6E-002	9.3E-002	8.6E-002	2.0E-001
			Chemical Total	4.0E-007	4.8E-005	1.3E-006	-	5.0E-005		2.6E-002	9.3E-002	8.6E-002	2.0E-001
	Exposure Medium Total							5.0E-005					2.0E-001
Medium Total								5.0E-005					2.0E-001
Receptor Total							Receptor Risk Total	5.0E-005				Receptor HI Total	2.0E-001

TABLE 9.4 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial 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
Groundwater	Groundwater	Process Water (Car Wash Scenario)	Benzene	3.4E-008	4.0E-006	1.3E-007	-	4.1E-006	RBC	4.3E-004	4.8E-002	1.7E-003	5.0E-002
			Tetrachloroethylene	2.4E-008	2.4E-006	2.5E-007	-	2.6E-006	Liver	1.3E-004	-	1.4E-003	1.5E-003
			Trichloroethylene	1.0E-005	2.4E-003	3.6E-005	-	2.5E-003	Liver	2.4E-001	1.7E+000	8.4E-001	2.8E+000
			Arsenic	6.7E-006	-	1.6E-006	-	8.3E-006	Skin	4.2E-002	-	1.0E-002	5.2E-002
			Chemical Total	1.7E-005	2.4E-003	3.8E-005	-	2.5E-003		2.8E-001	1.7E+000	8.5E-001	2.9E+000
		Exposure Point Total						2.5E-003					2.9E+000
	Exposure Medium Total							2.5E-003					2.9E+000
Medium Total								2.5E-003					2.9E+000
Receptor Total							Receptor Risk Total	2.5E-003				Receptor HI Total	2.9E+000

Total Liver HI Across All Media =	2.8E+000
Total RBC HI Across All Media =	5.0E-002
Total Skin HI Across All Media =	5.2E-002

TABLE 9.4 CT

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial 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
Groundwater	Groundwater	Process Water (Car Wash Scenario)	Trichloroethylene	3.2E-006	4.6E-004	1.1E-005	-	4.7E-004	Liver	2.1E-001	8.9E-001	7.4E-001	1.8E+000
			Arsenic	2.1E-006	-	5.1E-007	-	2.6E-006	Skin	3.7E-002	-	8.9E-003	4.5E-002
			Chemical Total	5.3E-006	4.6E-004	1.2E-005	-	4.7E-004		2.4E-001	8.9E-001	7.5E-001	1.9E+000
		Exposure Point Total						4.7E-004					1.9E+000
	Exposure Medium Total							4.7E-004					1.9E+000
Medium Total								4.7E-004					1.9E+000
Receptor Total							Receptor Risk Total	4.7E-004				Receptor HI Total	1.9E+000

Total Liver HI Across All Media =	1.8E+000
Total Skin HI Across All Media =	4.5E-002

TABLE 9.5 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk (1)					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	RRAA Surface Soil	Benzo(a)pyrene	9.6E-006	4.3E-006	3.9E-006	-	1.4E-005	Body Weight, Liver, Kidney	3.7E-005	-	1.9E-005	5.6E-005
			Arsenic	2.8E-005	2.2E-006	2.6E-006	-	3.3E-005	Skin	4.4E-002	-	5.2E-003	4.9E-002
			Chemical Total	3.8E-005	2.3E-006	6.6E-006	-	4.6E-005		4.4E-002	-	5.2E-003	4.9E-002
		Exposure Point Total						4.6E-005					4.9E-002
	Exposure Medium Total							4.6E-005					4.9E-002
Medium Total								4.6E-005				-	4.9E-002
Receptor Total							Receptor Risk Total	4.6E-005				Receptor HI Total	4.9E-002

Footnote:
(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

TABLE 9.5 CT

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk (1)					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	RRAA Surface Soil	Benzo(a)pyrene	7.8E-006	2.1E-008	5.7E-007	-	8.4E-006	Body Weight, Liver, Kidney	4.6E-005	-	3.4E-006	4.9E-005
			Arsenic	2.3E-005	5.9E-007	3.8E-007	-	2.4E-005	Skin	5.4E-002	-	9.3E-004	5.5E-002
			Chemical Total	3.1E-005	6.1E-007	9.5E-007	-	3.2E-005		5.4E-002	-	9.3E-004	5.5E-002
		Exposure Point Total						3.2E-005					5.5E-002
	Exposure Medium Total							3.2E-005					5.5E-002
Medium Total								3.2E-005					5.5E-002
Receptor Total							Receptor Risk Total	3.2E-005				Receptor Hi Total	5.5E-002

Footnote:

(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

TABLE 9.6 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Child

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
Soil	Soil	RRAA Surface Soil	Benzo(a)pyrene	6.7E-006	2.0E-008	2.4E-006	-	9.2E-006	Body Weight, Liver, Kidney	4.3E-004	-	1.6E-004	5.9E-004
			Dibenzo(a,h)anthracene	2.1E-006	3.3E-009	7.6E-007	-	2.8E-006	Body Weight	6.7E-005	-	2.4E-005	9.1E-005
			Arsenic	2.0E-005	5.4E-007	1.6E-006	-	2.2E-005	Skin	5.1E-001	-	4.3E-002	5.5E-001
			Iron	-	-	-	-	-	Iron Overload	1.0E+000	-	2.8E-002	1.0E+000
			Manganese	-	-	-	-	-	CNS	2.6E-001	2.4E+000	1.8E-001	2.8E+000
			Chemical Total	2.8E-005	5.6E-007	4.8E-006	-	3.4E-005		1.8E+000	2.4E+000	2.5E-001	4.4E+000
		Exposure Point Total						3.4E-005					4.4E+000
	Exposure Medium Total							3.4E-005					4.4E+000
Medium Total								3.4E-005					4.4E+000
Receptor Total							Receptor Risk Total	3.4E-005				Receptor HI Total	4.4E+000

Total Skin HI Across All Media =	5.5E-001
Total Iron Overload HI Across All Media =	1.0E+000
Total CNS HI Across All Media =	2.8E+000
Total Body Weight HI Across All Media =	6.8E-004
Total Kidney HI Across All Media =	5.9E-004
Total Liver HI Across All Media =	5.9E-004

TABLE 9.6 CT
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

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
Soil	Soil	RRAA Surface Soil	Benzo(a)pyrene	6.7E-006	1.4E-008	4.9E-007	-	7.2E-006	Body Weight, Liver, Kidney	4.3E-004	-	3.1E-005	4.6E-004
			Dibenzo(a,h)anthracene	2.1E-006	2.2E-009	1.5E-007	-	2.2E-006	Body Weight	6.7E-005	-	4.8E-006	7.1E-005
			Arsenic	2.0E-005	3.6E-007	3.3E-007	-	2.0E-005	Skin	5.1E-001	-	8.5E-003	5.2E-001
			Iron	-	-	-	-	-	Iron Overload	1.0E+000	-	5.6E-003	1.0E+000
			Manganese	-	-	-	-	-	CNS	2.6E-001	1.6E+000	3.6E-002	1.9E+000
			Chemical Total	2.8E-005	3.7E-007	9.7E-007	-	3.0E-005		1.8E+000	1.6E+000	5.1E-002	3.4E+000
		Exposure Point Total						3.0E-005					3.4E+000
	Exposure Medium Total							3.0E-005					3.4E+000
Medium Total								3.0E-005					3.4E+000
Receptor Total							Receptor Risk Total	3.0E-005				Receptor HI Total	3.4E+000

Total Skin HI Across All Media =	5.2E-001
Total CNS HI Across All Media =	1.9E+000
Total Kidney HI Across All Media =	4.6E-004
Total Liver HI Across All Media =	4.6E-004
Total Body Weight HI Across All Media =	5.3E-004
Total Iron Overload HI Across All Media =	1.0E+000

TABLE 9.7 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk (1)					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	BIA Surface Soil	Arsenic	2.7E-005	4.2E-006	2.5E-006	-	3.4E-005	Skin	4.2E-002	-	5.0E-003	4.7E-002
			Manganese	-	-	-	-	-	CNS	1.5E-002	1.7E+000	1.5E-002	1.7E+000
			Chemical Total	2.7E-005	4.2E-006	2.5E-006	-	3.4E-005		5.7E-002	1.7E+000	2.0E-002	1.7E+000
		Exposure Point Total						3.4E-005					1.7E+000
	Exposure Medium Total							3.4E-005					1.7E+000
Medium Total								3.4E-005					1.7E+000
Receptor Total							Receptor Risk Total	3.4E-005				Receptor HI Total	1.7E+000

Footnote:
(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duratio

Total Skin HI Across All Media =	4.7E-002
Total CNS HI Across All Media =	1.7E+000

TABLE 9.7 CT

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk (1)					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	BIA Surface Soil	Arsenic	2.2E-005	1.7E-006	3.7E-007	-	2.4E-005	Skin	5.2E-002	-	8.9E-004	5.3E-002
			Manganese	-	-	-	-	-	CNS	1.9E-002	1.4E+000	2.7E-003	1.4E+000
			Chemical Total	2.2E-005	1.7E-006	3.7E-007	-	2.4E-005		7.1E-002	1.4E+000	3.6E-003	1.5E+000
		Exposure Point Total						2.4E-005					1.5E+000
	Exposure Medium Total							2.4E-005					1.5E+000
Medium Total								2.4E-005					1.5E+000
Receptor Total							Receptor Risk Total	2.4E-005				Receptor HI Total	1.5E+000

Footnote:

(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

Total Skin HI Across All Media =	5.3E-002
cross All Media =	1.4E+000

TABLE 9.8 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk (1)					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	CCA Surface Soil	Trichloroethylene	3.3E-005	1.7E-003	3.2E-006	-	1.8E-003	Liver	1.9E-001	4.3E-001	2.3E-002	6.5E-001
			Benzo(a)anthracene	3.3E-005	4.4E-007	1.4E-005	-	4.7E-005	Body Weight, Liver, Kidney	1.3E-003	-	6.6E-004	1.9E-003
			Benzo(a)pyrene	3.3E-004	2.9E-006	1.4E-004	-	4.7E-004	Body Weight, Liver, Kidney	1.3E-003	-	6.6E-004	1.9E-003
			Benzo(b)fluoranthene	5.0E-005	1.1E-006	2.1E-005	-	7.2E-005	Body Weight, Liver, Kidney	1.9E-003	-	1.0E-003	2.9E-003
			Dibenzo(a,h)anthracene	1.1E-005	6.8E-008	4.4E-006	-	1.5E-005	Body Weight	2.1E-005	-	1.1E-005	3.1E-005
			Indeno(1,2,3-cd)pyrene	1.1E-005	8.2E-008	4.7E-006	-	1.6E-005	Body Weight, Liver, Kidney	4.4E-004	-	2.3E-004	6.7E-004
			Arsenic	5.5E-005	7.4E-006	5.2E-006	-	6.8E-005	Skin	8.6E-002	-	1.0E-002	9.6E-002
			Cadmium	-	1.4E-006	-	-	1.4E-006	Kidney	1.8E-002	-	2.9E-002	4.6E-002
			Chromium	-	3.4E-006	-	-	3.4E-006	Lungs	1.4E-001	4.2E-001	2.3E-001	7.9E-001
			Manganese	-	-	-	-	-	CNS	2.8E-002	2.6E+000	2.8E-002	2.6E+000
			Chemical Total	5.3E-004	1.7E-003	1.9E-004	-	2.4E-003		4.7E-001	3.4E+000	3.2E-001	4.2E+000
		Exposure Point Total						2.4E-003					4.2E+000
	Exposure Medium Total							2.4E-003					4.2E+000
Medium Total								2.4E-003					4.2E+000
Receptor Total							Receptor Risk Total	2.4E-003				Receptor HI Total	4.2E+000

Footnote:
(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

Total Skin HI Across All Media =	9.6E-002
Total CNS HI Across All Media =	2.6E+000
Total Liver HI Across All Media =	6.6E-001
Total Kidney HI Across All Media =	5.4E-002
Total Lungs HI Across All Media =	7.9E-001
Total Body Weight HI Across All Media =	7.5E-003

TABLE 9.8 CT

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk (1)					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	CCA Surface Soil	Trichloroethylene	2.7E-005	9.9E-004	4.6E-007	-	1.0E-003	Liver	2.4E-001	6.6E-001	4.2E-003	9.0E-001
			Benzo(a)anthracene	2.7E-005	2.2E-007	2.0E-006	-	2.9E-005	Body Weight, Liver, Kidney	1.6E-003	-	1.2E-004	1.7E-003
			Benzo(a)pyrene	2.7E-004	1.3E-006	2.0E-005	-	2.9E-004	Body Weight, Liver, Kidney	1.6E-003	-	1.2E-004	1.7E-003
			Benzo(b)fluoranthene	4.1E-005	5.7E-007	3.0E-006	-	4.4E-005	Body Weight, Liver, Kidney	2.4E-003	-	1.8E-004	2.6E-003
			Dibenzo(a,h)anthracene	8.7E-006	2.9E-008	6.4E-007	-	9.4E-006	Body Weight	2.6E-005	-	1.9E-006	2.8E-005
			Indeno(1,2,3-cd)pyrene	9.3E-006	3.6E-008	6.8E-007	-	1.0E-005	Body Weight, Liver, Kidney	5.5E-004	-	4.1E-005	5.9E-004
			Arsenic	4.5E-005	3.0E-006	7.5E-007	-	4.8E-005	Skin	1.1E-001	-	1.8E-003	1.1E-001
			Manganese	-	-	-	-	-	CNS	3.5E-002	2.1E+000	4.9E-003	2.2E+000
			Chemical Total	4.3E-004	9.9E-004	2.7E-005	-	1.4E-003		3.9E-001	2.8E+000	1.1E-002	3.2E+000
		Exposure Point Total						1.4E-003					3.2E+000
	Exposure Medium Total							1.4E-003					3.2E+000
Medium Total								1.4E-003					3.2E+000
Receptor Total							Receptor Risk Total	1.4E-003				Receptor HI Total	3.2E+000

Footnote:

(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

Total Skin HI Across All Media =	1.1E-001
Total CNS HI Across All Media =	2.2E+000
Total Liver HI Across All Media =	9.1E-001
Total Kidney HI Across All Media =	6.6E-003
Total Body Weight HI Across All Media =	6.6E-003

TABLE 9.9 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 yrs)

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
Soil	Soil	BIA Surface Soil	Arsenic	1.9E-005	1.6E-006	1.6E-006	-	2.2E-005	Skin	4.9E-001	-	4.1E-002	5.3E-001
			Manganese	-	-	-	-	-	CNS	1.8E-001	4.9E+000	1.2E-001	5.2E+000
			Chemical Total	1.9E-005	1.6E-006	1.6E-006	-	2.2E-005		6.6E-001	4.9E+000	1.6E-001	5.7E+000
		Exposure Point Total						2.2E-005					5.7E+000
	Exposure Medium Total							2.2E-005					5.7E+000
Medium Total								2.2E-005					5.7E+000
Receptor Total							Receptor Risk Total	2.2E-005				Receptor HI Total	5.7E+000

Total Skin HI Across All Media =	5.3E-001
Total CNS HI Across All Media =	5.2E+000

TABLE 9.9 CT
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

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
Soil	Soil	BIA Surface Soil	Arsenic	1.9E-005	1.0E-006	3.1E-007	-	2.0E-005	Skin	4.9E-001	-	8.2E-003	4.9E-001
			Manganese	-	-	-	-	-	CNS	1.8E-001	3.3E+000	2.5E-002	3.5E+000
			Chemical Total	1.9E-005	1.0E-006	3.1E-007	-	2.0E-005		6.6E-001	3.3E+000	3.3E-002	3.9E+000
		Exposure Point Total						2.0E-005					3.9E+000
	Exposure Medium Total							2.0E-005					3.9E+000
Medium Total								2.0E-005					3.9E+000
Receptor Total							Receptor Risk Total	2.0E-005				Receptor HI Total	3.9E+000

Total Skin HI Across All Media =	4.9E-001
Total CNS HI Across All Media =	3.5E+000

TABLE 9.10 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 yrs)

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
Soil	Soil	CCA Surface Soil	Trichloroethylene	2.3E-005	9.8E-004	2.0E-006	-	1.0E-003	Liver	2.3E+000	2.9E+000	1.9E-001	5.3E+000
			Benzo(a)anthracene	2.3E-005	2.1E-007	8.4E-006	-	3.2E-005	Body Weight, Liver, Kidney	1.5E-002	-	5.4E-003	2.0E-002
			Benzo(a)pyrene	2.3E-004	1.3E-006	8.4E-005	-	3.2E-004	Body Weight, Liver, Kidney	1.5E-002	-	5.4E-003	2.0E-002
			Benzo(b)fluoranthene	3.5E-005	5.5E-007	1.3E-005	-	4.9E-005	Body Weight, Liver, Kidney	2.3E-002	-	8.2E-003	3.1E-002
			Benzo(k)fluoranthene	1.4E-006	6.5E-009	5.2E-007	-	2.0E-006	Body Weight, Liver, Kidney	9.2E-003	-	3.4E-003	1.3E-002
			Dibenzo(a,h)anthracene	7.5E-006	2.7E-008	2.7E-006	-	1.0E-005	Body Weight	2.4E-004	-	8.7E-005	3.3E-004
			Indeno(1,2,3-cd)pyrene	8.0E-006	3.2E-008	2.9E-006	-	1.1E-005	Body Weight, Liver, Kidney	5.1E-003	-	1.9E-003	7.0E-003
			Antimony	-	-	-	-	-	Blood	1.2E+000	-	2.2E-001	1.4E+000
			Arsenic	3.9E-005	2.7E-006	3.2E-006	-	4.5E-005	Skin	1.0E+000	-	8.4E-002	1.1E+000
			Chromium	-	1.3E-006	-	-	1.3E-006	Lungs	1.7E+000	1.2E+000	1.9E+000	4.8E+000
			Iron	-	-	-	-	-	Iron Overload	1.9E+000	-	5.3E-002	2.0E+000
			Manganese	-	-	-	-	-	CNS	3.3E-001	7.6E+000	2.3E-001	8.2E+000
			Chemical Total	3.7E-004	9.8E-004	1.2E-004	-	1.5E-003		8.4E+000	1.2E+001	2.7E+000	2.3E+001
		Exposure Point Total						1.5E-003					2.3E+001
	Exposure Medium Total							1.5E-003					2.3E+001
Medium Total								1.5E-003					2.3E+001
Receptor Total							Receptor Risk Total	1.5E-003				Receptor HI Total	2.3E+001

Total Skin HI Across All Media =	1.1E+000
Total CNS HI Across All Media =	8.2E+000
Total Liver HI Across All Media =	5.4E+000
Total Blood HI Across All Media =	1.4E+000
Total Kidney HI Across All Media =	9.1E-002
Total Lungs HI Across All Media =	4.8E+000
Total Iron Overload HI Across All Media =	2.0E+000
Total Body Weight HI Across All Media =	9.1E-002

TABLE 9.10 CT

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

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
Soil	Soil	CCA Surface Soil	Trichloroethylene	2.3E-005	6.5E-004	3.9E-007	-	6.8E-004	Liver	2.3E+000	1.9E+000	3.8E-002	4.2E+000
			Benzo(a)anthracene	2.3E-005	1.4E-007	1.7E-006	-	2.5E-005	Body Weight, Liver, Kidney	1.5E-002	-	1.1E-003	1.6E-002
			Benzo(a)pyrene	2.3E-004	8.4E-007	1.7E-005	-	2.5E-004	Body Weight, Liver, Kidney	1.5E-002	-	1.1E-003	1.6E-002
			Benzo(b)fluoranthene	3.5E-005	3.7E-007	2.6E-006	-	3.8E-005	Body Weight, Liver, Kidney	2.3E-002	-	1.6E-003	2.4E-002
			Benzo(k)fluoranthene	1.4E-006	4.3E-009	1.0E-007	-	1.5E-006	Body Weight, Liver, Kidney	9.2E-003	-	6.7E-004	9.9E-003
			Dibenzo(a,h)anthracene	7.5E-006	1.8E-008	5.5E-007	-	8.1E-006	Body Weight	2.4E-004	-	1.7E-005	2.6E-004
			Indeno(1,2,3-cd)pyrene	8.0E-006	2.2E-008	5.6E-007	-	8.6E-006	Body Weight, Liver, Kidney	5.1E-003	-	3.7E-004	5.5E-003
			Antimony	-	-	-	-	-	Blood	1.2E+000	-	4.4E-002	1.2E+000
			Arsenic	3.9E-005	1.8E-006	6.5E-007	-	4.1E-005	Skin	1.0E+000	-	1.7E-002	1.0E+000
			Chromium	-	8.5E-007	-	-	8.5E-007	Lungs	1.7E+000	8.3E-001	3.7E-001	2.9E+000
			Iron	-	-	-	-	-	Iron Overload	1.9E+000	-	1.1E-002	1.9E+000
			Manganese	-	-	-	-	-	CNS	3.3E-001	5.1E+000	4.5E-002	5.4E+000
			Chemical Total	3.7E-004	6.6E-004	2.3E-005	-	1.0E-003		6.4E+000	7.8E+000	5.3E-001	1.7E+001
		Exposure Point Total						1.0E-003					1.7E+001
	Exposure Medium Total							1.0E-003					1.7E+001
Medium Total								1.0E-003					1.7E+001
Receptor Total							Receptor Risk Total	1.0E-003				Receptor HI Total	1.7E+001

Total Skin HI Across All Media =	1.0E+000
Total CNS HI Across All Media =	5.4E+000
Total Liver HI Across All Media =	4.3E+000
Total Blood HI Across All Media =	1.2E+000
Total Kidney HI Across All Media =	7.1E-002
Total Lungs HI Across All Media =	2.9E+000
Total Iron Overload HI Across All Media =	1.9E+000
Total Body Weight HI Across All Media =	7.2E-002

TABLE 9.11 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent (12-18 yrs)

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
Soil	Soil	BIA Surface Soil	Arsenic	1.5E-006	2.0E-008	2.3E-007	-	1.7E-006	Skin	3.8E-002	-	5.9E-003	4.4E-002
			Chemical Total	1.5E-006	2.0E-008	2.3E-007	-	1.7E-006		3.8E-002	-	5.9E-003	4.4E-002
		Exposure Point Total						1.7E-006					4.4E-002
		CCA Surface Soil	Trichloroethylene	1.8E-006	1.3E-005	2.8E-007	-	1.5E-005	Liver	1.8E-001	3.7E-002	2.8E-002	2.4E-001
			Benzo(a)anthracene	1.8E-006	2.7E-009	1.2E-006	-	3.0E-006	Body Weight, Liver, Kidney	1.2E-003	-	7.8E-004	1.9E-003
			Benzo(a)pyrene	1.8E-005	1.6E-008	1.2E-005	-	3.0E-005	Body Weight, Liver, Kidney	1.2E-003	-	7.8E-004	1.9E-003
			Benzo(b)fluoranthene	2.7E-006	7.1E-009	1.8E-006	-	4.6E-006	Body Weight, Liver, Kidney	1.8E-003	-	1.2E-003	2.9E-003
			Arsenic	3.0E-006	3.5E-008	4.7E-007	-	3.5E-006	Skin	7.8E-002	-	1.2E-002	9.0E-002
			Chemical Total	2.7E-005	1.3E-005	1.6E-005	-	4.8E-005		2.6E-001	3.7E-002	4.2E-002	3.4E-001
		Exposure Point Total						4.8E-005					3.4E-001
	Exposure Medium Total							5.0E-005					3.8E-001
Medium Total								5.0E-005					3.8E-001
Receptor Total							Receptor Risk Total	5.0E-005				Receptor HI Total	3.8E-001

TABLE 9.11 CT

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

CENTRAL TENDENCY

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent (12-18 yrs)

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
Soil	Soil	CCA Surface Soil	Trichloroethylene	9.1E-007	6.3E-006	2.8E-008	-	7.2E-006	Liver	8.9E-002	1.8E-002	2.8E-003	1.1E-001
			Benzo(a)pyrene	9.0E-006	8.0E-009	1.2E-006	-	1.0E-005	Body Weight, Liver, Kidney	5.8E-004	-	7.8E-005	6.6E-004
			Benzo(b)fluoranthene	1.4E-006	3.5E-009	1.8E-007	-	1.6E-006	Body Weight, Liver, Kidney	8.8E-004	-	1.2E-004	9.9E-004
			Arsenic	1.5E-006	1.8E-008	4.7E-008	-	1.6E-006	Skin	3.9E-002	-	1.2E-003	4.0E-002
			Chemical Total	1.3E-005	6.3E-008	1.5E-006	-	1.7E-005		1.3E-001	1.8E-002	4.2E-003	1.5E-001
		Exposure Point Total						1.7E-005					1.5E-001
	Exposure Medium Total							1.7E-005					1.5E-001
Medium Total								1.7E-005					1.5E-001
Receptor Total							Receptor Risk Total	1.7E-005				Receptor HI Total	1.5E-001

TABLE 9.12 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Shoreline Resident
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
Sediment	Sediment	Little Valley Creek and Tributaries	Benzo(a)pyrene	2.5E-006	-	1.3E-006	-	3.9E-006	Body Weight, Liver, Kidney	3.3E-005	-	1.7E-005	4.9E-005
			Arsenic	2.4E-006	-	2.9E-007	-	2.7E-006	Skin	1.2E-002	-	1.5E-003	1.4E-002
			Chemical Total	4.9E-006	-	1.6E-006	-	6.6E-006		1.2E-002	-	1.5E-003	1.4E-002
		Exposure Point Total						6.6E-006					1.4E-002
	Exposure Medium Total							6.6E-006					1.4E-002
Surface Water	Surface Water	Little Valley Creek and Tributaries	Trichloroethylene	6.3E-007	-	2.7E-006	-	3.4E-006	Liver	1.2E-002	-	5.3E-002	6.5E-002
			Chemical Total	6.3E-007	-	2.7E-006	-	3.4E-006		1.2E-002	-	5.3E-002	6.5E-002
		Exposure Point Total						3.4E-006					6.5E-002
	Exposure Medium Total							3.4E-006					6.5E-002
Medium Total								6.6E-006					1.4E-002
Receptor Total							Receptor Risk Total	6.6E-006				Receptor HI Total	1.4E-002

TABLE 9.12 CT
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Shoreline Resident
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
Sediment	Sediment	Little Valley Creek and Tributaries	-	-	-	-	-	-	-	-	-	-	-
			Chemical Total	-	-	-	-	-		-	-	-	-
		Exposure Point Total						-					-
	Exposure Medium Total							-					-
Surface Water	Surface Water	Little Valley Creek and Tributaries	-	-	-	-	-	-		-	-	-	-
			Chemical Total	-	-	-	-	-		-	-	-	-
		Exposure Point Total						-					-
	Exposure Medium Total							-					-
Medium Total								-					-
Receptor Total							Receptor Risk Total	-				Receptor HI Total	-

TABLE 9.13 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Shoreline Resident
Receptor Age: Child (0 - 6 yrs)

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
Sediment	Sediment	Little Valley Creek and Tributaries	Benzo(a)pyrene	4.8E-006	-	1.7E-006	-	6.5E-006	Body Weight, Liver, Kidney	3.0E-004	-	1.1E-004	4.1E-004
			Arsenic	4.4E-006	-	3.7E-007	-	4.8E-006	Skin	1.2E-001	-	9.7E-003	1.2E-001
			Chemical Total	9.2E-006	-	2.1E-006	-	1.1E-005		1.2E-001	-	9.8E-003	1.3E-001
		Exposure Point Total						1.1E-005					1.3E-001
	Exposure Medium Total							1.1E-005					1.3E-001
Surface Water	Surface Water	Little Valley Creek and Tributaries	Trichloroethylene	5.9E-007	-	1.3E-006	-	1.8E-006	Liver	5.8E-002	-	1.2E-001	1.8E-001
			Chemical Total	5.9E-007	-	1.3E-006	-	1.8E-006		5.8E-002	-	1.2E-001	1.8E-001
		Exposure Point Total						1.8E-006					1.8E-001
	Exposure Medium Total							1.8E-006					1.8E-001
Medium Total								1.1E-005					1.3E-001
Receptor Total							Receptor Risk Total	1.1E-005				Receptor HI Total	1.3E-001

TABLE 9.13 CT
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Shoreline Resident
Receptor Age: Child (0 - 6 years)

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
Sediment	Sediment	Little Valley Creek and Tributaries	Benzo(a)pyrene	2.4E-006	-	1.7E-007	-	2.6E-006	Body Weight, Liver, Kidney	1.5E-004	-	1.1E-005	1.6E-004
			Arsenic	2.2E-006	-	3.7E-008	-	2.3E-006	Skin	5.8E-002	-	9.7E-004	5.9E-002
			Chemical Total	4.6E-006	-	2.1E-007	-	4.8E-006		5.8E-002	-	9.8E-004	5.9E-002
		Exposure Point Total						4.8E-006					5.9E-002
	Exposure Medium Total							4.8E-006					5.9E-002
Medium Total								4.8E-006					5.9E-002
Receptor Total							Receptor Risk Total	4.8E-006				Receptor HI Total	5.9E-002

TABLE 9.14 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

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
Soil	Soil	BIA All Soil	Arsenic	6.6E-007	1.9E-006	6.0E-008	-	2.7E-006	Skin	1.0E-001	-	9.3E-003	1.1E-001
			Manganese	-	-	-	-	-	CNS	3.2E-002	3.1E+001	2.4E-002	3.1E+001
			Chemical Total	6.6E-007	1.9E-006	6.0E-008	-	2.7E-006		1.4E-001	3.1E+001	3.3E-002	3.1E+001
		Exposure Point Total						2.7E-006					3.1E+001
	Exposure Medium Total							2.7E-006					3.1E+001
Medium Total								2.7E-006					3.1E+001
Receptor Total							Receptor Risk Total	2.7E-006				Receptor HI Total	3.1E+001

Total Skin HI Across All Media =	1.1E-001
Total CNS HI Across All Media =	3.1E+001

TABLE 9.14 CT

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

CENTRAL TENDENCY

Little Valley Superfund Site

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
Soil	Soil	BIA All Soil	Arsenic	-	1.2E-006	6.0E-008	-	1.2E-006	Skin	-	-	9.3E-003	9.3E-003
			Manganese	-	-	-	-	-	CNS	-	1.9E+001	2.4E-002	1.9E+001
			Chemical Total	-	1.2E-006	6.0E-008	-	1.2E-006		-	1.9E+001	3.3E-002	1.9E+001
		Exposure Point Total						1.2E-006					1.9E+001
	Exposure Medium Total							1.2E-006					1.9E+001
Medium Total								1.2E-006					1.9E+001
Receptor Total							Receptor Risk Total	1.2E-006				Receptor HI Total	1.9E+001

Total Skin HI Across All Media =	9.3E-003
Total CNS HI Across All Media =	1.9E+001

TABLE 9.15 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

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
Soil	Soil	CCA All Soil	Trichloroethylene	3.7E-007	4.5E-005	3.3E-008	-	4.6E-005	Liver, CNS	2.2E-001	8.0E-001	1.9E-002	1.0E+000
			Benzo(a)pyrene	4.1E-006	4.8E-007	1.6E-006	-	6.2E-006	Body Weight, Liver, Kidney	1.6E-003	-	6.1E-004	2.2E-003
			Arsenic	1.1E-006	2.9E-006	1.0E-007	-	4.1E-006	Skin	1.7E-001	-	1.5E-002	1.9E-001
			Cadmium	-	1.6E-006	-	-	1.6E-006	Kidney	7.0E-002	-	8.4E-002	1.5E-001
			Chromium	-	1.0E-006	-	-	1.0E-006	Lungs	2.2E-001	6.1E+000	2.7E-001	6.6E+000
			Manganese	-	-	-	-	-	CNS	6.5E-002	5.6E+001	4.8E-002	5.6E+001
			Chemical Total	5.6E-006	5.2E-005	1.7E-006	-	5.9E-005		7.5E-001	6.3E+001	4.3E-001	6.4E+001
		Exposure Point Total						5.9E-005					6.4E+001
	Exposure Medium Total							5.9E-005					6.4E+001
Medium Total								5.9E-005					6.4E+001
Receptor Total							Receptor Risk Total	5.9E-005				Receptor HI Total	6.4E+001

Total Skin HI Across All Media =	1.9E-001
Total Liver HI Across All Media =	1.0E+000
Total Kidney HI Across All Media =	1.6E-001
Total CNS HI Across All Media =	5.6E+001
Total Lungs HI Across All Media =	6.6E+000
Total Body Weight HI Across All Media =	2.2E-003

TABLE 9.15 CT
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY
Little Valley Superfund Site

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
Soil	Soil	CCA All Soil	Trichloroethylene	-	2.7E-005	3.3E-008	-	2.7E-005	Liver, CNS	-	4.8E-001	1.9E-002	5.0E-001
			Benzo(a)pyrene	-	2.9E-007	1.6E-006	-	1.9E-006	Body Weight, Liver, Kidney	-	-	6.1E-004	6.1E-004
			Arsenic	-	1.7E-006	1.0E-007	-	1.8E-006	Skin	-	-	1.5E-002	1.5E-002
			Chromium	-	6.3E-007	-	-	6.3E-007	Lungs	-	3.7E+000	2.7E-001	3.9E+000
			Manganese	-	-	-	-	-	CNS	-	3.4E+001	4.8E-002	3.4E+001
			Chemical Total	-	3.0E-005	1.7E-006	-	3.2E-005		-	3.8E+001	3.5E-001	3.8E+001
		Exposure Point Total						3.2E-005					3.8E+001
	Exposure Medium Total							3.2E-005					3.8E+001
Medium Total								3.2E-005					3.8E+001
Receptor Total							Receptor Risk Total	3.2E-005				Receptor HI Total	3.8E+001

Total Skin HI Across All Media =	1.5E-002
Total Liver HI Across All Media =	5.0E-001
Total CNS HI Across All Media =	3.4E+001
Total Lungs HI Across All Media =	3.9E+000
Total Body Weight HI Across All Media =	6.1E-004
Total Kidney HI Across All Media =	6.1E-004

TABLE 9.16 RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

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
Soil	Soil	RRAA All Soil	Arsenic	5.9E-007	1.2E-006	5.3E-008	-	1.9E-006	Skin	9.2E-002	-	8.3E-003	1.0E-001
			Manganese	-	-	-	-	-	CNS	4.8E-002	3.3E+001	3.6E-002	3.3E+001
			Chemical Total	5.9E-007	1.2E-006	5.3E-008	-	1.9E-006		1.4E-001	3.3E+001	4.4E-002	3.3E+001
		Exposure Point Total						1.9E-006					3.3E+001
	Exposure Medium Total							1.9E-006					3.3E+001
Medium Total								1.9E-006					3.3E+001
Receptor Total							Receptor Risk Total	1.9E-006				Receptor HI Total	3.3E+001

Total Skin HI Across All Media =	1.0E-001
Total CNS HI Across All Media =	3.3E+001

TABLE 9.16 CT

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

CENTRAL TENDENCY

Little Valley Superfund Site

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
Soil	Soil	RRAA All Soil	Manganese	-	-	-	-	-	CNS	-	2.0E+001	3.6E-002	2.0E+001
			Chemical Total	-	-	-	-	-		-	2.0E+001	3.6E-002	2.0E+001
		Exposure Point Total						-					2.0E+001
	Exposure Medium Total							-					2.0E+001
Medium Total								-					2.0E+001
Receptor Total							Receptor Risk Total	-				Receptor HI Total	2.0E+001

Total CNS HI Across All Media = 2.0E+001

TABLE 10.1 RME

RISK SUMMARY

REASONABLE MAXIMUM EXPOSURE

Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial 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
Soil	Soil	BIA Surface Soil	Arsenic	3.0E-006	2.0E-006	1.2E-006	-	6.2E-006	Skin	1.9E-002	-	7.4E-003	2.6E-002
			Manganese	-	-	-	-	-	CNS	6.8E-003	1.5E+000	2.2E-002	1.5E+000
			Chemical Total	3.0E-006	2.0E-006	1.2E-006	-	6.2E-006		2.5E-002	1.5E+000	3.0E-002	1.5E+000
		Exposure Point Total						6.2E-006					1.5E+000
	Exposure Medium Total							6.2E-006					1.5E+000
Medium Total								6.2E-006					1.5E+000
Receptor Total							Receptor Risk Total	6.2E-006				Receptor HI Total	1.5E+000

Total Skin HI Across All Media =	2.6E-002
Total CNS HI Across All Media =	1.5E+000

TABLE 10.1 CT
RISK SUMMARY
CENTAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial 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
Soil	Soil	BIA Surface Soil	Arsenic	9.4E-007	3.8E-007	3.7E-008	-	1.4E-006	Skin	1.6E-002	-	6.4E-004	1.7E-002
			Chemical Total	9.4E-007	3.8E-007	3.7E-008	-	1.4E-006		1.6E-002	-	6.4E-004	1.7E-002
		Exposure Point Total						1.4E-006					1.7E-002
	Exposure Medium Total							1.4E-006					1.7E-002
Medium Total								1.4E-006					1.7E-002
Receptor Total							Receptor Risk Total	1.4E-006				Receptor HI Total	1.7E-002

TABLE 10.2 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial 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
Soil	Soil	CCA Surface Soil	Trichloroethylene	3.7E-006	6.1E-004	1.5E-006	-	6.1E-004	Liver	8.7E-002	4.2E-001	3.4E-002	5.5E-001
			Benzo(a)anthracene	3.7E-006	1.8E-007	6.3E-006	-	1.0E-005	Weight, Liver, Ki	5.7E-004	-	9.7E-004	1.5E-003
			Benzo(a)pyrene	3.7E-005	1.2E-006	6.3E-005	-	1.0E-004	Weight, Liver, Ki	5.7E-004	-	9.7E-004	1.5E-003
			Benzo(b)fluoranthene	5.6E-006	4.1E-007	9.6E-006	-	1.6E-005	Weight, Liver, Ki	8.6E-004	-	1.5E-003	2.3E-003
			Dibenzo(a,h)anthracene	1.2E-006	3.1E-008	2.1E-006	-	3.3E-006	Body Weight	9.2E-006	-	1.6E-005	2.5E-005
			Indeno(1,2,3-cd)pyrene	1.3E-006	3.6E-008	2.2E-006	-	3.5E-006	Weight, Liver, Ki	2.0E-004	-	3.4E-004	5.3E-004
			Arsenic	6.1E-006	3.5E-006	2.4E-006	-	1.2E-005	Skin	3.8E-002	-	1.5E-002	5.3E-002
			Cadmium	-	1.0E-006	-	-	1.0E-006	Kidney	8.0E-003	-	4.2E-002	5.0E-002
			Chromium	-	1.6E-006	-	-	1.6E-006	Lungs	6.4E-002	3.8E-001	3.4E-001	7.8E-001
			Manganese	-	-	-	-	-	CNS	1.2E-002	2.3E+000	4.1E-002	2.4E+000
			Chemical Total	5.9E-005	6.1E-004	8.8E-005	-	7.6E-004		2.1E-001	3.1E+000	4.7E-001	3.8E+000
		Exposure Point Total						7.6E-004					3.8E+000
	Exposure Medium Total							7.6E-004					3.8E+000
Medium Total								7.6E-004					3.8E+000
Receptor Total							Receptor Risk Total	7.6E-004				Receptor HI Total	3.8E+000

Total Skin HI Across All Media =	5.3E-002
Total CNS HI Across All Media =	2.4E+000
Total Kidney HI Across All Media =	5.6E-002
Total Lungs HI Across All Media =	7.8E-001
Total Liver HI Across All Media	6.0E-003
Total Body Weight HI Across All Media	6.0E-003

TABLE 10.2 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Commercial 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
Soil	Soil	CCA Surface Soil	Trichloroethylene	1.2E-006	1.9E-004	4.7E-008	-	1.9E-004	Liver	7.6E-002	3.7E-001	3.0E-003	4.5E-001
			Benzo(a)anthracene	1.2E-006	4.5E-008	2.0E-007	-	1.4E-006	Body Weight, Liver, Kidney	5.0E-004	-	8.5E-005	5.8E-004
			Benzo(a)pyrene	1.2E-005	2.8E-007	2.0E-006	-	1.4E-005	Body Weight, Liver, Kidney	5.0E-004	-	8.5E-005	5.8E-004
			Benzo(b)fluoranthene	1.8E-006	1.1E-007	3.0E-007	-	2.2E-006	Body Weight, Liver, Kidney	7.5E-004	-	1.3E-004	8.8E-004
			Arsenic	1.9E-006	6.6E-007	7.7E-008	-	2.7E-006	Skin	3.3E-002	-	1.3E-003	3.5E-002
			Manganese	-	-	-	-	-	CNS	1.1E-002	1.2E+000	3.6E-003	1.2E+000
			Chemical Total	1.8E-005	1.9E-004	2.6E-006	-	2.1E-004		1.2E-001	1.6E+000	8.2E-003	1.7E+000
		Exposure Point Total						2.1E-004					1.7E+000
	Exposure Medium Total							2.1E-004					1.7E+000
Medium Total								2.1E-004					1.7E+000
Receptor Total							Receptor Risk Total	2.1E-004				Receptor HI Total	1.7E+000

Total Skin HI Across All Media =	3.5E-002
Total CNS HI Across All Media =	1.2E+000
Total Liver HI Across All Media =	4.5E-001
Total Body Weight HI Across All Media =	2.0E-003
Total Kidney HI Across All Media =	2.0E-003

TABLE 10.3 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial 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
Groundwater	Groundwater	Process Water	Trichloroethylene	1.3E-006	2.5E-004	4.2E-006	-	2.6E-004	Liver	3.0E-002	1.8E-001	9.8E-002	3.0E-001
		(Washdown Scenario)	Chemical Total	1.3E-006	2.5E-004	4.2E-006	-	2.6E-004		3.0E-002	1.8E-001	9.8E-002	3.0E-001
		Exposure Point Total						2.6E-004					3.0E-001
	Exposure Medium Total							2.6E-004					3.0E-001
Medium Total								2.6E-004					3.0E-001
Receptor Total							Receptor Risk Total	2.6E-004				Receptor HI Total	3.0E-001

TABLE 10.3 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial 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
Groundwater	Groundwater	Process Water (Washdown Scenario)	Trichloroethylene	4.0E-007	4.8E-005	1.3E-006	-	5.0E-005	Liver	2.6E-002	9.3E-002	8.6E-002	2.0E-001
			Chemical Total	4.0E-007	4.8E-005	1.3E-006	-	5.0E-005		2.6E-002	9.3E-002	8.6E-002	2.0E-001
	Exposure Medium Total							5.0E-005					2.0E-001
Medium Total								5.0E-005					2.0E-001
Receptor Total							Receptor Risk Total	5.0E-005				Receptor HI Total	2.0E-001

TABLE 10.4 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial 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
Groundwater	Groundwater	Process Water (Car Wash Scenario)	Benzene	3.4E-008	4.0E-006	1.3E-007	-	4.1E-006	RBC	4.3E-004	4.8E-002	1.7E-003	5.0E-002
			Tetrachloroethylene	2.4E-008	2.4E-006	2.5E-007	-	2.6E-006	Liver	1.3E-004	-	1.4E-003	1.5E-003
			Trichloroethylene	1.0E-005	2.4E-003	3.6E-005	-	2.5E-003	Liver	2.4E-001	1.7E+000	8.4E-001	2.8E+000
			Arsenic	6.7E-006	-	1.6E-006	-	8.3E-006	Skin	4.2E-002	-	1.0E-002	5.2E-002
			Chemical Total	1.7E-005	2.4E-003	3.8E-005	-	2.5E-003		2.8E-001	1.7E+000	8.5E-001	2.9E+000
		Exposure Point Total						2.5E-003					2.9E+000
	Exposure Medium Total							2.5E-003					2.9E+000
Medium Total								2.5E-003					2.9E+000
Receptor Total							Receptor Risk Total	2.5E-003				Receptor HI Total	2.9E+000

Total Liver HI Across All Media =	2.8E+000
Total RBC HI Across All Media =	5.0E-002
Total Skin HI Across All Media =	5.2E-002

TABLE 10.4 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Commercial 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
Groundwater	Groundwater	Process Water (Car Wash Scenario)	Trichloroethylene	3.2E-006	4.6E-004	1.1E-005	-	4.7E-004	Liver	2.1E-001	8.9E-001	7.4E-001	1.8E+000
			Arsenic	2.1E-006	-	5.1E-007	-	2.6E-006	Skin	3.7E-002	-	8.9E-003	4.5E-002
			Chemical Total	5.3E-006	4.6E-004	1.2E-005	-	4.7E-004		2.4E-001	8.9E-001	7.5E-001	1.9E+000
		Exposure Point Total						4.7E-004					1.9E+000
	Exposure Medium Total							4.7E-004					1.9E+000
Medium Total								4.7E-004					1.9E+000
Receptor Total							Receptor Risk Total	4.7E-004				Receptor HI Total	1.9E+000

Total Liver HI Across All Media =	1.8E+000
Total Skin HI Across All Media =	4.5E-002

TABLE 10.5 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk (1)					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	RRAA Surface Soil	Benzo(a)pyrene	9.6E-006	4.3E-008	3.9E-006	-	1.4E-005	Weight, Liver, Ki	3.7E-005	-	1.9E-005	5.6E-005
			Arsenic	2.8E-005	1.7E-006	2.6E-006	-	3.2E-005	Skin	4.4E-002	-	5.2E-003	4.9E-002
			Chemical Total	3.8E-005	1.7E-006	6.6E-006	-	4.6E-005		4.4E-002	-	5.2E-003	4.9E-002
		Exposure Point Total						4.6E-005					4.9E-002
	Exposure Medium Total							4.6E-005					4.9E-002
Medium Total								4.6E-005					4.9E-002
Receptor Total							Receptor Risk Total	4.6E-005				Receptor HI Total	4.9E-002

Footnote:
(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

Total Skin HI Across All Media =	4.9E-002
Total CNS HI Across All Media =	4.9E-002

TABLE 10.5 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk (1)					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	RRAA Surface Soil	Benzo(a)pyrene	7.8E-006	2.1E-008	5.7E-007	-	8.4E-006	Body Weight, Liver, Kidney	4.6E-005	-	3.4E-006	4.9E-005
			Arsenic	2.3E-005	5.9E-007	3.8E-007	-	2.4E-005	Skin	5.4E-002	-	9.3E-004	5.5E-002
			Chemical Total	3.1E-005	6.1E-007	9.5E-007	-	3.2E-005		5.4E-002	-	9.3E-004	5.5E-002
		Exposure Point Total						3.2E-005					5.5E-002
	Exposure Medium Total							3.2E-005					5.5E-002
Medium Total								3.2E-005					5.5E-002
Receptor Total							Receptor Risk Total	3.2E-005				Receptor HI Total	5.5E-002

Footnote:
(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

TABLE 10.6 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

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
Soil	Soil	RRAA Surface Soil	Benzo(a)pyrene	6.7E-006	2.0E-008	2.4E-006	-	9.2E-006	Weight, Liver, Ki	4.3E-004	-	1.6E-004	5.9E-004
			Dibenzo(a,h)anthracene	2.1E-006	3.3E-009	7.6E-007	-	2.8E-006	Body Weight	6.7E-005	-	2.4E-005	9.1E-005
			Arsenic	2.0E-005	5.4E-007	1.6E-006	-	2.2E-005	Skin	5.1E-001	-	4.3E-002	5.5E-001
			Iron	-	-	-	-	-	Iron Overload	1.0E+000	-	2.8E-002	1.0E+000
			Manganese	-	-	-	-	-	CNS	2.6E-001	2.4E+000	1.8E-001	2.8E+000
			Chemical Total	2.8E-005	5.6E-007	4.8E-006	-	3.4E-005		1.8E+000	2.4E+000	2.5E-001	4.4E+000
		Exposure Point Total						3.4E-005					4.4E+000
	Exposure Medium Total							3.4E-005					4.4E+000
Medium Total								3.4E-005					4.4E+000
Receptor Total							Receptor Risk Total	3.4E-005				Receptor HI Total	4.4E+000

Total Skin HI Across All Media =	5.5E-001
Total Iron Overload HI Across All Media =	1.0E+000
Total CNS HI Across All Media =	2.8E+000
Total Body Weight HI Across All Media =	6.8E-004
Total Kidney HI Across All Media =	5.9E-004
Total Liver HI Across All Media =	5.9E-004

TABLE 10.6 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

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
Soil	Soil	RRAA Surface Soil	Benzo(a)pyrene	6.7E-006	1.4E-008	4.9E-007	-	7.2E-006	Body Weight, Liver, Kidney	4.3E-004	-	3.1E-005	4.6E-004
			Dibenzo(a,h)anthracene	2.1E-006	2.2E-009	1.5E-007	-	2.2E-006	Body Weight	6.7E-005	-	4.8E-006	7.1E-005
			Arsenic	2.0E-005	3.6E-007	3.3E-007	-	2.0E-005	Skin	5.1E-001	-	8.5E-003	5.2E-001
			Iron	-	-	-	-	-	Iron Overload	1.0E+000	-	5.6E-003	1.0E+000
			Manganese	-	-	-	-	-	CNS	2.6E-001	1.6E+000	3.6E-002	1.9E+000
			Chemical Total	2.8E-005	3.7E-007	9.7E-007	-	3.0E-005		1.8E+000	1.6E+000	5.1E-002	3.4E+000
		Exposure Point Total						3.0E-005					3.4E+000
	Exposure Medium Total							3.0E-005					3.4E+000
Medium Total								3.0E-005					3.4E+000
Receptor Total							Receptor Risk Total	3.0E-005				Receptor HI Total	3.4E+000

Total Skin HI Across All Media =	5.2E-001
Total CNS HI Across All Media =	1.9E+000
Total Kidney HI Across All Media =	4.6E-004
Total Liver HI Across All Media =	4.6E-004
Total Body Weight HI Across All Media =	5.3E-004
Total Iron Overload HI Across All Media =	1.0E+000

TABLE 10.7 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk (1)					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	BIA Surface Soil	Arsenic	2.7E-005	4.2E-006	2.5E-006	-	3.4E-005	Skin	4.2E-002	-	5.0E-003	4.7E-002
			Manganese	-	-	-	-	-	CNS	1.5E-002	1.7E+000	1.5E-002	1.7E+000
			Chemical Total	2.7E-005	4.2E-006	2.5E-006	-	3.4E-005		5.7E-002	1.7E+000	2.0E-002	1.7E+000
		Exposure Point Total						3.4E-005					1.7E+000
	Exposure Medium Total							3.4E-005					1.7E+000
Medium Total								3.4E-005					1.7E+000
Receptor Total							Receptor Risk Total	3.4E-005				Receptor HI Total	1.7E+000

Footnote:
(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duratior

Total Skin HI Across All Media =	4.7E-002
Total CNS HI Across All Media =	1.7E+000

TABLE 10.7 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk (1)					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	BIA Surface Soil	Arsenic	2.2E-005	1.7E-006	3.7E-007	-	2.4E-005	Skin	5.2E-002	-	8.9E-004	5.3E-002
			Manganese	-	-	-	-	-	CNS	1.9E-002	1.4E+000	2.7E-003	1.4E+000
			Chemical Total	2.2E-005	1.7E-006	3.7E-007	-	2.4E-005		7.1E-002	1.4E+000	3.6E-003	1.5E+000
		Exposure Point Total						2.4E-005					1.5E+000
	Exposure Medium Total							2.4E-005					1.5E+000
Medium Total								2.4E-005					1.5E+000
Receptor Total							Receptor Risk Total	2.4E-005				Receptor HI Total	1.5E+000

Footnote:
(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

Total Skin HI Across All Media =	5.3E-002
cross All Media =	1.4E+000

TABLE 10.8 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe:	Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk (1)					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	CCA Surface Soil	Trichloroethylene	3.3E-005	1.7E-003	3.2E-006	-	1.8E-003	Liver	1.9E-001	4.3E-001	2.3E-002	6.5E-001
			Benzo(a)anthracene	3.3E-005	4.4E-007	1.4E-005	-	4.7E-005	y Weight, Liver, Ki	1.3E-003	-	6.6E-004	1.9E-003
			Benzo(a)pyrene	3.3E-004	2.9E-006	1.4E-004	-	4.7E-004	y Weight, Liver, Ki	1.3E-003	-	6.6E-004	1.9E-003
			Benzo(b)fluoranthene	5.0E-005	1.1E-006	2.1E-005	-	7.2E-005	y Weight, Liver, Ki	1.9E-003	-	1.0E-003	2.9E-003
			Dibenzo(a,h)anthracene	1.1E-005	6.8E-008	4.4E-006	-	1.5E-005	Body Weight	2.1E-005	-	1.1E-005	3.1E-005
			Indeno(1,2,3-cd)pyrene	1.1E-005	8.2E-008	4.7E-006	-	1.6E-005	y Weight, Liver, Ki	4.4E-004	-	2.3E-004	6.7E-004
			Arsenic	5.5E-005	7.4E-006	5.2E-006	-	6.8E-005	Skin	8.6E-002	-	1.0E-002	9.6E-002
			Cadmium	-	1.4E-006	-	-	1.4E-006	Kidney	1.8E-002	-	2.9E-002	4.6E-002
			Chromium	-	3.4E-006	-	-	3.4E-006	Lungs	1.4E-001	4.2E-001	2.3E-001	7.9E-001
			Manganese	-	-	-	-	-	CNS	2.8E-002	2.6E+000	2.8E-002	2.6E+000
			Chemical Total	5.3E-004	1.7E-003	1.9E-004	-	2.4E-003		4.7E-001	3.4E+000	3.2E-001	4.2E+000
		Exposure Point Total						2.4E-003					4.2E+000
	Exposure Medium Total							2.4E-003					4.2E+000
Medium Total								2.4E-003					4.2E+000
Receptor Total							Receptor Risk Total	2.4E-003				Receptor HI Total	4.2E+000

Footnote:
(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

Total Skin HI Across All Media =	9.6E-002
Total CNS HI Across All Media =	2.6E+000
Total Liver HI Across All Media =	6.6E-001
Total Kidney HI Across All Media =	5.4E-002
Total Lungs HI Across All Media =	7.9E-001
Total Body Weight HI Across All Media =	7.5E-003

TABLE 10.8 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk (1)					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	CCA Surface Soil	Trichloroethylene	2.7E-005	9.9E-004	4.6E-007	-	1.0E-003	Liver	2.4E-001	6.6E-001	4.2E-003	9.0E-001
			Benzo(a)anthracene	2.7E-005	2.2E-007	2.0E-006	-	2.9E-005	Body Weight, Liver, Kidney	1.6E-003	-	1.2E-004	1.7E-003
			Benzo(a)pyrene	2.7E-004	1.3E-006	2.0E-005	-	2.9E-004	Body Weight, Liver, Kidney	1.6E-003	-	1.2E-004	1.7E-003
			Benzo(b)fluoranthene	4.1E-005	5.7E-007	3.0E-006	-	4.4E-005	Body Weight, Liver, Kidney	2.4E-003	-	1.8E-004	2.6E-003
			Dibenzo(a,h)anthracene	8.7E-006	2.9E-008	6.4E-007	-	9.4E-006	Body Weight	2.6E-005	-	1.9E-006	2.8E-005
			Indeno(1,2,3-cd)pyrene	9.3E-006	3.6E-008	6.8E-007	-	1.0E-005	Body Weight, Liver, Kidney	5.5E-004	-	4.1E-005	5.9E-004
			Arsenic	4.5E-005	3.0E-006	7.5E-007	-	4.8E-005	Skin	1.1E-001	-	1.8E-003	1.1E-001
			Manganese	-	-	-	-	-	CNS	3.5E-002	2.1E+000	4.9E-003	2.2E+000
			Chemical Total	4.3E-004	9.9E-004	2.7E-005	-	1.4E-003		3.9E-001	2.8E+000	1.1E-002	3.2E+000
		Exposure Point Total						1.4E-003					3.2E+000
	Exposure Medium Total							1.4E-003					3.2E+000
Medium Total								1.4E-003					3.2E+000
Receptor Total							Receptor Risk Total	1.4E-003				Receptor HI Total	3.2E+000

Footnote:
(1) The adult resident cancer risk (24 year exposure duration) and the child resident cancer risk (6 year exposure duration) were added together to present the cancer risk over the enter 30 year exposure duration.

Total Skin HI Across All Media =	1.1E-001
Total CNS HI Across All Media =	2.2E+000
Total Liver HI Across All Media =	9.1E-001
Total Kidney HI Across All Media =	6.6E-003
Total Body Weight HI Across All Media =	6.6E-003

TABLE 10.9 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 yrs)

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
Soil	Soil	BIA Surface Soil	Arsenic	1.9E-005	1.6E-006	1.6E-006	-	2.2E-005	Skin	4.9E-001	-	4.1E-002	5.3E-001
			Manganese	-	-	-	-	-	CNS	1.8E-001	4.9E+000	1.2E-001	5.2E+000
			Chemical Total	1.9E-005	1.6E-006	1.6E-006	-	2.2E-005		6.6E-001	4.9E+000	1.6E-001	5.7E+000
		Exposure Point Total						2.2E-005					5.7E+000
	Exposure Medium Total							2.2E-005					5.7E+000
Medium Total								2.2E-005					5.7E+000
Receptor Total							Receptor Risk Total	2.2E-005				Receptor HI Total	5.7E+000

Total Skin HI Across All Media =	5.3E-001
Total CNS HI Across All Media =	5.2E+000

TABLE 10.9 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

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
Soil	Soil	BIA Surface Soil	Arsenic	1.9E-005	1.0E-006	3.1E-007	-	2.0E-005	Skin	4.9E-001	-	8.2E-003	4.9E-001
			Manganese	-	-	-	-		CNS	1.8E-001	3.3E+000	2.5E-002	3.5E+000
			Chemical Total	1.9E-005	1.0E-006	3.1E-007	-	2.0E-005		6.6E-001	3.3E+000	3.3E-002	3.9E+000
		Exposure Point Total						2.0E-005					3.9E+000
	Exposure Medium Total							2.0E-005					3.9E+000
Medium Total								2.0E-005					3.9E+000
Receptor Total							Receptor Risk Total	2.0E-005				Receptor HI Total	3.9E+000

Total Skin HI Across All Media =	4.9E-001
Total CNS HI Across All Media =	3.5E+000

TABLE 10.10 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 yrs)

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
Soil	Soil	CCA Surface Soil	Trichloroethylene	2.3E-005	9.8E-004	2.0E-006	-	1.0E-003	Liver	2.3E+000	2.9E+000	1.9E-001	5.3E+000
			Benzo(a)anthracene	2.3E-005	2.1E-007	8.4E-006	-	3.2E-005	Weight, Liver, Ki	1.5E-002	-	5.4E-003	2.0E-002
			Benzo(a)pyrene	2.3E-004	1.3E-006	8.4E-005	-	3.2E-004	Weight, Liver, Ki	1.5E-002	-	5.4E-003	2.0E-002
			Benzo(b)fluoranthene	3.5E-005	5.5E-007	1.3E-005	-	4.9E-005	Weight, Liver, Ki	2.3E-002	-	8.2E-003	3.1E-002
			Benzo(k)fluoranthene	1.4E-006	6.5E-009	5.2E-007	-	2.0E-006	Weight, Liver, Ki	9.2E-003	-	3.4E-003	1.3E-002
			Dibenzo(a,h)anthracene	7.5E-006	2.7E-008	2.7E-006	-	1.0E-005	Body Weight	2.4E-004	-	8.7E-005	3.3E-004
			Indeno(1,2,3-cd)pyrene	8.0E-006	3.2E-008	2.9E-006	-	1.1E-005	Weight, Liver, Ki	5.1E-003	-	1.9E-003	7.0E-003
			Antimony	-	-	-	-	-	Blood	1.2E+000	-	2.2E-001	1.4E+000
			Arsenic	3.9E-005	2.7E-006	3.2E-006	-	4.5E-005	Skin	1.0E+000	-	8.4E-002	1.1E+000
			Chromium	-	1.3E-006	-	-	1.3E-006	Lungs	1.7E+000	1.2E+000	1.9E+000	4.8E+000
			Iron	-	-	-	-	-	Iron Overload	1.9E+000	-	5.3E-002	2.0E+000
			Manganese	-	-	-	-	-	CNS	3.3E-001	7.6E+000	2.3E-001	8.2E+000
			Chemical Total	3.7E-004	9.8E-004	1.2E-004	-	1.5E-003		8.4E+000	1.2E+001	2.7E+000	2.3E+001
		Exposure Point Total						1.5E-003					2.3E+001
	Exposure Medium Total							1.5E-003					2.3E+001
Medium Total								1.5E-003					2.3E+001
Receptor Total							Receptor Risk Total	1.5E-003				Receptor HI Total	2.3E+001

Total Skin HI Across All Media =	1.1E+000
Total CNS HI Across All Media =	8.2E+000
Total Liver HI Across All Media =	5.4E+000
Total Blood HI Across All Media =	1.4E+000
Total Kidney HI Across All Media =	9.1E-002
Total Lungs HI Across All Media =	4.8E+000
Total Iron Overload HI Across All Media =	2.0E+000
Total Body Weight HI Across All Media =	9.1E-002

TABLE 10.10 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child (0 - 6 years)

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
Soil	Soil	CCA Surface Soil	Trichloroethylene	2.3E-005	6.5E-004	3.9E-007	-	6.8E-004	Liver	2.3E+000	1.9E+000	3.8E-002	4.2E+000
			Benzo(a)anthracene	2.3E-005	1.4E-007	1.7E-006	-	2.5E-005	Body Weight, Liver, Kidney	1.5E-002	-	1.1E-003	1.6E-002
			Benzo(a)pyrene	2.3E-004	8.4E-007	1.7E-005	-	2.5E-004	Body Weight, Liver, Kidney	1.5E-002	-	1.1E-003	1.6E-002
			Benzo(b)fluoranthene	3.5E-005	3.7E-007	2.6E-006	-	3.8E-005	Body Weight, Liver, Kidney	2.3E-002	-	1.6E-003	2.4E-002
			Benzo(k)fluoranthene	1.4E-006	4.3E-009	1.0E-007	-	1.5E-006	Body Weight, Liver, Kidney	9.2E-003	-	6.7E-004	9.9E-003
			Dibenzo(a,h)anthracene	7.5E-006	1.8E-008	5.5E-007	-	8.1E-006	Body Weight	2.4E-004	-	1.7E-005	2.6E-004
			Indeno(1,2,3-cd)pyrene	8.0E-006	2.2E-008	5.8E-007	-	8.6E-006	Body Weight, Liver, Kidney	5.1E-003	-	3.7E-004	5.5E-003
			Antimony	-	-	-	-	-	Blood	1.2E+000	-	4.4E-002	1.2E+000
			Arsenic	3.9E-005	1.8E-006	6.5E-007	-	4.1E-005	Skin	1.0E+000	-	1.7E-002	1.0E+000
			Chromium	-	8.5E-007	-	-	8.5E-007	Lungs	1.7E+000	8.3E-001	3.7E-001	2.9E+000
			Iron	-	-	-	-	-	Iron Overload	1.9E+000	-	1.1E-002	1.9E+000
			Manganese	-	-	-	-	-	CNS	3.3E-001	5.1E+000	4.5E-002	5.4E+000
			Chemical Total	3.7E-004	6.6E-004	2.3E-005	-	1.0E-003		8.4E+000	7.8E+000	5.3E-001	1.7E+001
		Exposure Point Total						1.0E-003					1.7E+001
	Exposure Medium Total							1.0E-003					1.7E+001
Medium Total								1.0E-003					1.7E+001
Receptor Total							Receptor Risk Total	1.0E-003				Receptor HI Total	1.7E+001

Total Skin HI Across All Media =	1.0E+000
Total CNS HI Across All Media =	5.4E+000
Total Liver HI Across All Media =	4.3E+000
Total Blood HI Across All Media =	1.2E+000
Total Kidney HI Across All Media =	7.1E-002
Total Lungs HI Across All Media =	2.9E+000
Total Iron Overload HI Across All Media =	1.9E+000
Total Body Weight HI Across All Media =	7.2E-002

TABLE 10.11 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent (12-18 yrs)

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
Soil	Soil	BIA Surface Soil	Arsenic	1.5E-006	2.0E-008	2.3E-007	-	1.7E-006	Skin	3.8E-002	-	5.9E-003	4.4E-002
			Chemical Total	1.5E-006	2.0E-008	2.3E-007	-	1.7E-006		3.8E-002	-	5.9E-003	4.4E-002
		Exposure Point Total						1.7E-006					4.4E-002
		CCA Surface Soil	Trichloroethylene	1.8E-006	1.3E-005	2.8E-007	-	1.5E-005	Liver	1.8E-001	3.7E-002	2.8E-002	2.4E-001
			Benzo(a)anthracene	1.8E-006	2.7E-009	1.2E-006	-	3.0E-006	Weight, Liver, Ki	1.2E-003	-	7.8E-004	1.9E-003
			Benzo(a)pyrene	1.8E-005	1.6E-008	1.2E-005	-	3.0E-005	Weight, Liver, Ki	1.2E-003	-	7.8E-004	1.9E-003
			Benzo(b)fluoranthene	2.7E-006	7.1E-009	1.8E-006	-	4.6E-006	Weight, Liver, Ki	1.8E-003	-	1.2E-003	2.9E-003
			Arsenic	3.0E-006	3.5E-008	4.7E-007	-	3.5E-006	Skin	7.8E-002	-	1.2E-002	9.0E-002
			Chemical Total	2.7E-005	1.3E-005	1.6E-005	-	4.8E-005		2.6E-001	3.7E-002	4.2E-002	3.4E-001
		Exposure Point Total						4.8E-005					3.4E-001
	Exposure Medium Total							5.0E-005					3.8E-001
Medium Total								5.0E-005					3.8E-001
Receptor Total							Receptor Risk Total	5.0E-005				Receptor HI Total	3.8E-001

TABLE 10.11 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent (12-18 yrs)

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
Soil	Soil	CCA Surface Soil	Trichloroethylene	9.1E-007	6.3E-006	2.8E-008	-	7.2E-006	Liver	8.9E-002	1.8E-002	2.8E-003	1.1E-001
			Benzo(a)pyrene	9.0E-006	8.0E-009	1.2E-006	-	1.0E-005	Body Weight, Liver, Kidney	5.8E-004	-	7.8E-005	6.6E-004
			Benzo(b)fluoranthene	1.4E-006	3.5E-009	1.8E-007	-	1.6E-006	Body Weight, Liver, Kidney	8.8E-004	-	1.2E-004	9.9E-004
			Arsenic	1.5E-006	1.8E-008	4.7E-008	-	1.6E-006	Skin	3.9E-002	-	1.2E-003	4.0E-002
			Chemical Total	1.3E-005	6.3E-006	1.5E-006	-	1.7E-005		1.3E-001	1.8E-002	4.2E-003	1.5E-001
		Exposure Point Total						1.7E-005					1.5E-001
	Exposure Medium Total							1.7E-005					1.5E-001
Medium Total								1.7E-005					1.5E-001
Receptor Total							Receptor Risk Total	1.7E-005				Receptor HI Total	1.5E-001

TABLE 10.12 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Shoreline Resident
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
Sediment	Sediment	Little Valley Creek and Tributaries	Benzo(a)pyrene	2.5E-006	-	1.3E-006	-	3.9E-006	y Weight, Liver, Ki	3.3E-005	-	1.7E-005	4.9E-005
			Arsenic	2.4E-006	-	2.9E-007	-	2.7E-006	Skin	1.2E-002	-	1.5E-003	1.4E-002
			Chemical Total	4.9E-006	-	1.6E-006	-	6.6E-006		1.2E-002	-	1.5E-003	1.4E-002
		Exposure Point Total						6.6E-006					1.4E-002
	Exposure Medium Total							6.6E-006					1.4E-002
Surface Water	Surface Water	Little Valley Creek and Tributaries	Trichloroethylene	6.3E-007	-	2.7E-006	-	3.4E-006	Liver	1.2E-002	-	5.3E-002	6.5E-002
			Chemical Total	6.3E-007	-	2.7E-006	-	3.4E-006		1.2E-002	-	5.3E-002	6.5E-002
		Exposure Point Total						3.4E-006					6.5E-002
	Exposure Medium Total							3.4E-006					6.5E-002
Medium Total								6.6E-006					1.4E-002
Receptor Total							Receptor Risk Total	6.6E-006				Receptor HI Total	1.4E-002

TABLE 10.12 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Shoreline Resident
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
Sediment	Sediment	Little Valley Creek and Tributaries	-	-	-	-	-	-	-	-	-	-	-
			Chemical Total	-	-	-	-	-		-	-	-	-
		Exposure Point Total						-					-
	Exposure Medium Total							-					-
Surface Water	Surface Water	Little Valley Creek and Tributaries	-	-	-	-	-	-		-	-	-	-
			Chemical Total	-	-	-	-	-		-	-	-	-
		Exposure Point Total						-					-
	Exposure Medium Total							-					-
Medium Total								-					-
Receptor Total							Receptor Risk Total	-				Receptor HI Total	-

TABLE 10.13 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Shoreline Resident
Receptor Age: Child (0 - 6 yrs)

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
Sediment	Sediment	Little Valley Creek and Tributaries	Benzo(a)pyrene	4.8E-006	-	1.7E-006	-	6.5E-006	Weight, Liver, Ki	3.0E-004	-	1.1E-004	4.1E-004
			Arsenic	4.4E-006	-	3.7E-007	-	4.8E-006	Skin	1.2E-001	-	9.7E-003	1.2E-001
			Chemical Total	9.2E-006	-	2.1E-006	-	1.1E-005		1.2E-001	-	9.8E-003	1.3E-001
		Exposure Point Total						1.1E-005					1.3E-001
	Exposure Medium Total							1.1E-005					1.3E-001
Surface Water	Surface Water	Little Valley Creek and Tributaries	Trichloroethylene	5.9E-007	-	1.3E-006	-	1.8E-006	Liver	5.8E-002	-	1.2E-001	1.8E-001
			Chemical Total	5.9E-007	-	1.3E-006	-	1.8E-006		5.8E-002	-	1.2E-001	1.8E-001
		Exposure Point Total						1.8E-006					1.8E-001
	Exposure Medium Total							1.8E-006					1.8E-001
Medium Total								1.1E-005					1.3E-001
Receptor Total							Receptor Risk Total	1.1E-005				Receptor HI Total	1.3E-001

TABLE 10.13 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

Scenario Timeframe: Current/Future
Receptor Population: Shoreline Resident
Receptor Age: Child (0 - 6 years)

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
Sediment	Sediment	Little Valley Creek and Tributaries	Benzo(a)pyrene	2.4E-006	-	1.7E-007	-	2.6E-006	Body Weight, Liver, Kidney	1.5E-004	-	1.1E-005	1.6E-004
			Arsenic	2.2E-006	-	3.7E-008	-	2.3E-006	Skin	5.8E-002	-	9.7E-004	5.9E-002
			Chemical Total	4.6E-006	-	2.1E-007	-	4.8E-006		5.8E-002	-	9.8E-004	5.9E-002
		Exposure Point Total						4.8E-006					5.9E-002
	Exposure Medium Total							4.8E-006					5.9E-002
Medium Total								4.8E-006					5.9E-002
Receptor Total							Receptor Risk Total	4.8E-006				Receptor HI Total	5.9E-002

TABLE 10.14 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

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
Soil	Soil	BIA All Soil	Arsenic	6.6E-007	1.9E-006	6.0E-008	-	2.7E-006	Skin	1.0E-001	-	9.3E-003	1.1E-001
			Manganese	-	-	-	-	-	CNS	3.2E-002	3.1E+001	2.4E-002	3.1E+001
			Chemical Total	6.6E-007	1.9E-006	6.0E-008	-	2.7E-006		1.4E-001	3.1E+001	3.3E-002	3.1E+001
		Exposure Point Total						2.7E-006					3.1E+001
	Exposure Medium Total							2.7E-006					3.1E+001
Medium Total								2.7E-006					3.1E+001
Receptor Total							Receptor Risk Total	2.7E-006				Receptor HI Total	3.1E+001

Total Skin HI Across All Media =	1.1E-001
Total CNS HI Across All Media =	3.1E+001

TABLE 10.14 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

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
Soil	Soil	BIA All Soil	Arsenic	-	1.2E-006	6.0E-008	-	1.2E-006	Skin	-	-	9.3E-003	9.3E-003
			Manganese	-	-	-	-	-	CNS	-	1.9E+001	2.4E-002	1.9E+001
			Chemical Total	-	1.2E-006	6.0E-008	-	1.2E-006		-	1.9E+001	3.3E-002	1.9E+001
		Exposure Point Total						1.2E-006					1.9E+001
	Exposure Medium Total							1.2E-006					1.9E+001
Medium Total								1.2E-006					1.9E+001
Receptor Total							Receptor Risk Total	1.2E-006				Receptor HI Total	1.9E+001

Total Skin HI Across All Media =	9.3E-003
Total CNS HI Across All Media =	1.9E+001

TABLE 10.15 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

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
Soil	Soil	CCA All Soil	Trichloroethylene	3.7E-007	4.5E-005	3.3E-008	-	4.6E-005	Liver, CNS	2.2E-001	8.0E-001	1.9E-002	1.0E+000
			Benzo(a)pyrene	4.1E-006	4.8E-007	1.6E-006	-	6.2E-006	Weight, Liver, Ki	1.6E-003	-	6.1E-004	2.2E-003
			Arsenic	1.1E-006	2.9E-006	1.0E-007	-	4.1E-006	Skin	1.7E-001	-	1.5E-002	1.9E-001
			Cadmium	-	1.6E-006	-	-	1.6E-006	Kidney	7.0E-002	-	8.4E-002	1.5E-001
			Chromium	-	1.0E-006	-	-	1.0E-006	Lungs	2.2E-001	6.1E+000	2.7E-001	6.6E+000
			Manganese	-	-	-	-	-	CNS	6.5E-002	5.6E+001	4.8E-002	5.6E+001
			Chemical Total	5.6E-006	5.2E-005	1.7E-006	-	5.9E-005		7.5E-001	6.3E+001	4.3E-001	6.4E+001
		Exposure Point Total						5.9E-005					6.4E+001
	Exposure Medium Total							5.9E-005					6.4E+001
Medium Total								5.9E-005					6.4E+001
Receptor Total							Receptor Risk Total	5.9E-005				Receptor HI Total	6.4E+001

Total Skin HI Across All Media =	1.9E-001
Total Liver HI Across All Media =	1.0E+000
Total Kidney HI Across All Media =	1.6E-001
Total CNS HI Across All Media =	5.6E+001
Total Lungs HI Across All Media =	6.6E+000
Total Body Weight HI Across All Media =	2.2E-003

TABLE 10.15 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

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
Soil	Soil	CCA All Soil	Trichloroethylene	-	2.7E-005	3.3E-008	-	2.7E-005	Liver, CNS	-	4.8E-001	1.9E-002	5.0E-001
			Benzo(a)pyrene	-	2.9E-007	1.6E-006	-	1.9E-006	Body Weight, Liver, Kidney	-	-	6.1E-004	6.1E-004
			Arsenic	-	1.7E-006	1.0E-007	-	1.8E-006	Skin	-	-	1.5E-002	1.5E-002
			Chromium	-	6.3E-007	-	-	6.3E-007	Lungs	-	3.7E+000	2.7E-001	3.9E+000
			Manganese	-	-	-	-	-	CNS	-	3.4E+001	4.8E-002	3.4E+001
			Chemical Total	-	3.0E-005	1.7E-006	-	3.2E-005		-	3.8E+001	3.5E-001	3.8E+001
		Exposure Point Total						3.2E-005					3.8E+001
	Exposure Medium Total							3.2E-005					3.8E+001
Medium Total								3.2E-005					3.8E+001
Receptor Total							Receptor Risk Total	3.2E-005				Receptor HI Total	3.8E+001

Total Skin HI Across All Media =	1.5E-002
Total Liver HI Across All Media =	5.0E-001
Total CNS HI Across All Media =	3.4E+001
Total Lungs HI Across All Media =	3.9E+000
Total Body Weight HI Across All Media =	6.1E-004
Total Kidney HI Across All Media =	6.1E-004

TABLE 10.16 RME
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Little Valley Superfund Site

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
Soil	Soil	RRAA All Soil	Arsenic	5.9E-007	1.2E-006	5.3E-008	-	1.9E-006	Skin	9.2E-002	-	8.3E-003	1.0E-001
			Manganese	-	-	-	-	-	CNS	4.8E-002	3.3E+001	3.6E-002	3.3E+001
			Chemical Total	5.9E-007	1.2E-006	5.3E-008	-	1.9E-006		1.4E-001	3.3E+001	4.4E-002	3.3E+001
		Exposure Point Total						1.9E-006					3.3E+001
	Exposure Medium Total							1.9E-006					3.3E+001
Medium Total								1.9E-006					3.3E+001
Receptor Total							Receptor Risk Total	1.9E-006				Receptor HI Total	3.3E+001

Total Skin HI Across All Media =	1.0E-001
Total CNS HI Across All Media =	3.3E+001

TABLE 10.16 CT
RISK SUMMARY
CENTRAL TENDENCY
Little Valley Superfund Site

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
Soil	Soil	RRAA All Soil	Manganese	-	-	-	-	-	CNS	-	2.0E+001	3.6E-002	2.0E+001
			Chemical Total	-	-	-	-	-		-	2.0E+001	3.6E-002	2.0E+001
		Exposure Point Total						-					2.0E+001
	Exposure Medium Total							-					2.0E+001
Medium Total								-					2.0E+001
Receptor Total							Receptor Risk Total	-				Receptor HI Total	2.0E+001

Total CNS HI Across All Media = 2.0E+001

APPENDIX F

PREVIOUS INVESTIGATIONS

CRA

GROUNDWATER EVALUATION REPORT

Bush Industries, Inc.
Little Valley, New York

Prepared By:

Conestoga-Rovers & Associates
2055 Niagara Falls Boulevard
Niagara Falls, New York 14304

FEBRUARY 2000
REF. NO. 8871 (2)
This report is printed on recycled paper.

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1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) has been retained by Bush Industries, Inc. (Bush Industries) to conduct a Groundwater Evaluation for the Bush Industries facility (Site) located in Little Valley, New York. Figures 1.1 and 1.2 present the site location and site plan, respectively. This report is required by the Order on Consent (File No. 96-07 R9-4314-96-06) agreed to between Bush Industries and the New York State Department of Environmental Conservation (NYSDEC).

In 1991, Bush Industries installed three groundwater monitoring wells at the Site. Samples from two of the wells were found to contain volatile organic compounds (VOCs). Table 1.1 summarizes the historical results from sampling of these wells and geologic logs for the wells are included in Appendix A. The previous investigations did not evaluate the potential for off-Site migration of VOCs in groundwater. The Groundwater Evaluation presents an expanded groundwater investigation focussed on further delineation of on-Site conditions and assessment of the potential for off-Site chemical migration in groundwater.

1.1 SCOPE OF WORK

The Groundwater Evaluation was conducted in accordance with the Subsurface Investigation Work Plan (Work Plan), dated January 1999 and approved by the NYSDEC. The scope of work for the investigation included the following:

i) redevelopment of the three existing groundwater monitoring wells;
ii) installation of five new groundwater monitoring wells;
iii) sampling of the three existing monitoring wells and the five new monitoring wells for volatile organic compound (VOC) analyses (two rounds); and
iv) measurement of hydraulic head in all wells.

A Groundwater Evaluation Report was prepared based on the results of the first groundwater sampling event and submitted in July 1999. In response to NYSDEC comments on that submittal, two additional monitoring wells were installed and sampled in December 1999. A second sampling event of the three original and five new wells was also conducted at the same time. The results of these investigations are presented herein.

1.2 SITE DESCRIPTION AND BACKGROUND

1.2.1 LOCATION

The Site is located at 312 Fair Oak Street in the Village of Little Valley, Cattaraugus County, New York. A topographic map of the Site and surrounding area prepared from a 7.5 minute series U.S. Geological Survey map is presented in Figure 1.1.

1.2.2 SITE HISTORY

The parcels comprising the Site have been purchased over a number of years, commencing with an initial conveyance of a parcel on May 25, 1959, through the last conveyance which occurred on October 17, 1988. The original parcel, conveyed to Bush Brothers Products Corporation on May 25, 1959, has been previously owned by Kinfolks, Inc. Contiguous parcels of property subsequently acquired were primarily residential in use. An Abstract of Title dated September 14, 1995, indicates a cutlery business owned certain parcels at the Site. Kinfolks, Inc. owned certain parcels at the Site from November 1, 1926 to January 29, 1958. A July 7, 1976 newspaper article from the Salamanca Republican Press reports that Kinfolks, Inc. was founded by Tint Champlain and Russell Case and manufactured hunting knives.

Bush Industries has used the Site for furniture manufacture since its acquisition. The major processes at the facility are furniture manufacturing and finishing. In the past, the company was involved in the assembly and finishing of plastic furniture. The company currently manufacturers pieces for ready to assemble furniture from hardwoods, particle board, and medium density fiberboard.

1.2.3 BUILDINGS AND FACILITIES

The Site is situated on a 9.4 acre lot, and contains three contiguous buildings (see Figure 1.2). The construction date of the original building, situated near the western edge of the property, is not known. The other two buildings were constructed in approximately 1968 and 1973. Separate from the main building(s) and situated behind it to the south is a 1600 square foot building. A wood chip and wood dust collection system is also located in this area.

1.2.4 ABOVEGROUND AND UNDERGROUND STORAGE TANKS

There are no known underground storage tanks (USTs) at the Site. In 1989, two USTs (2000 gallon and 3000 gallon) used by a previous Site owner to store fuel oil and one 550 gallon UST used for gasoline storage were removed by Bush with notification to and observation by NYSDEC. The locations of the former tanks are shown on Figure 1.2. There is a 500-gallon aboveground propane storage tank at the Site. The propane is used to fuel fork lifts.

1.2.5 HAZARDOUS MATERIALS

Hazardous materials are stored in the southwest portion of the main building (see Figure 1.2). In the past, hazardous materials were stored within the 1600 square foot metal building located south of the main facility (see Figure 1.2). Hazardous materials used (past and present) at the facility include thinners, lacquers, stains, and other finish products. Mineral spirits are used in a parts cleaner. Bush Industries does not use chlorinated solvents (e.g., trichloroethene (TCE)) in its operations at the facility and has no record of past usage of these materials at the Site. All waste materials are disposed of off-Site in accordance with applicable regulations.

1.2.6 SURFACE WATER

Surface water runoff from the southern portion of the Site drains to the west branch of Little Valley Creek, located near the southern boundary of the property. Runoff from the north portion of the Site drains overland to the municipal sewer system. A culvert located south of the main building receives roof drainage which subsequently seeps to the subsurface.

In the southeast portion of the property there is a swale purported to be the former channel of the west branch of Little Valley Creek.

1.2.7 REGIONAL GEOLOGY AND HYDROGEOLOGY

The Little Valley area is located within the Allegheny section of the Appalachian Plateau physiographic province of western New York. The Little Valley itself is a U-shaped glacial valley filled with glacially-derived outwash deposits which may be overlain by more recent finer grained alluvial deposits. The glacial deposits overlie bedrock

comprised of interbedded shales, siltstones, and sandstones of Upper Devonian age. Depths to bedrock within the valley have been reported to range up to 50 to 100 feet or more[1]. In the surrounding uplands the depth to bedrock is much more shallow.

The glacial deposits contain substantial proportions of sand and gravel and are sufficiently transmissive for use as both public and private water supply. Regionally, groundwater flow in the Little Valley is generally toward the southeast, parallel to Little Valley Creek[1].

1.2.8 SITE GEOLOGY AND HYDROGEOLOGY

Three groundwater monitoring wells were installed by Bush Industries at the Site in 1991. The overburden was found to be comprised primarily of sand and gravel with intermittent silty and clayey strata. Groundwater flow at the Site was indicated to be toward the northeast, in the direction of the center of the valley and the east branch of Little Valley Creek.

The remainder of this report is presented in five sections. Section 2.0 describes the investigation work performed and field and analytical methodology. Section 3.0 presents the investigation results. The results are interpreted in Section 4.0 with respect to chemical migration. Recommendations are presented in Section 5.0. The report certification is included in Section 6.0.

1 NYSDEC Division of Water Report titled "Geotechnical Investigation, Little Valley", May 1994.

2.0 WORK PERFORMED

This section describes the investigation work performed. The activities completed included the following: well installation, well redevelopment, hydraulic head measurements, and groundwater sampling and analysis. The work was conducted in two phases. The first phase was implementation of the NYSDEC-approved Work Plan, which included installation of five new groundwater monitoring wells. The second phase was conducted in response to NYSDEC comments on the results of the first phase investigation and included installation of two additional monitoring wells. The second phase also included resampling of existing monitoring wells at the Site. The following subsections describe these activities in detail.

2.1 PHASE I INVESTIGATIONS

2.1.1 WELL INSTALLATION

2.1.1.1 MONITORING WELL LOCATIONS

Five new groundwater monitoring wells were installed during the period between April 19 through April 27, 1999. The wells were designated MW-1 through MW-5 and were installed at the locations shown on Figure 2.1 in accordance with the NYSDEC-approved Work Plan. The well locations were selected to monitor groundwater quality in conjunction with the three existing monitoring wells (MW-U1, MW-D1, and MW-D2) located in the interior of the property (Figure 2.1).

The rationale for the monitoring well locations is as follows. As described in Section 1.2.7, data from the previous groundwater investigations suggested the groundwater flow direction from the Site is toward the northeast. However, this was based on only two deep wells (MW-D1 and MW-D2) so the flow direction could not be precisely evaluated. Monitoring wells MW-3 and MW-4 were located in potentially downgradient directions (north and east) from the highest detected levels in the original monitoring wells (MW-D2). Monitoring wells MW-1 and MW-5 were installed at potential upgradient locations on the west and south sides of the property. Monitoring well MW-2 was installed in the central potion of the property, south of the main building.

2.1.1.2 MONITORING WELL DEPTHS AND SCREENED INTERVALS

The depth of the wells was dictated by conditions encountered in the field. The main objective was to penetrate the uppermost regional waterbearing zone at each location. Based on the geologic logs for the existing wells at the Site, the Work Plan specified the maximum well depth to be 60 feet BGS. Wells were terminated at a shallower depth if one of the following conditions occurred:

i) photoionization detector (PID) screening indicated a high concentration of VOCs in a more shallow saturated zone;

ii) a confining layer (i.e., glaciolacustrine clay) was encountered underlying at least ten feet of saturated soil; or

iii) bedrock was encountered.

Three of the five new wells (MW-2, MW-4, and MW-5) were terminated at shallower depths due to bedrock depths of less than 60 feet BGS. The remaining wells (MW-1 and MW-3) were completed to 60 feet BGS. All five new wells were screened to intercept the regional water table. The screened interval in MW-1, MW-2, MW-3, and MW-4 was 20 feet in length. The screened interval in MW-5 was 10 feet in length because bedrock was encountered at a shallow depth. The monitoring well depths and screened intervals are presented in the well construction summary shown on Table 2.1.

2.1.1.3 MONITORING WELL CONSTRUCTION

All monitoring wells were constructed of 2-inch ID Schedule 40 PVC screen and riser, silica sandpack, bentonite seal, cement/bentonite grout backfill, and locking steel protective casing as described in the NYSDEC approved Work Plan. A well construction summary is presented in Table 2.1. The stratigraphic and instrumentation logs are presented in Appendix A.

Drilling and well installation procedures were as follows:

1. Each borehole was advanced through the overburden collecting split spoon soil samples continuously to 10 feet BGS and at 5-foot intervals (and when a change in materials is noticed during drilling) ahead of 4 1/4-inch ID hollow stem auger flights. Split spoon samples were screened using a PID. The depth of the borehole and monitoring well installation was dictated by conditions

encountered in the field. The main objective was to penetrate the uppermost regional waterbearing zone to a maximum depth of 60 feet BGS.

2. The screen and risers were installed through the annulus of the hollow stem augers. The 2-inch diameter Schedule 40 PVC 10 slot well screen was attached by threaded flush joint couplers to the 2-inch diameter Schedule 40 PVC riser pipe. The well screens were 20 feet in length except for monitoring well MW-5 where the shallow depth to bedrock permitted only a 10 foot screen length.

3. Suitably graded washed silica sand was placed around the riser and screen from the bottom of the hole to two feet above the top of the screen. The auger was slowly withdrawn as the sand was emplaced such that the bottom of the auger was always two feet below the top of the sand. A 2-foot thickness of bentonite pellets was placed above the sandpack. Both the sand and bentonite pellets were tamped lightly as they are being placed. The auger was continued to be raised until two feet above the top of the screen. Potable water was added to hydrate the bentonite pellets when the hole was dry. The bentonite pellets were allowed to hydrate for a minimum of one-half hour.

4. The remainder of the annular space was grouted with a cement/bentonite grout mix to a depth of 1 foot BGS using a tremie pipe and the hollow stem auger was removed completely.

5. A 6-inch flushmount or aboveground lockable protective steel casing was installed as directed by the CRA geologist. The protective steel casing was centered and securely set with a concrete security collar two feet square by one foot thick. The collar was sloped to direct surface runoff away from the well.

All downhole equipment used during well installation was decontaminated between locations. All drilling equipment such as augers, cutting bits, drill steel, and associated equipment and tools was cleaned utilizing a stiff brush to remove any debris or gross contamination and decontaminated using a high pressure low volume steam cleaner.

Auger cuttings and liquid wastes generated during monitoring well construction and decontamination activities, were containerized in 55-gallon DOT approved steel drums and transported to an on-Site staging area designated by Bush Industries. Spent personal protective equipment (PPE) and refuse was collected in drums and staged on Site as directed by Bush Industries. These materials will be disposed of by Bush Industries in accordance with applicable regulations.

2.1.1.4 MONITORING WELL DEVELOPMENT

After installation, the new monitoring wells were developed to remove fines from the sandpack.

Monitoring well development was performed in accordance with the Work Plan as follows:

i) the development for new wells was performed no later than seven days after well completion;

ii) the pump or bailer was lowered to the bottom of the monitoring well;

iii) a minimum of five well volumes was removed and the well was surged several times during development to suspend and remove fine-grained sediment. Specific conductance, temperature, and pH were monitored during development; and

iv) all development water was containerized and stored on-Site pending characterization and disposal.

If yields were sufficient, development continued until the specific conductance, temperature, and pH of the groundwater stabilized. Stabilization was deemed to occur if three consecutive well volume measurements of specific conductance, and temperature are approximately plus or minus ten percent and if pH values are within one pH unit of the last three value averages. If well yields were low (i.e., the wells become dewatered) or if stabilization had not occurred after removal of 15 well volumes, well development was deemed complete.

Table 2.2 summarizes the development parameters (specific conductance, temperature, and pH measurements of the purge water at conclusion of well development) and well yield and water quality observations during development.

2.1.2 WELL REDEVELOPMENT

The three existing groundwater monitoring wells MW-U1, MW-D1, and MW-D2 were redeveloped on April 28 and 29, 1999. The purpose of the redevelopment is to remove any sediment buildup in the wells. The redevelopment was performed as described in

Section 2.1.1.4. Table 2.2 summarizes the measurements and observations made during redevelopment.

2.1.3 HYDRAULIC MEASUREMENTS

On May 5, 1999, prior to sampling the groundwater, water level measurements were obtained in all existing (MW-U1, MW-D1, and MW-D2) and newly installed monitoring wells (MW-1 through MW-5) and in the following NYSDEC and USEPA piezometers: LV-4, LV-7, and PZ-20D. The measurements were obtained within a 60-minute period prior to purging any wells. A second round of hydraulic head measurements from all site wells and LV-4 and LV-7 was conducted on December 13, 1999. The monitoring well locations are shown on Figure 2.1. Access to the USEPA piezometer PZ-20D could not be obtained for the second round of measurements.

Water levels were measured to the nearest one-hundredth foot with an electric water level tape. Water level measurements for each monitoring well were referenced to the top of the riser pipe. The measured distance from the top of the riser pipe to the water surface was subtracted from the riser pipe elevation to determine the water elevation in the well.

2.1.4 GROUNDWATER SAMPLING

2.1.4.1 SAMPLE COLLECTION AND HANDLING

Groundwater samples were collected on May 5, 1999 from all existing and Phase I monitoring wells. A total of nine groundwater samples, including a blind duplicate sample (from MW-2), were collected. A second round of samples was collected on December 13 and 14, 1999. One well, MW-3, was dry and could not be resampled in the December 1999 sampling event.

Prior to sampling, wells were purged of either a minimum of three well volumes or until dry for low yielding wells (well does not yield three volumes). Specific conductivity, pH, and temperature were monitored during purging. When well yields were sufficient, the purging continued until the specific conductance, pH, and temperature of the groundwater stabilized. Groundwater stabilization occurred if three consecutive well volume measurements of specific conductance, pH, and temperature are approximately plus or minus ten percent and if pH values are within one pH unit of the last three value averages. A submersible pump or dedicated bottom loading bailer was

used to purge the wells. The field purging data for the first and second rounds of sampling are summarized in Tables 2.3 and 2.4.

A new pair of disposable latex gloves were used to handle each sample between sample locations. Groundwater samples were collected using dedicated bottom-loading teflon bailers and clean braided nylon rope.

All samples collected for chemical analysis were placed in precleaned laboratory supplied jars. Samples were preserved per laboratory instructions, where appropriate. Samples were labeled with a unique sample number, time, and date of sample collection and instructions for analysis.

All samples were placed on ice or cooler packers in laboratory supplied coolers immediately after collection and labeling. The groundwater samples were shipped to Severn Trent Laboratories, in Monroe, Connecticut (STL). All samples were shipped via overnight courier. Standard Chain of Custody procedures were followed. Clean, dedicated sampling equipment was used at all locations where samples were collected for chemical analysis.

The groundwater samples were submitted for TCL VOCs analysis using the analytical methods described in Section 4.0. A field blank and trip blank were also submitted to the laboratory for TCL VOCs analysis. Sample collection summaries for the two events are presented in Tables 2.5 and 2.6.

2.1.4.2 SAMPLE ANALYSIS

The groundwater samples were analyzed for TCL VOCs and tentatively identified compounds (TICs). The method of analysis was 95-1, referenced from "New York State Department of Environmental Conservation Analytical Services Protocol (ASP), 10/95 Edition". Reporting limits for the analytes of interest were in accordance with NYSDEC ASP contract required quantitation limits (CRQLs). All data were reported with full NYSDEC ASP Category B deliverables, including site-specific matrix spike/matrix spike duplicate (MS/MSD) analyses. All calibration and quality control criteria were in accordance with the cited method.

Severn Trent Laboratories in Monroe, Connecticut was selected to perform the analyses. STL is certified by the New York State Department of Health (NYSDOH) for the ASP and VOC categories required. The analytical reports were validated using "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data

Review", February 1994. Validation assessments, including any necessary qualifications, are provided in Appendix B.

2.1.4.3 SAMPLING EQUIPMENT DECONTAMINATION

All non-dedicated downhole sampling equipment was decontaminated using the following procedure:

i) Alconox and water cleaning;

ii) distilled water rinse;

iii) hexane rinse; and

iv) distilled water rinse.

Decontamination waters were collected, containerized, and stored on-Site pending characterization and disposal.

2.2 PHASE II INVESTIGATION

After reviewing the results of the first round of groundwater sampling presented in the first submittal of the Groundwater Evaluation Report, NYSDEC requested that Bush Industries install two additional monitoring wells. Bush Industries installed these wells, designated MW-6 and MW-7 on Figure 2.1, in December 1999 at locations selected by NYSDEC. Well installation procedures, well development, and sampling methodology for MW-6 and MW-7 were identical to the procedures used for the Phase I monitoring wells as described in Section 2.1. Shallow bedrock encountered at MW-6 permitted only a 10-foot screen length. A 20-foot screen was installed in MW-7. The additional wells were sampled as part of the second sampling event conducted December 13 and 14, 1999.

3.0 RESULTS

The following subsections describe the results of the Groundwater Evaluation.

3.1 PID SCREENING

All split spoon soil samples were screened for VOCs using a PID (open air measurement from directly above the sample) and the measurements are presented on the stratigraphic and instrumentation logs in Appendix A. There were no elevated PID measurements (maximum measurement of 3.2 ppm at only one location).

3.2 GROUNDWATER FLOW

The hydraulic monitoring results (i.e., measured water levels and calculated groundwater elevations) are summarized in Tables 3.1 and 3.2.

The results of the hydraulic head measurements presented in Tables 3.1 and 3.2 were used to generate contour maps of hydraulic head distribution in the regional aquifer beneath the Site. Data from MW-5 and MW-6 were not used in the contour maps since these wells are screened at higher elevations due to the shallow depth to bedrock at the south portion of the property. Data from historic wells MW-U1 and MW-D2 were also excluded since these wells were also installed to shallower depths.

Figure 3.1 presents the contour map of the hydraulic head distribution measured in May 1999. Groundwater flows from high hydraulic head to low hydraulic head. Groundwater flow in the overburden beneath the Site is indicated to be to the north-northeast with a horizontal hydraulic gradient of approximately 0.02. Figure 3.2 presents the contour map of the hydraulic head distribution measured in December 1999. This map also indicates a north-northeasterly flow direction with a similar horizontal hydraulic gradient.

3.3 GROUNDWATER QUALITY

Appendix B presents Analytical Data Assessment and Validation Reports for all analytical results obtained during the investigation. The analytical results are summarized below.

Groundwater samples were collected for chemical analysis from the eight on-Site monitoring wells in May 1999. The second sampling round from all Site monitoring wells conducted in December 1999 included the two additional wells. Monitoring well MW-3 was not sampled in December 1999 because it was dry. The samples were submitted to STL and analyzed for TCL VOCs plus TICs.

Analytical results for groundwater samples are presented in Appendix B. Summaries of detected chemical constituents in groundwater are presented in Table 3.3 (May 1999) and Table 3.4 (December 1999). The laboratory results presented in Tables 3.3 and 3.4 were compared to the New York State groundwater standards and guidance values (referred to collectively in this report as groundwater criteria) presented in the NYSDEC TOGS document (June 1998). These criteria are based upon human consumption of groundwater. The Site and its vicinity are serviced by municipal water.

VOCs detected in the groundwater samples obtained in May 1999 were above the NYSDEC groundwater criteria in five wells as follows:

VOC	*Groundwater Criteria (µg/L)*	*Location (Concentrations in µg/L)*
Vinyl Chloride	2	MW-2 (4J)
1,2-Dichloroethene (total)	5	MW-2 (54/51), MW-D1 (6J), MW-D2 (58)
Trichloroethene	5	MW-2 (230/190), MW-D1 (11), MW-D2 (160)
Benzene	1	MW-4 (2J), MW-D2 (2J)

Notes:
J Estimated concentration.

Samples were collected in May 1999 by NYSDEC from off-Site wells previously installed by NYSDEC (LV-4 and LV-7). Analytical results for these wells are included in Appendix C. The only VOC detected in either sample was TCE at an estimated concentration of 0.5J µg/L in well LV-4.

Figure 3.3 presents the distribution of all chemicals detected in the May 1999 groundwater samples.

Analytical results from the samples obtained in December 1999 were generally lower than the May 1999 results. VOCs detected in the groundwater samples obtained in December 1999 were above the NYSDEC groundwater criteria in four wells as follows:

VOC	*Groundwater Criteria (µg/L)*	*Location (Concentrations in µg/L)*
Vinyl Chloride	2	MW-6 (4J)
1,2-Dichloroethene (total)	5	MW-2 (40/42), MW-D2 (16), MW-6 (30)
Trichloroethene	5	MW-2 (84/87), MW-D1 (9J), MW-D2 (58), MW-6 (17)

Notes:
J Estimated concentration.

Figure 3.4 presents the distribution of all chemicals detected in the December 1999 groundwater samples.

4.0 DISCUSSION AND CONCLUSIONS

4.1 GROUNDWATER FLOW

Figure 4.1 presents a location plan for cross-sectional geologic depictions presented in Figures 4.2 through 4.4. These cross-sections illustrate the predominance of glacially derived sand and gravel deposits at the Site.

As discussed in Section 1.0, regional groundwater flow within the Little Valley is expected to be toward the southern end of the valley, with the Allegheny River being a possible groundwater discharge area. Groundwater flow at the Site does not follow this pattern, but rather flows north-northeasterly. The local flow pattern is likely a result of the Site location close to the south wall of the Little Valley where:

i) bedrock slopes sharply to the north; and
ii) groundwater recharge may be occurring from the west branch of Little Valley Creek.

Figure 4.2 shows a cross-section along the groundwater flow path from the south (MW-5) to the north (MW-3). The top of bedrock is close to the surface at MW-5 and slopes downward to the north. South of MW-5, bedrock outcrops are visible on the hillside on the opposite side of the stream. The northerly groundwater flow at the Site is likely a result of structural control (groundwater flow along the top of bedrock) and/or local recharge from the stream, which may be influent (losing water to the groundwater system) in this area. The former stream channel does not appear to influence groundwater flow. Except for a thin layer of clayey sediment observed within the upper 2 feet of soil, subsurface soils were similar to those encountered in other borings drilled at the site (silty sand and gravel). No evidence of a preferential migration pathway was observed to be associated with the former creek bed and PID measurements did not show VOC presence in the unsaturated zone.

Figure 4.3 presents a more northeasterly cross-sectional depiction, incorporating the NYSDEC monitoring wells LV-4 and LV-7. The bedrock slope is also evident on this figure. Figure 4.4 presents an east-west cross-section taken perpendicular to the groundwater flow path.

All wells installed for the project monitor the uppermost saturated zone at the Site. The split-spoon sampling showed that this zone is comprised primarily of glacially-derived sand and gravel extending to approximately the top of bedrock. While the bedrock was

not investigated during this study, it is reported to be of low transmissivity relative to the unconsolidated deposits (NYSDEC, 1994).

4.2 GROUNDWATER QUALITY

Except for the detections of benzene estimated below the method detection limit, the chemicals detected in groundwater samples are limited to trichloroethene and its degradation products (dichloroethenes, chloroethane, and vinyl chloride). The maximum concentrations are measured in the interior of the Site at wells MW-D2 and MW-2. In each of these wells, trichloroethene was detected as the highest concentration and 1,2-dichloroethene (total) was detected as the next highest concentration of detected constituents.

1,2-Dichloroethene is the most likely chemical to be produced first by biodegradation of trichloroethene in groundwater. Other potential degradation products were estimated to be present below detection limits. The presence of degradation products suggests a historic rather than recent release.

Bush Industries has no record of TCE use in their past or present operations at the Site. As described in Section 1.0, the property was occupied by Kinfolk's, Inc. from approximately the late 1920s or early 1930s through 1958. No documentation of historical TCE use, disposal or spillage at the facility has been discovered. However, in general, cutlery manufacture reportedly involved some degreasing and it is possible that chlorinated solvents such as TCE may have been used. Although no releases have been identified, the relatively low concentrations measured in groundwater at the Site would more typically be associated with incidental spillage and handling losses of relatively small amounts of the chemical than with intentional disposal or widespread release of large quantities.

As indicated above, the chemical concentrations detected in groundwater at the Site (shown in Figures 3.3 and 3.4) are low -- far below the aqueous solubility limits of the compounds. This suggests that the chemicals are present in groundwater in the aqueous phase and any migration would occur via advection and dispersion in the flowing groundwater (as opposed to migration as a separate phase). Chemical migration would therefore be primarily horizontal in the direction of groundwater flow and would be intercepted by the downgradient monitoring wells if migration were occurring. Therefore, investigation of deeper (bedrock) groundwater is not necessary at the Site.

The trichloroethene distribution in groundwater at the Site is presented on Figures 3.3 and 3.4. As discussed above, the highest concentrations occur in the interior of the Site at MW-2 and MW-D2. Comparison with the hydraulic head distributions (Figures 3.1 and 3.2) shows that wells MW-D1 and MW-3 are located along the groundwater flow path from the vicinity of wells MW-2 and MW-D2. The May 1999 data show that as groundwater migrates across the Site, the trichloroethene concentration drops to 11 µg/L at MW-D1 and further to 5J µg/L (estimated) at well MW-3 which monitors the downgradient Site boundary. The December 1999 results show a similar attenuation (albeit at lower overall concentrations). These results indicate that:

i) The highest concentrations of trichloroethene and its degradation products remain in the interior of the Site. There is a residual low level presence of trichloroethene and its degradation products in the interior of the Site with concentrations in groundwater dropping precipitously along the downgradient flow path.

ii) Concentrations of trichloroethene at the downgradient perimeter of the Site are approximately equal to or below the New York State Groundwater criterion.

iii) Benzene concentrations below method detection limits were estimated to be above the New York State groundwater criteria of 1 µg/L at two locations (MW-D2 and MW-4) where concentrations of 2J (estimated) were reported for the May 1999 sampling event. Benzene was not above the New York State groundwater criteria in any well during the December 1999 sampling event.

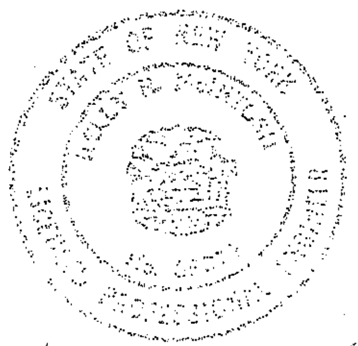
iv) This distribution trend (rapidly declining concentrations with distance from the interior of the Site) indicates that the Site does not pose a significant threat to downgradient groundwater quality.

5.0 RECOMMENDATIONS

Measured chemical concentrations in groundwater were above New York State Groundwater criteria at four wells located in the interior of the Site. As a result, the Order on Consent for the project requires that a Remediation Report be prepared and submitted to NYSDEC within 60 days of NYSDEC approval of this Groundwater Evaluation Report. The Remediation Report will evaluate the potential for unacceptable risk to human health or the environment, evaluate remedial alternatives, including a no action alternative, and will recommend a course of action with supporting rationale.

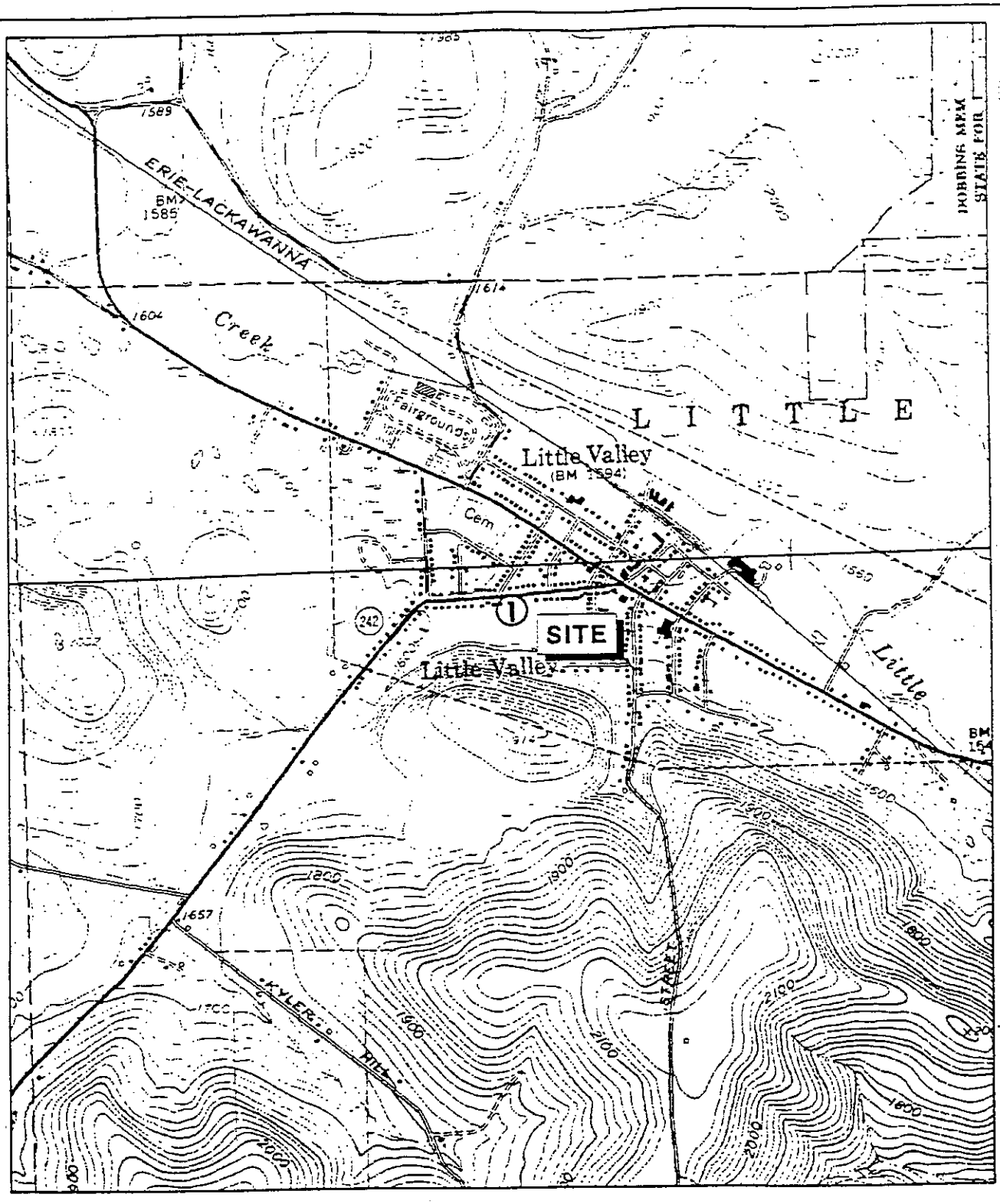
[illegible] CERTIFICATION

I hereby certify that this investigation was conducted under my direction and supervision in accordance with the NYSDEC-approved Work Plan.



Kelly R. McIntosh, Ph.D., P.E.

FIGURES



SOURCE:

USGS CATTARAUGUS AND LITTLE VALLEY, NEW YORK QUADRANGLES.

N

figure 1.1

SITE LOCATION
BUSH INDUSTRIES
Little Valley, New York

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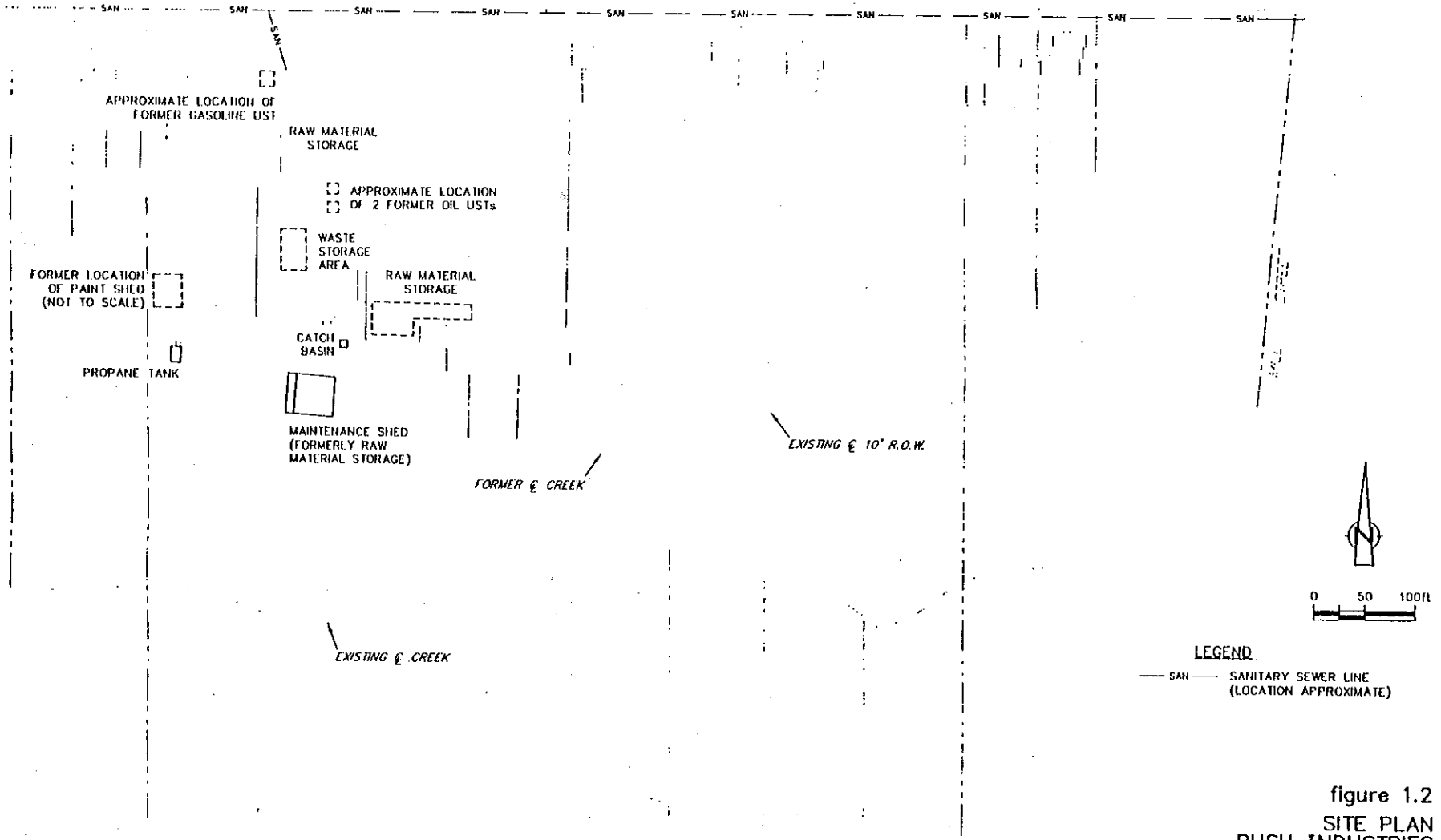

figure 1.2
SITE PLAN
BUSH INDUSTRIES
Little Valley, New York

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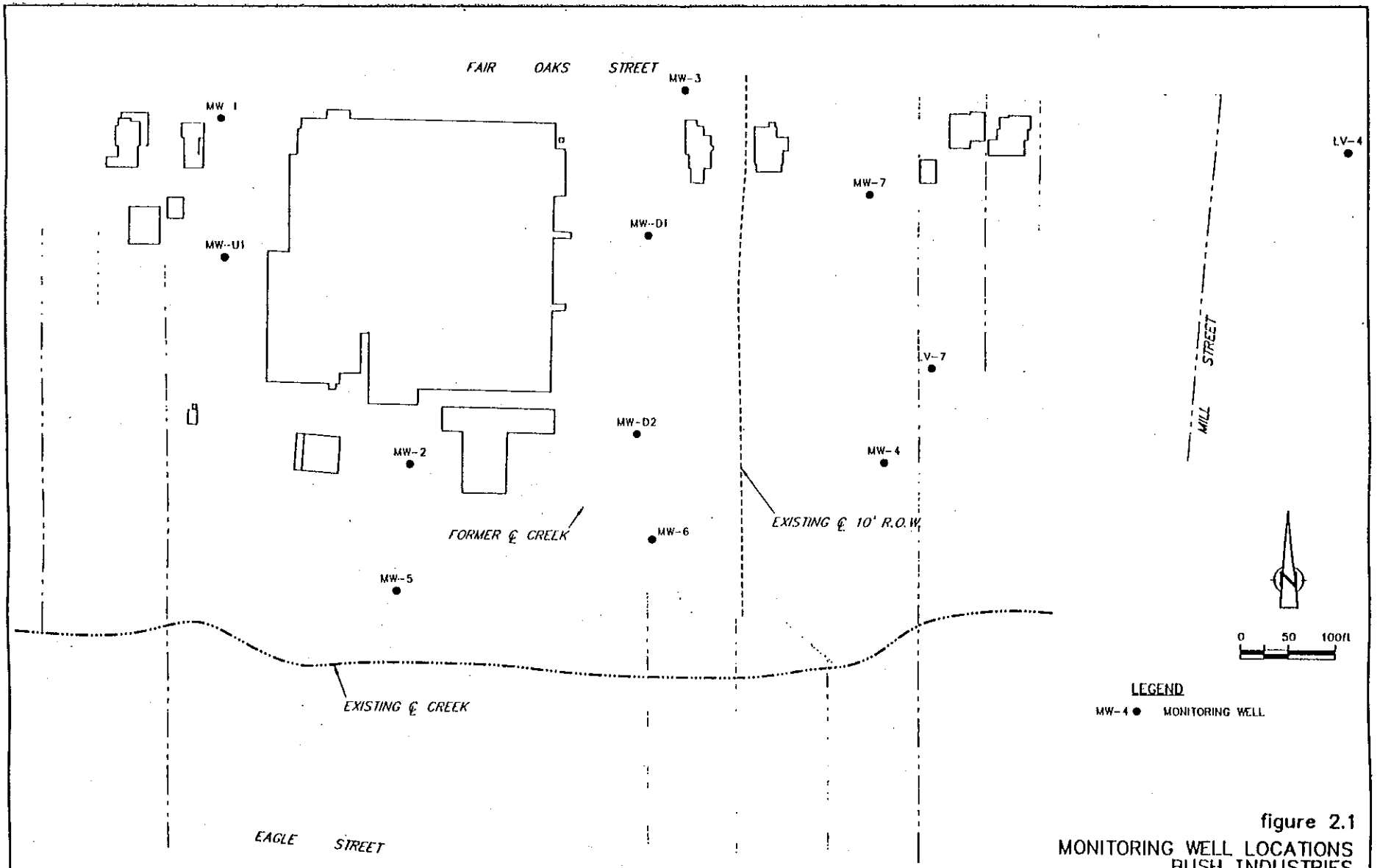

figure 2.1
MONITORING WELL LOCATIONS
BUSH INDUSTRIES
Little Valley, New York

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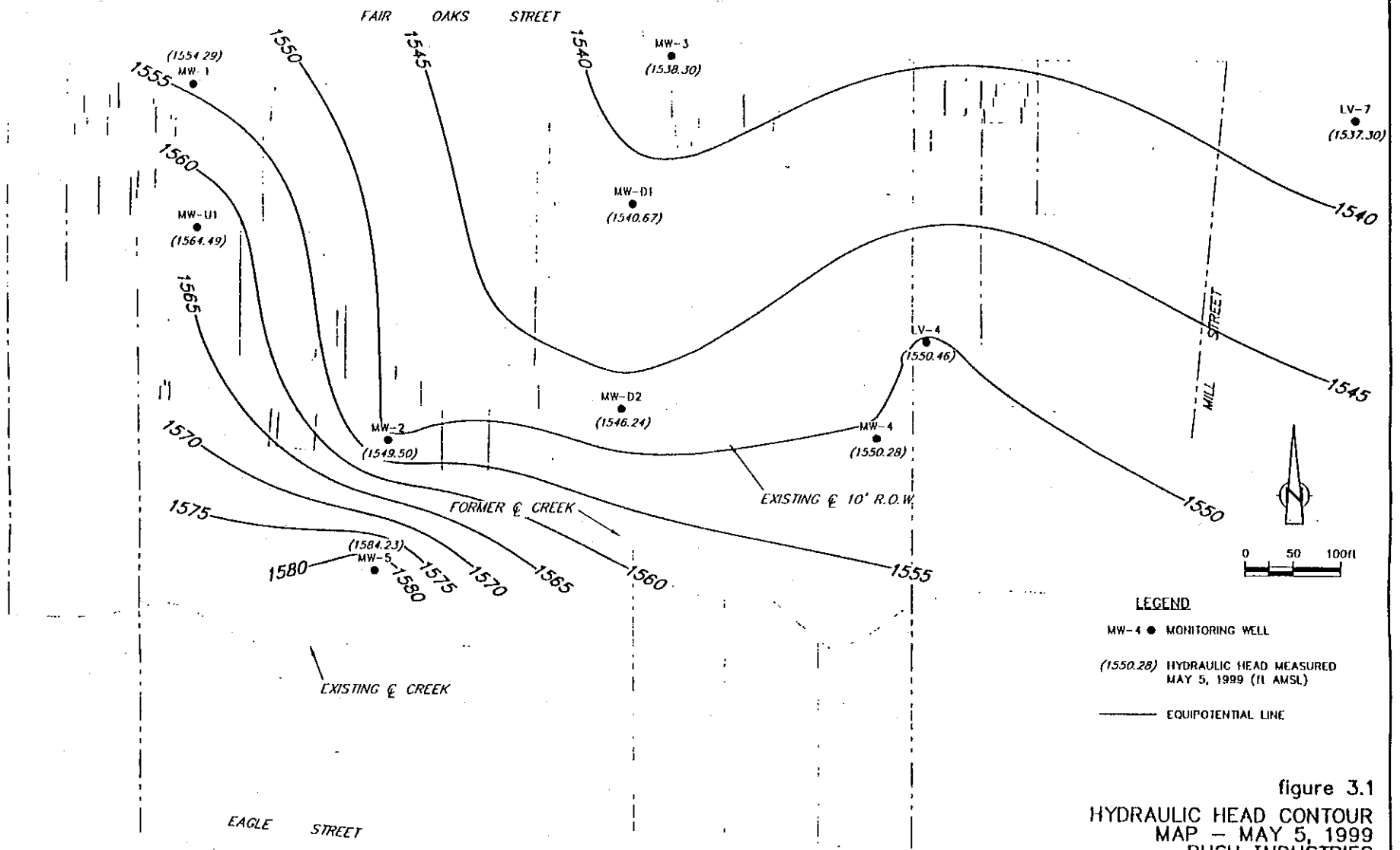

figure 3.1
HYDRAULIC HEAD CONTOUR MAP – MAY 5, 1999
BUSH INDUSTRIES
Little Valley, New York

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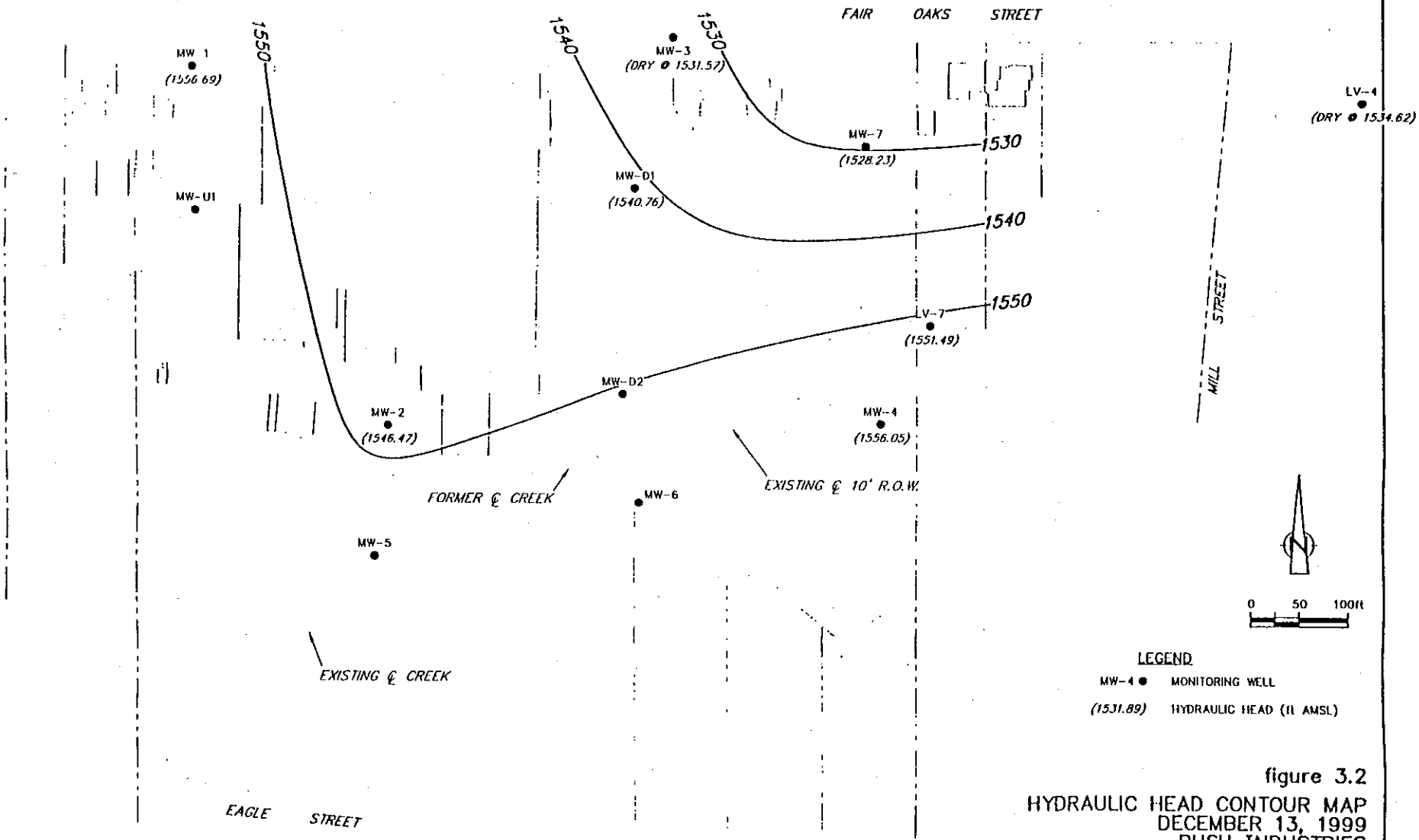

figure 3.2
HYDRAULIC HEAD CONTOUR MAP
DECEMBER 13, 1999
BUSH INDUSTRIES
Little Valley, New York

CRA
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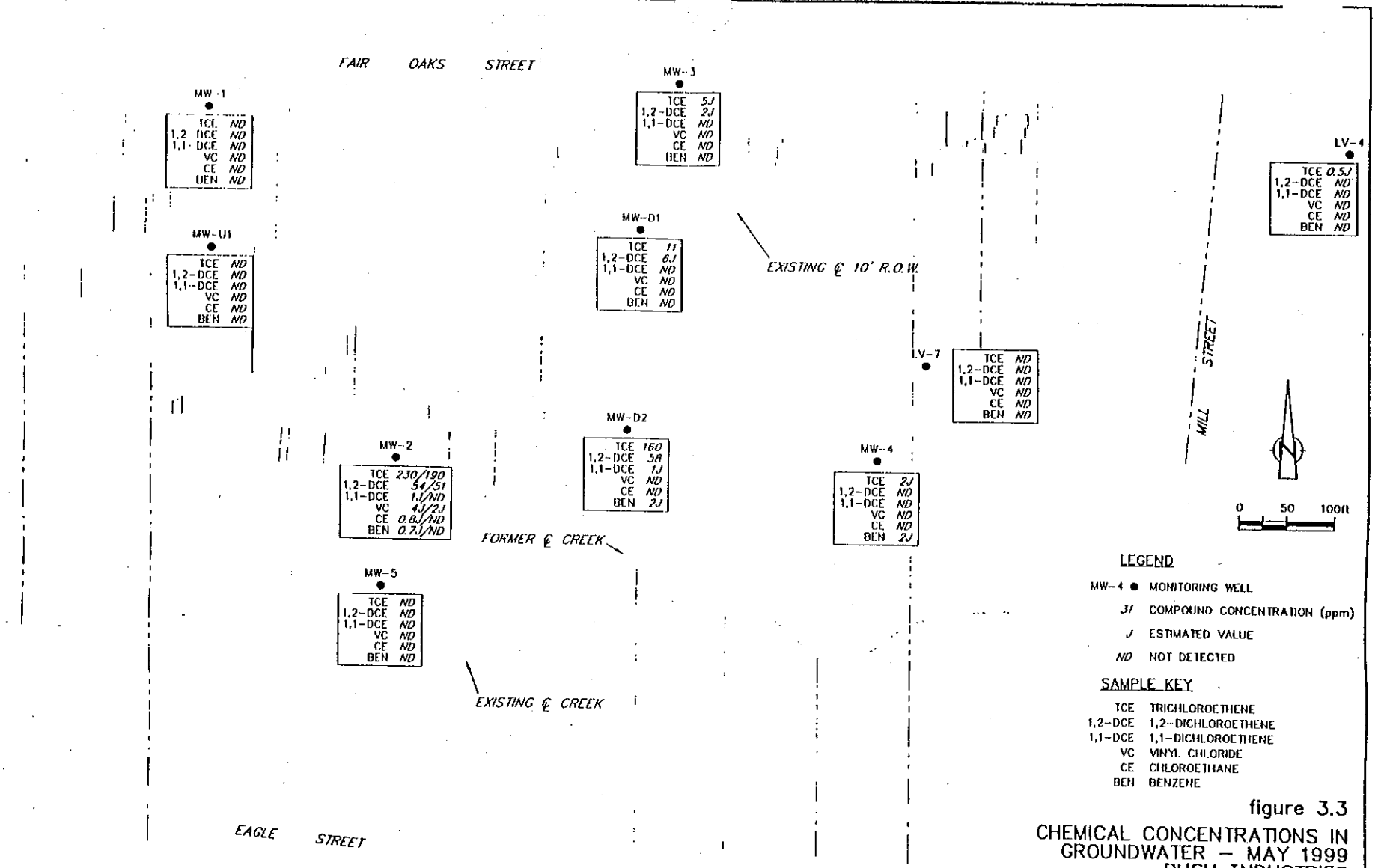

figure 3.3

CHEMICAL CONCENTRATIONS IN GROUNDWATER – MAY 1999
BUSH INDUSTRIES
Little Valley, New York

CRA

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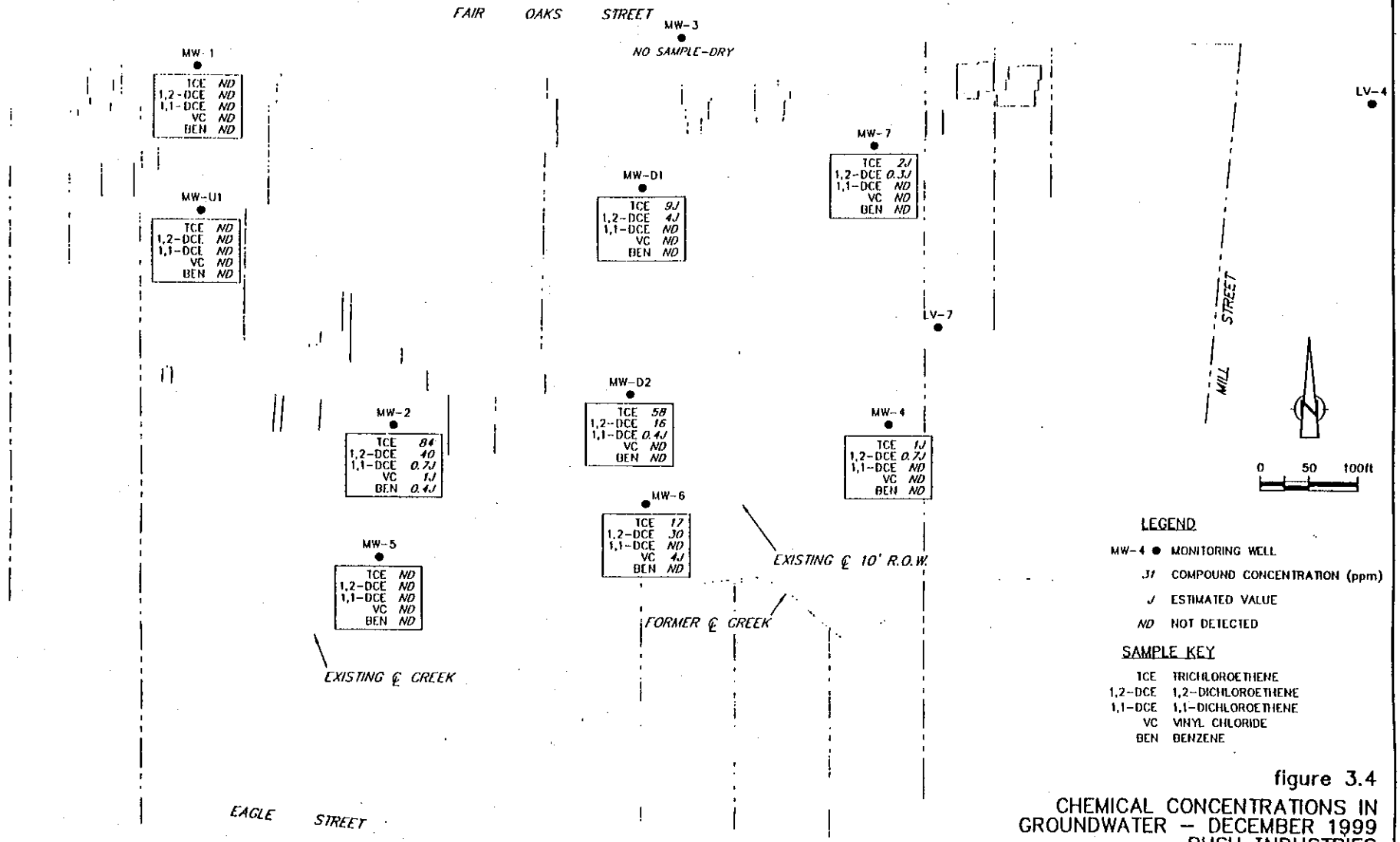

figure 3.4

CHEMICAL CONCENTRATIONS IN GROUNDWATER – DECEMBER 1999
BUSH INDUSTRIES
Little Valley, New York

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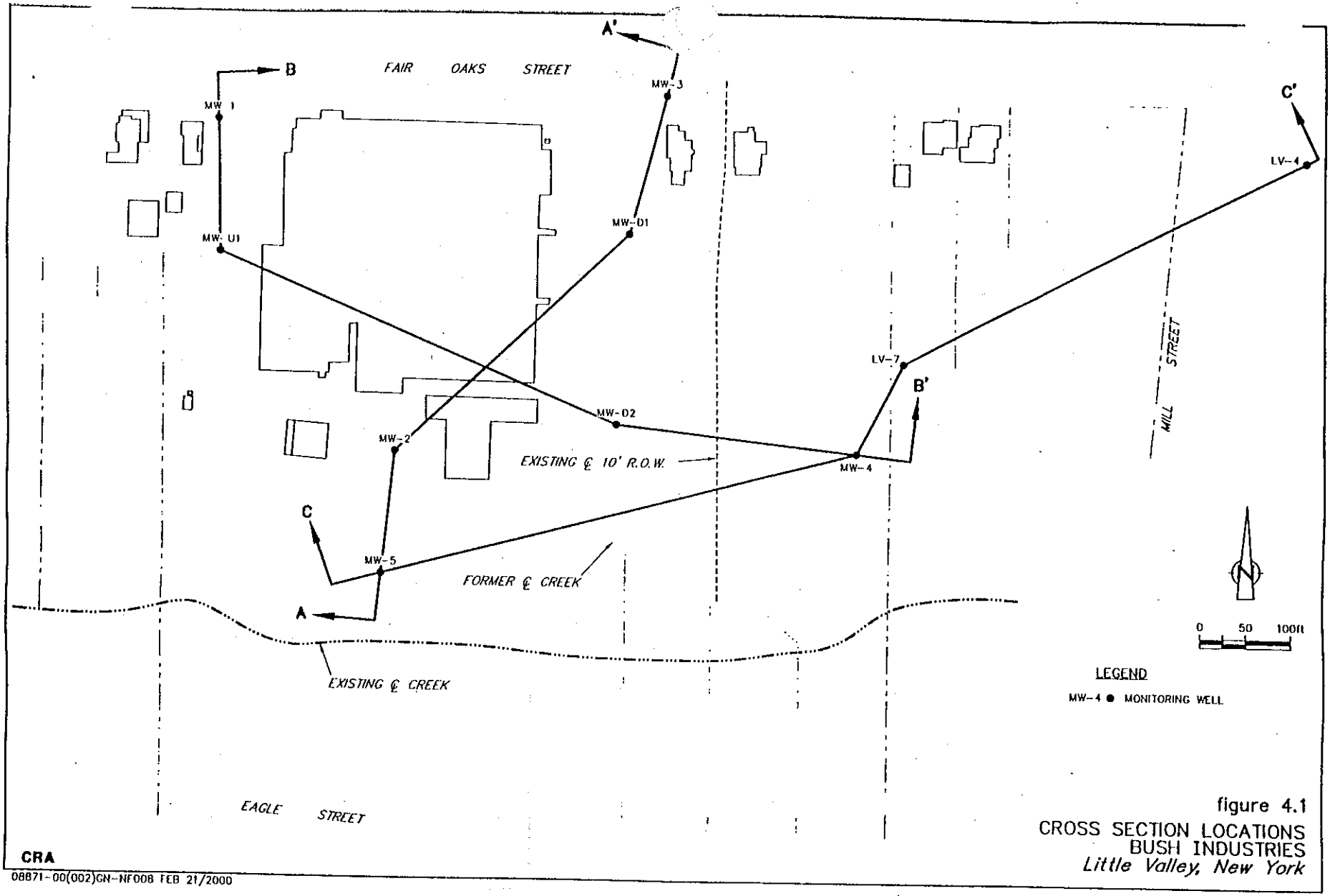

figure 4.1
CROSS SECTION LOCATIONS
BUSH INDUSTRIES
Little Valley, New York

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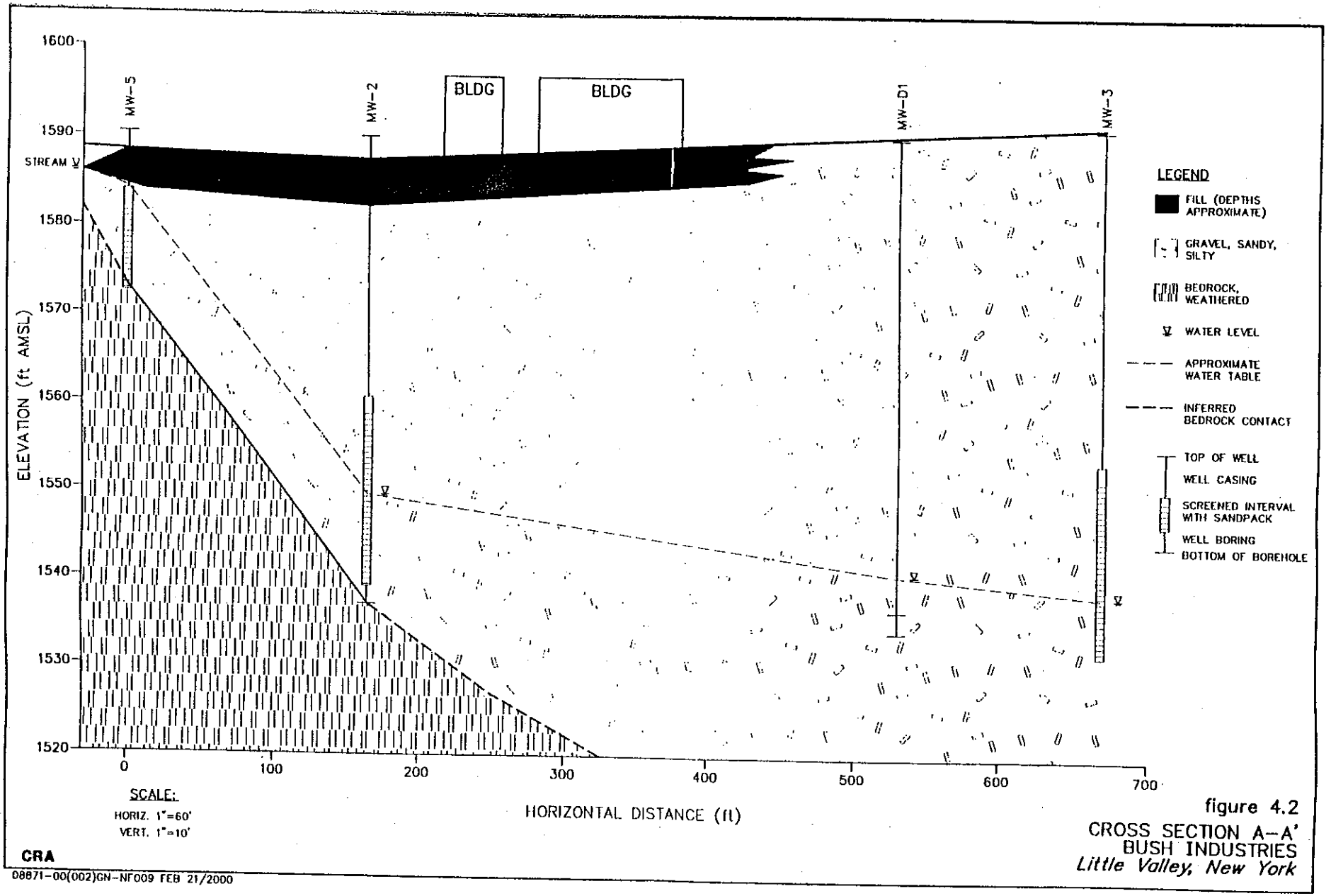

figure 4.2
CROSS SECTION A–A'
BUSH INDUSTRIES
Little Valley, New York

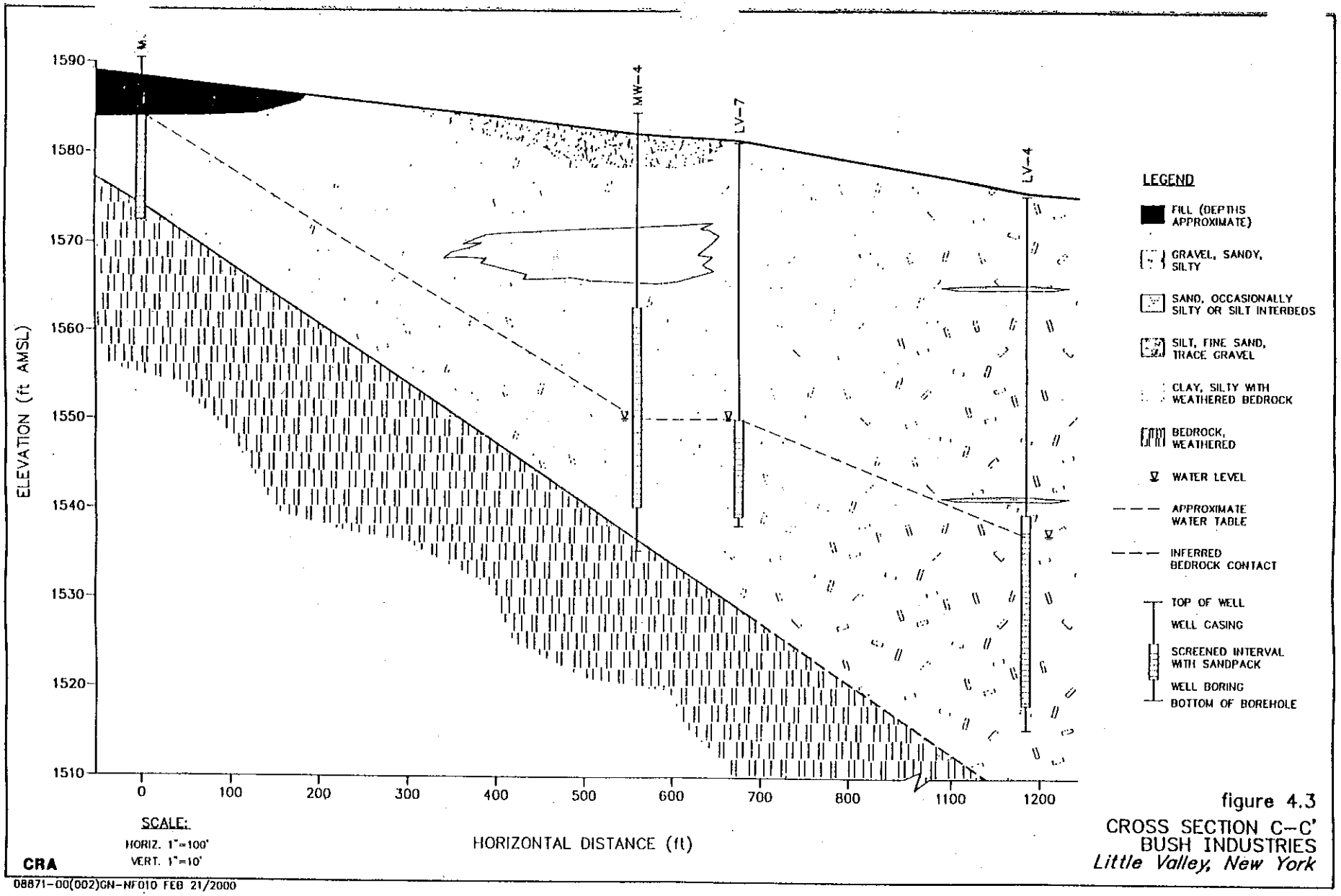

figure 4.3
CROSS SECTION C–C'
BUSH INDUSTRIES
Little Valley, New York

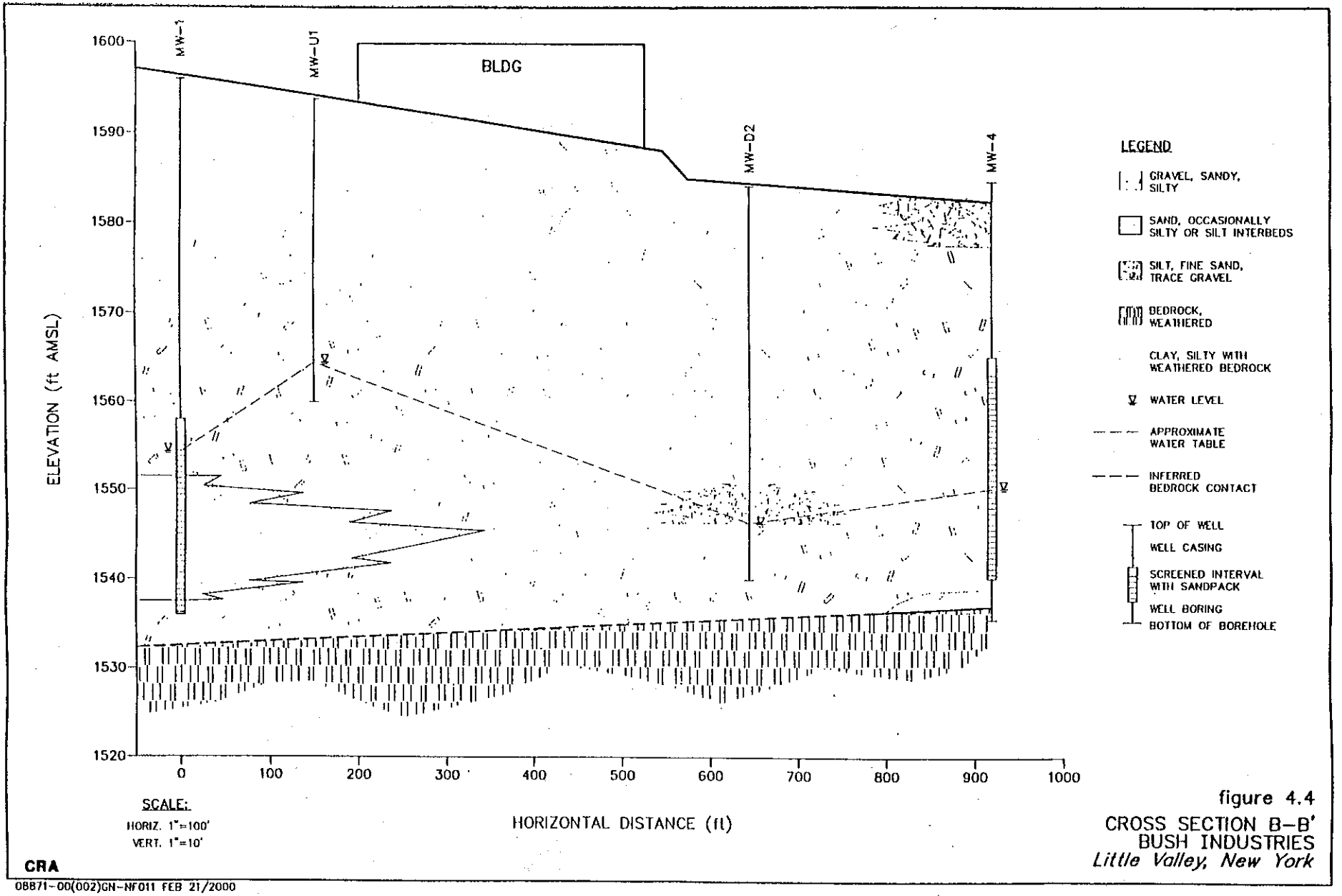

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figure 4.4
CROSS SECTION B–B'
BUSH INDUSTRIES
Little Valley, New York

TABLES

TABLE 1.1

HISTORICAL ANALYTICAL RESULTS FOR SUBSURFACE INVESTIGATION
SUBSURFACE INVESTIGATION
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK

Compound [1]	*BUSH 7-8-94*			*BUSH 12-7-92*			*NYSDOH 7-13-92*			*BUSH 7-13-92*			*BUSH 5-29-91*		
	U1	*D1*	*D2*	*U1*	*D1*	*D2*	*U1*	*D1*	*D2*	*U1*	*D1*	*D2*	*U1*	*D1*	*D2*
1,1-Dichloroethene	ND	ND	3.1	ND	ND	ND	ND	ND	2	ND	ND	1.6	ND	ND	5
cis-1,2-Dichloroethene	ND	1.9	78	ND	13	130	ND	15	52	ND	15	49*	ND	17	140
Trichloroethene	ND	14	250	ND	21	170	ND	45	81	ND	32*	120*	ND	49	280
Toluene	ND	ND	ND	ND	ND	ND	ND	25	ND	ND	ND	ND	ND	ND	ND
Butylbenzene	ND	ND	ND	ND	ND	ND	ND	9	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

(1) All results are reported in micrograms/liter (ug/L) = parts per billion (ppb)

* Results are reported for a diluted sample analyzed after the original (undiluted) sample analytical results indicated the presence of these compounds at concentrations above the linear working limits for the method.

TABLE 2.1

WELL CONSTRUCTION SUMMARY
SUBSURFACE INVESTIGATION
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK

Well	*Date Installed*	*Northing*	*Easting*	*Ground Elevation (ft.AMSL)*	*Top of Riser (ft.AMSL)*	*Well Depth (ft.BGS)*	*Screened Interval (ft.BGS)*	*Sandpack Interval (ft.BGS)*
MW-1	4/22/99	4935.65	4250.35	1596.44	1596.00	60	40 to 60	38 to 60
MW-2	4/21/99	4560.31	4456.51	1587.61	1590.18	49	29 to 49	27 to 49
MW-3	4/26/99	4967.20	4762.07	1591.67	1591.37	60	40 to 60	38 to 60
MW-4	4/23/99	4563.56	4980.92	1582.42	1584.67	42	21.5 to 41.5	19.5 to 41.5
MW-5	4/20/99	4422.02	4441.35	1588.48	1590.44	16	6 to 16	4.5 to 16
MW-6	12/8/99	4479.25	4723.67	1582.76	1584.99	14.5	4 to 14	3 to 14.5
MW-7	12/8/99	4854.11	4966.38	1582.49	1584.97	59.5	39.5 to 59.5	37.5 to 59.5

Notes:
ft. AMSL feet above mean sea level
ft. BGS feet below ground surface

TABLE 2.2

WELL DEVELOPMENT SUMMARY
SUBSURFACE INVESTIGATION
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK

Well	*Date*	*Water Level Depth (ft. BTOC)*	*Method*	*Total Volume Removed*	*pH (s.u.)*	*Specific Conductance (uS/cm)*	*Temperature (° C)*	*Comments*
MW-1	4/28/99	44.50	Bailer / Submersible	16 (dry)	6.59	199	10.5	Brown, Silty
MW-2	4/28/99	38.69	Bailer	10	7.54	385	11	Brown, Silty
MW-3	4/28/99	53.22	Bailer	10	7.05	525	11.3	Brown, Silty
MW-4	4/28/99	31.27	Bailer / Submersible	47	6.97	331	9	Brown, Silty
MW-5	4/28/99	59.00	Bailer	14	6.75	171	6.5	Brown, Silty
MW-D1	4/28/99	49.45	Bailer	2	6.76	530	11.6	Brown, Silty
MW-D2	4/29/99	37.60	Bailer	3.7 (dry)	6.94	392	10.2	Brown, Silty
MW-U1	4/28/99	28.30	Bailer	3.6(dry)	6.42	150	8.4	Brown, Silty
MW-6	12/8/99	3.10	Bailer	8	NM	NM	NM	Brown, Silty
MW-6	12/13/99	3.09	Peristaltic	4.6	6.05	190	8.2	Yellow tint, cloudy
MW-7	12/8/99	51.7	Bailer	12	NM	NM	NM	Brown, Silty
MW-7	12/13/99	56.74	Bailer	2	7.67	314	8.5	Brown, Cloudy

Notes:
ft. BTOC feet below top of casing (reference point)
s.u. standard units
NM Not Measured

TABLE 2.3

WELL PURGING SUMMARY
SUBSURFACE INVESTIGATION
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
MAY 1999

Well	*Date*	*Water Level Depth (Ft. BTOC)*	*Method*	*Well Volume (gals.)*	*Total Volume Removed (gals.)*	*pH (s.u.)*	*Specific Conductance (µS/cm)*	*Temperature (° C)*
MW-1	5/5/99	41.71	Submersible pump	2.7	8.1	6.20	194	12.1
MW-2	5/5/99	40.68	Submersible pump	1.8	6.0	7.31	387	12.6
MW-3	5/5/99	53.07	Bailer	1.1	3.5	6.98	510	12.0
MW-4	5/5/99	34.39	Submersible pump	1.5	6.0	7.17	262	10.0
MW-5	5/5/99	6.21	Submersible pump	2.0	10.0	6.83	161	9.9
MW-U1	5/5/99	29.38	Bailer	1.0	4.0	6.86	171	10.6
MW-D1	5/5/99	49.64	Bailer	0.4	2.0	6.79	575	14.1
MW-D2	5/5/99	37.93	Bailer	0.9	3.5	7.08	362	11.6

Notes:
ft. BTOC feet below top of casing (reference point)
s.u. standard units

TABLE 2.4

WELL PURGING SUMMARY
SUBSURFACE INVESTIGATION
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
DECEMBER 1999

Well	*Date*	*Water Level Depth (Ft. BTOC)*	*Method*	*Well Volume (gals.)*	*Total Volume Removed (gals.)*	*pH (s.u.)*	*Specific Conductance (µS/cm)*	*Temperature (° C)*
MW-1	12/13/99	39.31	Submersible pump	3.1	12.4	6.70	358	8.5
MW-2	12/14/99	51.70	Submersible pump	1.3	5.3 (dry) [2]	6.96	400	9.9
MW-3	12/13/99	Dry [1]	NA	NA	NA	NA	NA	NA
MW-4	12/13/99	28.50	Submersible pump	2.4	7.5	6.07	240	10.0
MW-5	12/13/99	5.66	Peristaltic pump	2.1	8	6.3	160	7.8
MW-6	12/13/99	56.74	Bailer	0.9	3	7.72	312	8.5
MW-7	12/13/99	12.10	Peristaltic pump	2.2	6.9	6.09	190	8.2
MW-U1	12/13/99	27.64	Bailer	1.4	4.2	5.99	200	9.7
MW-D1	12/13/99	49.55	Bailer	0.4	1.5	6.47	520	10.6
MW-D2	12/14/99	41.54	Bailer	0.4	1.0 (dry) [2]	7.27	345	9

Notes:
ft. BTOC feet below top of casing (reference point)
s.u. standard units
(1) MW-3 was dry and could not be purged and sampled.
(2) MW-2 and MW-D2 became dry after purging the indicated volume and were sampled after allowing for well recovery.

TABLE 2.5
SAMPLE COLLECTION SUMMARY
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
MAY 1999

Sample ID	*Location*	*Date*	*Time*	*Analyses*	*Comments*
MW-U1	MW-U1	05/05/99	1230	TCL Volatiles	
MW-D1	MW-D1	05/05/99	1600	TCL Volatiles	
MW-D2	MW-D2	05/05/99	1630	TCL Volatiles	
MW-1	MW-1	05/05/99	1200	TCL Volatiles	MS/MSD
MW-2	MW-2	05/05/99	1530	TCL Volatiles	
MW-D3	MW-2	05/05/99	1540	TCL Volatiles	Field Duplicate of MW-2
MW-3	MW-3	05/05/99	1400	TCL Volatiles	
MW-4	MW-4	05/05/99	1315	TCL Volatiles	
MW-5	MW-5	05/05/99	1445	TCL Volatiles	
RB-1	-	05/05/99	1545	TCL Volatiles	Rinse Blank
Trip Blank	-	05/05/99	-	TCL Volatiles	Trip Blank

Notes:
MS Matrix Spike.
MSD Matrix Spike Duplicate.
TCL Target Compound List.

TABLE 2.6

SAMPLE COLLECTION SUMMARY[1]
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
DECEMBER 1999

Sample ID	*Location*	*Date*	*Time*	*Analyses*	*Comments*
MWU1	MW-U1	12/13/99	1030	TCL Volatiles	
MWD1	MW-D1	12/13/99	1620	TCL Volatiles	
MWD2	MW-D2	12/14/99	1000	TCL Volatiles	
MW1	MW-1	12/13/99	1200	TCL Volatiles	
MW2	MW-2	12/14/99	1030	TCL Volatiles	
MWD3	MW-2	12/14/99	1040	TCL Volatiles	Field Duplicate of MW-2
MW4	MW-4	12/13/99	1600	TCL Volatiles	
MW5	MW-5	12/13/99	1200	TCL Volatiles	
MW6	MW-6	12/13/99	1400	TCL Volatiles	MS/MSD
MW7	MW-7	12/13/99	1430	TCL Volatiles	
RB-8871-01	NA	12/14/99	1400	TCL Volatiles	Rinse Blank
Trip Blank	NA	12/14/99	NA	TCL Volatiles	Trip Blank

Notes:
(1) Monitoring well MW-3 was not sampled because it was dry on the date of sampling.
MS Matrix Spike.
MSD Matrix Spike Duplicate.
TCL Target Compound List.
NA Not Applicable.

TABLE 3.1

HYDRAULIC HEAD MEASUREMENTS
SUBSURFACE INVESTIGTION
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
MAY 5, 1999

Well I.D.	*Water Level (Ft. BTOC)*	*Elevation (Ft. AMSL)*
MW-1	41.71	1554.29
MW-2	40.68	1549.50
MW-3	53.07	1538.30
MW-4	34.39	1550.28
MW-5	6.21	1584.23
MW-D1	49.64	1540.67
MW-D2	37.93	1546.24
MW-U1	29.38	1564.49
LV-4	30:86	1550.46
LV-7	38.18	1537.30
PZ-20D	30.81	1534.49

Notes:
AMSL Above Mean Sea Level.
BTOC Below Top of Casing (reference point).

[illegible] feet above mean sea level
[illegible] feet below ground surface

TABLE 3.2

HYDRAULIC HEAD MEASUREMENTS
SUBSURFACE INVESTIGTION
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
DECEMBER 13, 1999

Well I.D.	*Water Level (Ft. BTOC)*	*Elevation (Ft. AMSL)*
MW-1	39.31	1556.69
MW-2	43.71	1546.47
MW-3	Dry @ 59.8	NA
MW-4	28.62	1556.05
MW-5	5.66	1584.78
MW-6	3.09	1581.90
MW-7	56.74	1528.23
MW-D1	49.55	1540.76
MW-D2	41.54	1542.63
MW-U1	27.60	1566.27
LV-7	29.83	1551.49
LV-4	Dry @ 40.86	NA
PZ-20D	NM	NA

Notes:
AMSL Above Mean Sea Level.
BTOC Below Top of Casing (reference point).
NA Not applicable; insufficient data to perform calculation.
NM Not measured.

TABLE 3.3

SUMMARY OF DETECTED VOCs IN GROUNDWATER (MAY 1999)
SUBSURFACE INVESTIGATION
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK

	Sample Location:		MW-1	MW-2	MW-2	MW-3	MW-4	MW-5	MW-D1	MW-D2	MW-U1
	Sample Date:		5/5/99	5/5/99	5/5/99 (Dupl)	5/5/99	5/5/99	5/5/99	5/5/99	5/5/99	5/5/99
Parameters	Units	NYS Groundwater Criteria [1]									
Volatile Organic Compounds											
Benzene	µg/L	1	ND10	0.7J	ND20	ND10	2J	ND10	ND10	2J	ND10
Chloroethane	µg/L	5	ND10	0.8J	ND20	ND10	ND10	ND10	ND10	ND10	ND10
1,1-Dichloroethene	µg/L	5	ND10	1J	ND20	ND10	ND10	ND10	ND10	1J	ND10
1,2-Dichloroethene (total)	µg/L	5	ND10	54	51	2J	ND10	ND10	6J	58	ND10
Trichloroethene	µg/L	5	ND10	230	190	5J	2J	ND10	11	160	ND10
Vinyl Chloride	µg/L	2	ND10	4J	2J	ND10	ND10	ND10	ND10	ND10	ND10

Notes:

(1) From NYSDEC TOGs (June 1998) Table 1; Water Class GA.

[ ] Above NYSDEC Groundwater Criteria.

Dupl. Field Duplicate.

ND Non-detect at associated detection limit.

J Associated value is estimated.

Samples were analyzed by the laboratory on May 10 and May 12, 1999, within the permissable holding time for the analysis.

TABLE 3.4

SUMMARY OF DETECTED VOCs IN GROUNDWATER (DECEMBER 1999)
SUBSURFACE INVESTIGATION
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK

	Sample Location:		MW-1	MW-2	MW-2	MW-3	MW-4	MW-5	MW-D1	MW-D2	MW-U1	MW-6	MW-7
	Sample Date:		12/13/99	12/14/99	12/14/99 (Dupl)	12/13/99	12/13/99	12/13/99			12/13/99	12/13/99	12/13/99
Parameters	Units	NYS Groundwater Criteria (1)											
Volatile Organic Compounds													
Benzene	µg/L	1	ND10	0.4J	0.4J	NS	ND10	ND10	ND10	ND10	ND10	ND10	ND10
1,1-Dichloroethene	µg/L	5	ND10	0.7J	0.7J	NS	ND10	ND10	ND10	0.4J	ND10	ND10	ND10
1,2-Dichloroethene (total)	µg/L	5	ND10	40	42	NS	0.7J	ND10	4J	16	ND10	30	0.3J
Trichloroethene	µg/L	5	ND10	84	87	NS	1J	ND10	9J	58	ND10	17	2J
Vinyl Chloride	µg/L	2	ND10	1J	1J	NS	ND10	ND10	ND10	ND10	ND10	4J	ND10

Notes:

(1) From NYSDEC TOGs (June 1998) Table 1; Water Class GA.

[ ] Above NYSDEC Groundwater Criteria.

Dupl. Field Duplicate.

ND Non-detect at associated detection limit.

J Associated value is estimated.

NS Not Sampled (well dry).

Samples were analyzed by the laboratory on December 17, 18, and 19, 1999, all within the permissable holding time for the analysis.

APPENDIX A

STRATIGRAPHIC AND INSTRUMENTATION LOGS

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SUBSURFACE INVESTIGATION
PROJECT NUMBER: 08871
CLIENT: BUSH INDUSTRIES, INC.
LOCATION: LITTLE VALLEY, N.Y.

HOLE DESIGNATION: MW-1
DATE COMPLETED: APRIL 22, 1999
DRILLING METHOD: 4¼" ID HSA
CRA SUPERVISOR: A. KISIEL

DEPTH ft. BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft. AMSL	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE STATE	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE REFERENCE POINT (Top of Riser)	1596.4 1596.00					
	Augered through asphalt and gravel to 0.5ft BGS.	1595.9	CONCRETE	1SS		12	0
2.5	GM/ML-GRAVEL and SILT, some sand, brown, moist			2SS		10	0
5.0				3SS		24	0
		1590.4		4SS		28	0
7.5	GM-GRAVEL, some sand, variable silt content, fine to coarse grained gravel, angular to subrounded, brown, moist - very slight odor @ 8 to 10ft BGS			5SS		28	0
10.0			2" Ø PVC PIPE				
12.5							
		1552.4		6SS		38	2.5
15.0	GW/SW-GRAVEL and SAND, some silt, dense, brown and light brown, dry, no odor						
17.5							
20.0			8" Ø BOREHOLE	7SS		32	1.7
22.5							
		1572.4		8SS		25	3.2
25.0	GW-GRAVEL, some sand, fractured rock, fine to coarse gravel, brown, moist to wet						
27.5							
	- wet			9SS		12	0
30.0			CEMENT/ BENTONITE GROUT				
32.5				10SS		15	

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▼ STATIC WATER LEVEL ▼

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SUBSURFACE INVESTIGATION
PROJECT NUMBER: 08871
CLIENT: BUSH INDUSTRIES, INC.
LOCATION: LITTLE VALLEY, N.Y.

HOLE DESIGNATION: MW-1
DATE COMPLETED: APRIL 22, 1999
DRILLING METHOD: 4¼" ID HSA
CRA SUPERVISOR: A. KISIEL

DEPTH ft. BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft. AMSL	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE STATE	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
				10SS		15	0
37.5	- occasional silty fine sand lenses		BENTONITE SEAL; 2" Ø PVC PIPE	11SS		17	0
40.0							
42.5							
	SP-SAND, fine grained, well sorted, brown, wet	1552.4		12SS		4	0
45.0			WELL SCREEN				
47.5	- some medium sand						
50.0				13SS		9	0
52.5			SAND PACK				
	SM-SAND, thin silty interbeds, brown, wet	1542.4		14SS		8	0
55.0							
57.5							
	GW-GRAVEL, fine to coarse, subangular to subrounded, brown, wet	1538.4	8" Ø BOREHOLE	15SS		8	0
60.0							
	END OF HOLE @ 60.0ft BGS	1536.4					
62.5							
65.0							
67.5							

SCREEN DETAILS
Screened interval:
40.0 to 60.0ft BGS
Length: 20.0ft
Diameter: 2"
Slot Size: #10
Material: SCH 40 PVC
Sand Pack:
38.0 to 60.0ft BGS
Material: Medium Sand

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▼ STATIC WATER LEVEL ▼

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SUBSURFACE INVESTIGATION
PROJECT NUMBER: 08871
CLIENT: BUSH INDUSTRIES, INC.
LOCATION: LITTLE VALLEY, N.Y.

HOLE DESIGNATION: MW-2
DATE COMPLETED: APRIL 21, 1999
DRILLING METHOD: 4¼" ID HSA
CRA SUPERVISOR: A. KISIEL

DEPTH ft. BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft. AMSL	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE STATE	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	REFERENCE POINT (Top of Riser)	1590.18					
	GROUND SURFACE	1587.6					
	GM/SM-GRAVEL and SAND (FILL), some silt, dark brown wood in shoe, brown and light brown, slightly moist		CONCRETE	1SS		32	0
2.5	- @ 2 to 2.5ft BGS, wood			2SS		16	0
	- concrete, water infiltration, auger refusal, moved borehole 5ft SW						
	- gray, brown, green gray, moist soil with wet lenses	1583.6		3SS		20	0
5.0	GM/SM-GRAVEL and SAND, some silt, trace clay, angular, moist			4SS		25	0
	- gray and green gray, wet spoon, soil is moist		2" Ø PVC PIPE				
7.5	- no recovery			5SS		23	0
10.0		1577.6		6SS		22	0
	GM-GRAVEL, some silt, and sand, medium dense to loose, moist, brown and gray						
12.5	- moist to wet			7SS		>50	
	- angular to subrounded, fine to coarse gravel and sand		8" Ø BOREHOLE	8SS		45	0
15.0							
17.5							
	- some silt, dense, thin oxidized lenses, slightly moist			9SS		67	0
20.0			CEMENT/ BENTONITE GROUT				
22.5							
	- trace clay			10SS		>50	0
25.0							
	- some sand, trace to some silt, medium dense, brown, wet		BENTONITE SEAL				
27.5			SAND PACK				
30.0				11SS		52	0
			WELL SCREEN				
32.5							
	- angular to subrounded gravel, trace clay, wet			12SS		37	

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▼ STATIC WATER LEVEL ▼

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SUBSURFACE INVESTIGATION
PROJECT NUMBER: 08871
CLIENT: BUSH INDUSTRIES, INC.
LOCATION: LITTLE VALLEY, N.Y.

HOLE DESIGNATION: MW-2
DATE COMPLETED: APRIL 21, 1999
DRILLING METHOD: 4¼" ID HSA
CRA SUPERVISOR: A. KISIEL

DEPTH ft. BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft. AMSL	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE STATE	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
-37.5	- less dense to loose (spoon is wet)		SAND PACK	12SS		37	0
-40.0			WELL SCREEN	13SS		28	0
-42.5			8" Ø BOREHOLE				
-45.0				14SS		>50	0
-47.5							
-50.0	- auger refusal		NATIVE MATERIAL	15SS		>50	0
	END OF HOLE @ 51.0ft BGS	1536.6	2" Ø SPLIT SPOON				
-52.5							
-55.0							
-57.5							
-60.0							
-62.5							
-65.0							
-67.5							

SCREEN DETAILS
Screened interval:
28.0 to 48.0ft BGS
Length: 20.0ft
Diameter: 2"
Slot Size: #10
Material: SCH 40 PVC
Sand Pack:
27.0 to 49.0ft BGS
Material: Medium Sand

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ STATIC WATER LEVEL ▼

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SUBSURFACE INVESTIGATION
PROJECT NUMBER: 08871
CLIENT: BUSH INDUSTRIES, INC.
LOCATION: LITTLE VALLEY, N.Y.

HOLE DESIGNATION: MW-3
DATE COMPLETED: APRIL 26, 1999
DRILLING METHOD: 4¼" ID HSA
CRA SUPERVISOR: A. KISIEL

DEPTH ft. BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft. AMSL	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE STATE	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	GROUND SURFACE REFERENCE POINT (Top of Riser)	1591.7 1591.37					
	ML-SILT, trace sand, roots, brown, moist		CONCRETE	1SS		6	0
		1589.7					
2.5	GM-GRAVEL, some sand, little silt, angular, fine to coarse, brown to orange brown, moist			2SS		35	0
	– some silt, trace clay, brown, moist			3SS		38	0
5.0							
				4SS		>50	0
7.5	– angular to subangular, occasional fine sand interbeds, micaceous, brown and dark brown, moist			5SS		76	0
			2" Ø PVC PIPE				
10.0							
12.5							
		1577.7					
15.0	GW/SW-GRAVEL and SAND, fine to coarse, angular to subangular, brown and gray, dry with occasional moist lenses			6SS		>80	0
17.5							
	– with silt and subangular gravel, dry to moist, brown		8" Ø BOREHOLE	7SS		42	0
20.0							
22.5							
	– predominately coarse sand and fine gravel, moist, loose, trace clayey silt lenses, trace wet lenses			8SS		52	0
25.0							
27.5							
			CEMENT/ BENTONITE GROUT	9SS		>50	0
30.0							
32.5							
	– trace to little silt, dense, trace fine sand lenses, dry, very moist to wet lenses			10SS		>87	

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

WATER FOUND ▽ STATIC WATER LEVEL ▼

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SUBSURFACE INVESTIGATION
PROJECT NUMBER: 08871
CLIENT: BUSH INDUSTRIES, INC.
LOCATION: LITTLE VALLEY, N.Y.

HOLE DESIGNATION: MW-3
DATE COMPLETED: APRIL 26, 1999
DRILLING METHOD: 4¼" ID HSA
CRA SUPERVISOR: A. KISIEL

DEPTH ft. BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft. AMSL	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE STATE	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
				10SS		>67	0
37.5			BENTONITE SEAL				
			2" Ø PVC PIPE				
40.0				11SS		57	0
42.5							
	– wet						
45.0			WELL SCREEN	12SS		31	0
47.5							
50.0				13SS		45	0
52.5			SAND PACK				
55.0				14SS		34	0
57.5			8" Ø BOREHOLE				
60.0			NATIVE MATERIAL	15SS		38	0
	END OF HOLE @ 61.0ft BGS	1530.7	2" Ø SPLIT SPOON				
62.5							
65.0							
67.5							

SCREEN DETAILS
Screened interval:
40.0 to 60.0ft BGS
Length: 20.0ft
Diameter: 2"
Slot Size: #10
Material: SCH 40 PVC
Sand Pack:
38.0 to 60.0ft BGS
Material: Medium Sand

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ STATIC WATER LEVEL ▼

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SUBSURFACE INVESTIGATION
PROJECT NUMBER: 08871
CLIENT: BUSH INDUSTRIES, INC.
LOCATION: LITTLE VALLEY, N.Y.

HOLE DESIGNATION: MW-4
DATE COMPLETED: APRIL 23, 1999
DRILLING METHOD: 4¼" ID HSA
CRA SUPERVISOR: A. KISIEL

DEPTH ft. BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft. AMSL	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE STATE	SAMPLE 'H' VALUE	SAMPLE PID (ppm)
	REFERENCE POINT (Top of Riser) GROUND SURFACE	1584.67 1582.4					
	Augered to 4ft BGS without sampling.		CONCRETE				
-2.5							
	ML-SILT, and fine sand, trace gravel, trace vegetation, brown and dark brown, moist	1578.4 1577.9	2" Ø PVC PIPE	1SS		24	0
-5.0	GM-GRAVEL, with fine to coarse sand, some silt, fine to coarse gravel, angular, unsorted, brown, moist						
-7.5			8" Ø BOREHOLE				
	SW-SAND, fine grained with fine to coarse angular to subangular gravel, occasional fine sand lenses and seams, brown and dark brown, moist to wet	1573.4		2SS		21	0
-10.0							
-12.5			CEMENT/ BENTONITE GROUT				
	GM/SM-GRAVEL and SAND, some silt, fine to coarse, brown, moist to wet	1568.4		3SS		21	0
-15.0							
-17.5			BENTONITE SEAL				
	- moist, unsaturated			4SS		28	0
-20.0							
-22.5			SAND PACK				
	- medium to carse sand, trace silt, saturated			5SS		14	0
-25.0							
-27.5							
	- coarse, trace fine to medium sand						
-30.0			WELL SCREEN	6SS		19	0
-32.5							
				7SS		42	

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▼ STATIC WATER LEVEL ▼

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SUBSURFACE INVESTIGATION
PROJECT NUMBER: 08871
CLIENT: BUSH INDUSTRIES, INC.
LOCATION: LITTLE VALLEY, N.Y.

HOLE DESIGNATION: MW-4
DATE COMPLETED: APRIL 23, 1999
DRILLING METHOD: 4¼" ID HSA
CRA SUPERVISOR: A. KISIEL

DEPTH ft. BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft. AMSL	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE STATE	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
37.5	– weathered bedrock (shale), gray		SAND PACK 8" ø BOREHOLE	7SS		42	0
40.0			WELL SCREEN	8SS		>50	0
42.5	CL/ML/SM-CLAY, SILT and SAND, interbedded with fine gravel, brown	1539.4	BENTONITE SEAL	9SS		26	0
45.0	– @ 43 to 43.5ft BGS saturated – weathered bedrock, saturated	1537.4		10SS		80	0
	CL/ML/GM-CLAY, SILT and GRAVEL, gray to brown, moist @ 45 to 45.9ft BGS	1535.4	2" ø SPLIT SPOON				
47.5	– weathered bedrock END OF HOLE @ 47.0ft BGS						
50.0							
52.5							
55.0							
57.5							
60.0							
62.5							
65.0							
67.5							

SCREEN DETAILS
Screened interval:
21.5 to 41.5ft BGS
Length: 20.0ft
Diameter: 2"
Slot Size: #10
Material: SCH 40 PVC
Sand Pack:
18.5 to 42.0ft BGS
Material: Medium Sand

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ STATIC WATER LEVEL ▼

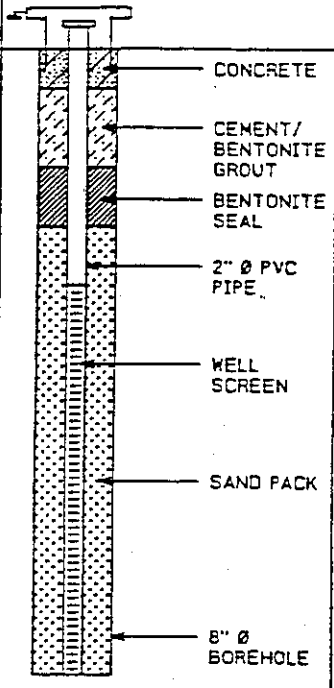
STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: SUBSURFACE INVESTIGATION
PROJECT NUMBER: 08871
CLIENT: BUSH INDUSTRIES, INC.
LOCATION: LITTLE VALLEY, N.Y.

HOLE DESIGNATION: MW-5
DATE COMPLETED: APRIL 20, 1999
DRILLING METHOD: 4¼" ID HSA
CRA SUPERVISOR: A. KISIEL

DEPTH ft. BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft. AMSL
	REFERENCE POINT (Top of Riser)	1590.44
	GROUND SURFACE	1588.5
2.5	SM/ML-SAND and SILT (FILL), trace gravel, fine grained sand, brown, moist	
5.0	GM-GRAVEL, and sand, some silt, trace wood, brown, moist to wet	1584.5
7.5	SM/GM-SAND and GRAVEL, some silt, dense, green gray, gray and brown, moist to wet	1582.5
10.0		
12.5	- moist	
15.0	- @ 14ft BGS broken rock, subrounded gravel - weathered bedrock, gray, clayey and silty, sandy, occasional limonitic staining	
17.5	END OF HOLE @ 16.0ft BGS	1572.5
20.0	NOTE: Initial boring drilled to 26ft BGS. Bedrock was very weathered @ 14.3 to 26ft BGS. Initial boring was backfilled with cement bentonite grout to surface and the boring location was moved approximately 15ft west. The second boring was augered to 16ft BGS without sampling and a 2" well was installed as shown on this log.	
22.5		
25.0		
27.5		
30.0		
32.5		

MONITOR INSTALLATION



SCREEN DETAILS
Screened interval:
6.0 to 16.0ft BGS
Length: 10.0ft
Diameter: 2"
Slot Size: #10
Material: SCH 40 PVC
Sand Pack:
4.5 to 16.0ft BGS
Material: Medium Sand

SAMPLE NUMBER	STATE	'N' VALUE	PID (ppm)
1SS		7	0
2SS		8	0
3SS		19	0
4SS		14	0
5SS		44	0
6SS		>50	0
7SS		>50	0
8SS		>50	0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ STATIC WATER LEVEL ▼

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: BUSH INDUSTRIES
PROJECT NUMBER: 8871
CLIENT: BUSH INDUSTRIES
LOCATION: LITTLE VALLEY, NEW YORK

HOLE DESIGNATION: MW-6
DATE COMPLETED: DECEMBER 8, 1999
DRILLING METHOD: 4 ¼" ID HSA
CRA SUPERVISOR: A. KISIEL

DEPTH ft. BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft. AMSL	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE STATE	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	REFERENCE POINT (Top of Riser) GROUND SURFACE	1584.99 1582.8					
2.5	CL-CLAY, silt, trace gravel, organic matter, plastic, cohesive, soft, brown, moist	1580.8	CONCRETE SEAL CEMENT/ BENTONITE GROUT	1SS		<4	0
	GM-GRAVEL, sand, trace silt, loose, brown, saturated	1578.8	BENTONITE SEAL 2" Ø PVC RISER PIPE	2SS		8	0
5.0	GM/SM-GRAVEL and SAND, some silt, dense, unsorted, brown and gray, moist to wet (wet spoon)	1576.8	WELL SCREEN	3SS		33	0
7.5	GM-GRAVEL, angular to subangular, fine to coarse, some sand, trace to little silt, dense, brown, gray, yellow brown and green gray, moist	1574.8		4SS		62	0
10.0	SM-SAND, some silt and angular to subrounded gravel, dense, red brown, brown, gray, moist		SAND PACK	5SS		42	0
12.5			8" Ø BOREHOLE				
15.0	WEATHERED SILTY SHALE to SILTSTONE, with silt, weathered shale fragments, gray, moist, oxidized	1568.8	BENTONITE SEAL	6SS		>50	0
17.5	WEATHERED SILTSTONE, sandy, with clay, occasional oxidized weathered zones, with hard competent bedrock	1565.8 1565.1	2" Ø SPLIT SPOON	7SS		>50	0
20.0	END OF HOLE @ 17.7ft BGS						
22.5							
25.0							
27.5							
30.0							
32.5							

SCREEN DETAILS
Screened Interval:
4.0 to 14.0ft BGS
Length: 10.0ft
Diameter: 2"
Slot Size: #10
Material: SCH 40 PVC
Sand Pack:
3.0 to 14.5ft BGS
Material: Silica Sand

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▼ STATIC WATER LEVEL ▼

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: BUSH INDUSTRIES
PROJECT NUMBER: 8871
CLIENT: BUSH INDUSTRIES
LOCATION: LITTLE VALLEY, NEW YORK

HOLE DESIGNATION: MW-7
DATE COMPLETED: DECEMBER 7, 1999
DRILLING METHOD: 4 ¼" ID HSA
CRA SUPERVISOR: A. KISIEL

DEPTH ft. BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft. AMSL	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE STATE	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	REFERENCE POINT (Top of Riser) GROUND SURFACE	1584.97 1562.5					
	ML-SILT, trace gravel, sand, some roots, dark brown, moist		CONCRETE SEAL	1SS		5	0
		1560.5					
2.5	CL-CLAY, silt, trace sand and gravel, slight plasticity, brown, moist			2SS		3	0.3
		1578.5					
5.0	SM/GM-SAND and GRAVEL, fine to coarse grained, silt, unsorted, dense, brown to yellow brown, dry			3SS		42	0.1
	– rock in shoe			4SS		>50	0
7.5			CEMENT/ BENTONITE GROUT	5SS		55	0
10.0							
12.5							
	– increased gravel, angular to subangular, red brown, moist with wet seams			6SS		25	
15.0			2" Ø PVC RISER PIPE				
17.5							
	– variable silt, brown, dry			7SS		41	0
20.0							
22.5							
	– brown and red brown			8SS		23	0
25.0			8" Ø BOREHOLE				
27.5							
		1553.5					
30.0	GM-GRAVEL, sand, variable silt, angular to subrounded, unsorted, dense, brown			9SS		18	0
32.5							
				10SS		48	0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▼ STATIC WATER LEVEL ▼

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: BUSH INDUSTRIES
PROJECT NUMBER: 8871
CLIENT: BUSH INDUSTRIES
LOCATION: LITTLE VALLEY, NEW YORK

HOLE DESIGNATION: MW-7
DATE COMPLETED: DECEMBER 7, 1999
DRILLING METHOD: 4 ¼" ID HSA
CRA SUPERVISOR: A. KISIEL

DEPTH ft. BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft. AMSL	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE STATE	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
-37.5			CEMENT/ BENTONITE GROUT; BENTONITE SEAL; 2" ø PVC RISER PIPE	10SS		48	0
-40.0				11SS		55	0
-42.5	No recovery						
-45.0			WELL SCREEN	12SS		>50	0
-47.5	- with oxidized sand lenses						
-50.0			SAND PACK	13SS		64	0
-52.5	No recovery (rock in shoe)						
-55.0				14SS		>50	0
-57.5			6" ø BOREHOLE				
	- 4" of fractured rock at bottom	1523.0		15SS		>50	0
-60.0	END OF HOLE @ 59.5ft BGS						
-62.5							
-65.0							
-67.5							

SCREEN DETAILS
Screened interval:
38.5 to 59.5ft BGS
Length: 20.0ft
Diameter: 2"
Slot Size: #10
Material: SCH 40 PVC
Sand Pack:
37.5 to 59.5ft BGS
Material: Silica Sand

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▼ STATIC WATER LEVEL ▼

APPENDIX B

ANALYTICAL DATA QUALITY ASSESSMENT AND VALIDATIONS

ANALYTICAL RESULTS AND QA/QC REVIEW
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
MAY 1999

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1.0 INTRODUCTION

The following details an assessment and validation of analytical results reported by Severn Trent Laboratories (STL) in Monroe, Connecticut for nine groundwater samples (including one field duplicate) collected in May 1999. A sample key is presented in Table 1.

All samples were analyzed for the target compound list (TCL) volatile organic compounds according to the requirements of the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) Contract Laboratory Program (October 1995). A summary of the analytical results is presented in Table 2.

The Quality Assurance/Quality Control (QA/QC) criteria by which these data have been assessed is outlined in the analytical method and the document entitled "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", EPA 540/R-94/012, February 1994.

2.0 SAMPLE HOLDING TIMES

Based on criteria outlined in the method, the following sample holding time requirement has been established:

Parameter	*Holding Time Criteria*
TCL Volatiles	10 days from VTSR to analysis

Notes:
VTSR Verified Time of Sample Receipt

All samples were analyzed within the required holding time. Additionally, all samples were properly preserved and stored at 4°C (±2°C).

3.0 GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) TUNING AND MASS CALIBRATION - VOLATILES

Prior to analysis, GC/MS instrumentation is tuned to ensure optimization over the mass range of interest. To evaluate instrument tuning, the compound bromofluorobenzene (BFB) is analyzed and the resulting spectra must meet specific criteria before analysis is initiated. Analysis of the tuning compound must then be repeated every 12 hours throughout the sample analysis period to ensure the continued optimization of the instrument.

The tuning compound was analyzed at the required frequency and all tuning criteria were met.

4.0 INSTRUMENT CALIBRATION

4.1 INITIAL CALIBRATION

To quantify compounds of interest in samples, calibration of the GC/MS over a specific concentration range must be performed. Initially, a five-point calibration curve containing all compounds of interest is analyzed. The linearity of the curve, as well as instrument sensitivity, is then evaluated using specific criteria outlined in the method.

The initial calibration was performed as required and acceptable sensitivity was demonstrated for all analytes of interest. The calibration curves generated showed acceptable linearity for all compounds of interest with the exception of acetone. All associated sample results were qualified as estimated based on the indicated variability (see Table 3).

4.2 CONTINUING CALIBRATION

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration (CCAL) standards must be analyzed and compared to the initial calibration curve every 12 hours. Criteria for evaluating the results of the continuing calibration are specified in the analytical method.

All continuing calibration criteria demonstrated acceptable instrument stability and analyte sensitivity for all compounds of interest with the exception of acetone, chloromethane and 2-butanone in one of the CCAL standards. The associated data were qualified as estimated based on the indicated variability (see Table 4).

5.0 INTERNAL STANDARDS PERFORMANCE

To ensure that changes in GC/MS response and sensitivity do not affect sample analysis results, internal standards are added to each sample prior to analysis. All results are then calculated as a ratio of the internal standard response.

All internal standard results reported for the volatiles analysis of the samples met the method-specified criteria, and all results were calculated correctly using the internal standard responses.

6.0 SURROGATE SPIKE RECOVERIES

All samples and blanks are spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of individual sample matrices on analytical efficiency.

All samples were spiked with the proper surrogate compounds and all surrogate recoveries showed acceptable analytical efficiency.

7.0 LABORATORY BLANK ANALYSES

The purpose of assessing the results of laboratory blank analyses is to determine the existence and magnitude of contamination introduced during analysis. Laboratory blanks were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical sequence.

Laboratory blanks were analyzed at the required frequency and all results were non-detect for the compounds of interest with the exception of low concentrations of acetone. All associated samples with similar levels of acetone as that found in the blanks were qualified as non-detect (see Table 5).

8.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) ANALYSIS

The recoveries of MS/MSD analyses are used to assess the effects of sample matrices on analytical accuracy. MS/MSD samples are prepared and analyzed at a minimum frequency of one per 20 investigative samples. The Relative Percent Difference (RPD) between the MS and MSD analyses indicates the quality of analytical precision achieved.

MS/MSD analyses were performed on sample MW-1. All recoveries and RPD values were acceptable indicating good analytical accuracy and precision.

9.0 FIELD DUPLICATE

To assess the analytical and sampling protocol precision, field duplicate samples are collected and submitted "blind" to the laboratory for analysis.

For this study, a field duplicate of sample MW-2 was collected. The analytical results were comparable, demonstrating acceptable sampling and analytical precision.

10.0 TRIP BLANK

To evaluate the possibility of cross-contamination during sample shipment and storage, trip blanks are collected and submitted to the laboratory for volatile organic analyses.

One trip blank was submitted for volatile organic analysis and all results were non-detect for the compounds of interest, with the exception of a low concentration of acetone. All associated samples with acetone levels similar to that of the blank were qualified as non-detect (see Table 6).

11.0 RINSE BLANK

The purpose of assessing the results of rinse blanks is to determine the existence and magnitude of sample contamination due to sampling procedures.

One rinse blank was submitted for volatile organic analysis and most results were non-detect for the compounds of interest. A low level concentration of methylene chloride was reported for the trip blank. An associated sample with a level similar to that of the rinse blank was qualified as non-detect (see Table 7).

12.0 CONCLUSION

Based on the preceding assessment, the data were acceptable with the qualifications noted.

TABLES

TABLE 1
SAMPLE COLLECTION AND ANALYSIS SUMMARY
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
MAY 1999

Sample ID	*Location*	*Date*	*Time*	*Analyses*	*Comments*
MW-U1	MW-U1	05/05/99	1230	TCL Volatiles	
MW-D1	MW-D1	05/05/99	1600	TCL Volatiles	
MW-D2	MW-D2	05/05/99	1630	TCL Volatiles	
MW-1	MW-1	05/05/99	1200	TCL Volatiles	MS/MSD
MW-2	MW-2	05/05/99	1530	TCL Volatiles	
MW-D3	MW-2	05/05/99	1540	TCL Volatiles	Field Duplicate of MW-2
MW-3	MW-3	05/05/99	1400	TCL Volatiles	
MW-4	MW-4	05/05/99	1315	TCL Volatiles	
MW-5	MW-5	05/05/99	1445	TCL Volatiles	
RB-1	-	05/05/99	1545	TCL Volatiles	Rinse Blank
Trip Blank	-	05/05/99	-	TCL Volatiles	Trip Blank

Notes:
MS Matrix Spike.
MSD Matrix Spike Duplicate.
TCL Target Compound List.

Date Printed: June 8, 1999

Time Printed: 2:57 pm

TABLE 2

ANALYTICAL RESULTS SUMMARY - GROUNDWATERS
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
MAY 1999

Sample Location:		MW-1	MW-2	MW-2	MW-3	MW-4	MW-5	MW-D1	MW-D2	MW-U1
Sample ID:		MW-1	MW-2	MW-D3	MW-3	MW-4	MW-5	MW-D1	MW-D2	MW-U1
Sample Date:		05/05/1999	05/05/1999	05/05/1999	05/05/1999	05/05/1999	05/05/1999	05/05/1999	05/05/1999	05/05/1999
				Dupl.						
Parameters	Units									
Volatile Organics										
CHLOROMETHANE	ug/L	ND 10 J	ND 20 J	ND 20	ND 10 J	ND 10 J	ND 10 J	ND 10 J	ND 10 J	ND 10 J
BROMOMETHANE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
VINYL CHLORIDE	ug/L	ND 10	4 J	2 J	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
CHLOROETHANE	ug/L	ND 10	0.8 J	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
METHYLENE CHLORIDE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
ACETONE	ug/L	ND 10 J	ND 20 J	ND 20 J	ND 10 J	ND 10 J	ND 10 J	ND 10 J	ND 10 J	ND 10 J
CARBON DISULFIDE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,1-DICHLOROETHENE	ug/L	ND 10	1 J	ND 20	ND 10	ND 10	ND 10	ND 10	1 J	ND 10
1,1-DICHLOROETHANE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,2-DICHLOROETHENE (TOTAL)	ug/L	ND 10	54	51	2 J	ND 10	ND 10	6 J	58	ND 10
CHLOROFORM	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,2-DICHLOROETHANE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
2-BUTANONE	ug/L	ND 10 J	ND 20 J	ND 20	ND 10 J	ND 10 J	ND 10 J	ND 10 J	ND 10 J	ND 10 J
1,1,1-TRICHLOROETHANE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
CARBON TETRACHLORIDE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
BROMODICHLOROMETHANE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,2-DICHLOROPROPANE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
CIS-1,3-DICHLOROPROPENE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
TRICHLOROETHENE	ug/L	ND 10	230	190	5 J	2 J	ND 10	11	160	ND 10
DIBROMOCHLOROMETHANE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,1,2-TRICHLOROETHANE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
BENZENE	ug/L	ND 10	0.7 J	ND 20	ND 10	2 J	ND 10	ND 10	2 J	ND 10
TRANS-1,3-DICHLOROPROPENE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
BROMOFORM	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
4-METHYL-2-PENTANONE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
2-HEXANONE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
TETRACHLOROETHENE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,1,2,2-TETRACHLOROETHANE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
TOLUENE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
CHLOROBENZENE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
ETHYLBENZENE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
STYRENE	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
XYLENE (TOTAL)	ug/L	ND 10	ND 20	ND 20	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10

Notes

NDx - Not detected at or above x.
Dupl. - Field duplicate.
J - Estimated.

TABLE 3

QUALIFIED SAMPLE DATA DUE TO OUTLYING INITIAL CALIBRATION RESULTS
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
MAY 1999

Parameter	*Compound*	*Calibration Date*	*Associated Sample ID*	*%RSD*	*Sample Results*	*Units*	*Qualifier*
VOCs	Acetone	03/10/99	MW-1	43	ND 10	µg/L	J
			MW-2		11J	µg/L	J
			MW-2 Dup.		5J	µg/L	J
			MW-3		ND 10	µg/L	J
			MW-4		ND 10	µg/L	J
			MW-5		ND 10	µg/L	J
			MW-D1		ND 10	µg/L	J
			MW-D2		ND 10	µg/L	J
			MW-U1		ND 10	µg/L	J

Notes:
%RSD Percent Relative Standard Deviation.
Dup. Field Duplicate.
J Estimated.
NDx Not-detected at or above x.
VOCs Volatile Organic Compounds.

TABLE 4

QUALIFIED SAMPLE DATA DUE TO OUTLYING CONTINUING CALIBRATION RESULTS
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
MAY 1999

Parameter	*Calibration Date*	*Compound*	*%D*	*Associated Sample ID*	*Sample Results*	*Units*	*Qualifier*
VOCs	05/10/99	Acetone	42	MW-1	ND 10	µg/L	J
				MW-2	11J	µg/L	J
				MW-3	ND 10	µg/L	J
				MW-4	ND 10	µg/L	J
				MW-5	ND 10	µg/L	J
				MW-D1	ND 10	µg/L	J
				MW-D2	ND 10	µg/L	J
				MW-U1	ND 10	µg/L	J
		Chloromethane	28	MW-1	ND 10	µg/L	J
				MW-2	ND 20	µg/L	J
				MW-3	ND 10	µg/L	J
				MW-4	ND 10	µg/L	J
				MW-5	ND 10	µg/L	J
				MW-D1	ND 10	µg/L	J
				MW-D2	ND 10	µg/L	J
				MW-U1	ND 10	µg/L	J
		2-Butanone	32	MW-1	ND 10	µg/L	J
				MW-2	ND 20	µg/L	J
				MW-3	ND 10	µg/L	J
				MW-4	ND 10	µg/L	J
				MW-5	ND 10	µg/L	J
				MW-D1	ND 10	µg/L	J
				MW-D2	ND 10	µg/L	J
				MW-U1	ND 10	µg/L	J

Notes:
%D Percent difference.
J Estimated.
NDX Not detected at or above x.
VOCs Volatile Organic Compounds.

TABLE 5

QUALIFIED SAMPLE DATA DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK

Parameter	*Blank ID/ Date*	*Analyte*	*Blank Result*	*Associated Sample ID*	*Sample Result*	*Qualified Sample Result*	*Units*
VOCs	VBLKMF 5/10/1999	Acetone	4J	MW-2	11J	ND 20	µg/L
	VBLKMK 5/12/1999	Acetone	11	MW-2 Dup.	5J	ND 20	µg/L

Notes:
Dup. Field Duplicate.
J Estimated.
NDx Not detected at or above x.
VOCs Volatile Organic Compounds.

TABLE 6

QUALIFIED SAMPLE DATA DUE TO ANALYTE CONCENTRATIONS IN THE TRIP BLANK
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
MAY 1999

Parameter	*Blank Date*	*Analyte*	*Blank Result*	*Associated Sample ID*	*Sample Result*	*Qualified Sample Result*
VOCs	05/05/99	Acetone	2J	MW-2	11J	ND 20
				MW-2 Dup.	5J	ND 20

Notes:
Dup. Field Duplicate.
J Estimated.
NDx Not detected at or above x.
VOCs Volatile Organic Compounds.

TABLE 7

QUALIFIED SAMPLE DATA DUE TO ANALYTE CONCENTRATIONS IN THE RINSE BLANKS
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
MAY 1999

Parameter	*Rinse Blank Date*	*Analyte*	*Blank Result*	*Sample ID*	*Sample Result*	*Qualified Sample Result*	*Units*
VOCs	05/05/99	Methylene Chloride	0.4J	MW-2	1J	ND 20	µg/L

Notes:
J Estimated.
NDx Not detected at or above x.
VOCs Volatile Organic Compounds.

APPENDIX A

CHAIN OF CUSTODY FORM

)-9-1022A

CHAIN OF CUSTODY RECORD

CRA
CONESTOGA-ROVERS & ASSOCIATES
2055 Niagara Falls Blvd. Suite Three
Niagara Falls, NY 14304 (716)297-6150

SHIPPED TO (Laboratory Name): Severn Trent Laboratories

REFERENCE NUMBER: 0887L

SAMPLER'S SIGNATURE: Andrew P. Kissel PRINTED NAME: Andrew P. Kissel

SEQ. No.	DATE	TIME	SAMPLE No.		SAMPLE TYPE	No. OF CONTAINERS	PARAMETERS: TCL VOCs (unpres)	REMARKS
	5/5/99	1230	MWHU1	01	G/W	2	2	
		1600	MW-D1	02		2	2	
		1630	MW-D2	03		2	2	
		1200	MW-1	04		6	6	
		1530	MW-2	05		2	2	
		1400	MW-3	06		2	2	
		1315	MW-4	07		2	2	
		1445	MW-5	08		2	2	
		1545	RB-1	09	Trip Blank	2	2	
	5/6/99	1400	MW-D3	10	GW	2	2	
			TRIP BLANK	11	DMB Water	2	2	

R.V. 5-6-99

PASSED RAD SCREEN
5°

TOTAL NUMBER OF CONTAINERS: 26 HEALTH/CHEMICAL HAZARDS:

RELINQUISHED BY: ① Andrew P. Kissel	DATE: 5/5/99 TIME: 1700	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:
RELINQUISHED BY: ③	DATE: TIME:	RECEIVED BY: ④	DATE: TIME:

METHOD OF SHIPMENT: Fedex WAY BILL No. 149014651 2

White –Fully Executed Copy
Yellow –Receiving Laboratory Copy
Pink –Shipper Copy

SAMPLE TEAM: Andrew P. Kissel

RECEIVED FOR LABORATORY BY: S. Venturelli

Nº NF– 2795

ANALYTICAL RESULTS AND QA/QC REVIEW
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
DECEMBER 1999

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1.0 INTRODUCTION

The following details an assessment and validation of analytical results reported by Severn Trent Laboratories (STL) in Monroe, Connecticut for ten groundwater samples (including one field duplicate) collected in December 1999. A sample key is presented in Table 1.

All samples were analyzed for the target compound list (TCL) volatile organic compounds according to the requirements of the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) Contract Laboratory Program (October 1995). A summary of the analytical results is presented in Table 2.

The Quality Assurance/Quality Control (QA/QC) criteria by which these data have been assessed is outlined in the analytical method and the document entitled "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", EPA 540/R-94/012, February 1994.

2.0 SAMPLE HOLDING TIMES

Based on criteria outlined in the method, the following sample holding time requirement has been established:

Parameter	*Holding Time Criteria*
TCL Volatiles	10 days from VTSR to analysis

Notes:
VTSR Verified Time of Sample Receipt

All samples were analyzed within the required holding time. Additionally, all samples were properly preserved and stored at 4°C (±2°C).

3.0 GAS CHROMATOGRAPH/MASS SPECTROMETER (GC/MS) TUNING AND MASS CALIBRATION - VOLATILES

Prior to analysis, GC/MS instrumentation is tuned to ensure optimization over the mass range of interest. To evaluate instrument tuning, the compound bromofluorobenzene (BFB) is analyzed and the resulting spectra must meet specific criteria before analysis is initiated. Analysis of the tuning compound must then be repeated every 12 hours throughout the sample analysis period to ensure the continued optimization of the instrument.

The tuning compound was analyzed at the required frequency and all tuning criteria were met.

4.0 INSTRUMENT CALIBRATION

4.1 INITIAL CALIBRATION

To quantify compounds of interest in samples, calibration of the GC/MS over a specific concentration range must be performed. Initially, a five-point calibration curve containing all compounds of interest is analyzed. The linearity of the curve, as well as instrument sensitivity, is then evaluated using specific criteria outlined in the method.

The initial calibration was performed as required and acceptable sensitivity and linearity were demonstrated for all analytes of interest.

4.2 CONTINUING CALIBRATION

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration (CCAL) standards must be analyzed and compared to the initial calibration curve every 12 hours. Criteria for evaluating the results of the continuing calibration are specified in the analytical method.

All continuing calibration criteria demonstrated acceptable instrument stability and analyte sensitivity for all compounds of interest with the exception of a slightly high percent difference for chloromethane in one of the CCAL standards. The associated data were non-detect, and no qualification was performed. The outlying percent difference was due to an increase in instrument sensitivity.

5.0 INTERNAL STANDARDS PERFORMANCE

To ensure that changes in GC/MS response and sensitivity do not affect sample analysis results, internal standards are added to each sample prior to analysis. All results are then calculated as a ratio of the internal standard response.

All internal standard results reported for the volatiles analysis of the samples met the method-specified criteria, and all results were calculated correctly using the internal standard responses.

6.0 SURROGATE SPIKE RECOVERIES

All samples and blanks are spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of individual sample matrices on analytical efficiency.

All samples were spiked with the proper surrogate compounds and all surrogate recoveries showed acceptable analytical efficiency.

7.0 LABORATORY BLANK ANALYSES

The purpose of assessing the results of laboratory blank analyses is to determine the existence and magnitude of contamination introduced during analysis. Laboratory blanks were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical sequence.

Laboratory blanks were analyzed at the required frequency and most results were non-detect for the compounds of interest. Low concentrations of some compounds of interest were reported. Most associated sample results were either non-detect or significantly greater in concentration, and no qualification of the data was necessary. One acetone sample result was qualified as non-detect (see Table 3).

8.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) ANALYSIS

The recoveries of MS/MSD analyses are used to assess the effects of sample matrices on analytical accuracy. MS/MSD samples are prepared and analyzed at a minimum frequency of one per 20 investigative samples. The Relative Percent Difference (RPD) between the MS and MSD analyses indicates the quality of analytical precision achieved.

MS/MSD analyses were performed on sample GW-8811-MW6. All recoveries and RPD values were acceptable indicating good analytical accuracy and precision.

9.0 BLANK SPIKE ANALYSES

The recoveries of blank spike analyses are used to assess the effects of sample matrices on analytical accuracy, independent of sample matrix.

Two blank spikes were performed for these analyses. All recoveries were acceptable except for one high carbon disulfide recovery. All associated sample results were non-detect, and no qualification of the data was necessary.

10. TICS

Chromatographic peaks recorded during volatile sample analyses which are not target compounds, surrogates, or internal standards, are potential TICs. The ten largest TICs that exhibit areas greater than 10 percent of the area of the nearest internal standard are tentatively identified and quantified.

TICs which were present in laboratory blanks or were identified as aldol condensation products were rejected. The only reported TIC was an unknown isomer of methyl naphthalene. This was tentatively identified in sample GW-8871-MWD2 at an estimated concentration of 6 micrograms per liter.

11.0 FIELD QA/QC

11.1 FIELD DUPLICATE

To assess the analytical and sampling protocol precision, field duplicate samples are collected and submitted "blind" to the laboratory for analysis.

For this study, a field duplicate of location MW-2 was collected, as identified in Table 1. The analytical results were comparable, demonstrating acceptable sampling and analytical precision.

11.2 TRIP BLANK

To evaluate the possibility of cross-contamination during sample shipment and storage, trip blanks are collected and submitted to the laboratory for volatile organic analyses.

One trip blank was submitted for volatile organic analysis and all results were non-detect for the compounds of interest, with the exception of low concentrations of acetone, 2-butanone, and methylene chloride. All associated samples with compound levels similar to those of the blank were qualified as non-detect (see Table 4).

11.3 RINSE BLANK

The purpose of assessing the results of rinse blanks is to determine the existence and magnitude of sample contamination due to sampling procedures.

One rinse blank was submitted for volatile organic analysis and most results were non-detect for the compounds of interest. Low concentrations of methylene chloride, acetone, and 2-butanone were reported for the rinse blank. All associated sample results were previously qualified as non-detect due to trip blank contamination (see Section 11.2). No further qualification was necessary.

12.0 CONCLUSION

Based on the preceding assessment, the data were acceptable with the qualifications noted.

TABLES

TABLE 1
SAMPLE COLLECTION AND ANALYSIS SUMMARY
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
DECEMBER 1999

Sample ID	*Location*	*Date*	*Time*	*Analyses*	*Comments*
GW-8871-MWU1	MW-U1	12/13/99	1030	TCL Volatiles	
GW-8871-MWD1	MW-D1	12/13/99	1620	TCL Volatiles	
GW-8871-MWD2	MW-D2	12/14/99	1000	TCL Volatiles	
GW-8871-MW1	MW-1	12/13/99	1200	TCL Volatiles	
GW-8871-MW2	MW-2	12/14/99	1030	TCL Volatiles	
GW-8871-MWD3	MW-2	12/14/99	1040	TCL Volatiles	Field Duplicate of MW-2
GW-8871-MW6	MW-6	12/13/99	1400	TCL Volatiles	MS/MSD
GW-8871-MW7	MW-7	12/13/99	1430	TCL Volatiles	
GW-8871-MW4	MW-4	12/13/99	1600	TCL Volatiles	
GW-8871-MW5	MW-5	12/13/99	1200	TCL Volatiles	
RB-8871-01	-	12/13/99	1400	TCL Volatiles	Rinse Blank
Trip Blank	-	12/14/99	-	TCL Volatiles	Trip Blank

Notes:
MS Matrix Spike.
MSD Matrix Spike Duplicate.
TCL Target Compound List.

Date Printed: January 11, 2000
Time Printed: 9:40 am

TABLE 2

ANALYTICAL RESULTS SUMMARY
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
DECEMBER 1999

Sample Location:		MW-1	MW-2	MW-2	MW-4	MW-5	MW-6	MW-7	MW-D1	MW-D2
Sample ID:		GW-8871-MW1	GW-8871-MW2	GW-8871-MWD3	GW-8871-MW4	GW-8871-MW5	GW-8871-MW6	GW-8871-MW7	GW-8871-MWD1	GW-8871-MWD2
Sample Date:		12/13/1999	12/14/1999	12/14/1999 Dupl.	12/13/1999	12/13/1999	12/13/1999	12/13/1999	12/13/1999	12/14/1999
Parameters	Units									
Volatile Organics										
Chloromethane	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Bromomethane	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Vinyl chloride	ug/L	ND 10	1 J	1 J	ND 10	ND 10	4 J	ND 10	ND 10	ND 10
Chloroethane	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Methylene chloride	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Acetone	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 16	ND 10
Carbon disulfide	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,1-Dichloroethene	ug/L	ND 10	0.7 J	0.7 J	ND 10	ND 10	ND 10	ND 10	ND 10	0.4 J
1,1-Dichloroethane	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,2-Dichloroethene (total)	ug/L	ND 10	40	42	0.7 J	ND 10	30	0.3 J	4 J	16
Chloroform	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,2-Dichloroethane	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
2-Butanone	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,1,1-Trichloroethane	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Carbon tetrachloride	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Bromodichloromethane	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,2-Dichloropropane	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
cis-1,3-Dichloropropene	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Trichloroethene	ug/L	ND 10	84	87	1 J	ND 10	17	2 J	9 J	58
Dibromochloromethane	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,1,2-Trichloroethane	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Benzene	ug/L	ND 10	0.4 J	0.4 J	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
trans-1,3-Dichloropropene	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Bromoform	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
4-Methyl-2-pentanone	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
2-Hexanone	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Tetrachloroethene	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
1,1,2,2-Tetrachloroethane	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Toluene	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Chlorobenzene	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Ethylbenzene	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Styrene	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Xylene (total)	ug/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10

Date Printed: January 11, 2000
Time Printed: 9:40 am

TABLE 2

ANALYTICAL RESULTS SUMMARY
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
DECEMBER 1999

Sample Location:	MW-U1
Sample ID:	GW-8871-MWU1
Sample Date:	12/13/1999

Parameters	Units	
Volatile Organics		
Chloromethane	ug/L	ND 10
Bromomethane	ug/L	ND 10
Vinyl chloride	ug/L	ND 10
Chloroethane	ug/L	ND 10
Methylene chloride	ug/L	ND 10
Acetone	ug/L	ND 10
Carbon disulfide	ug/L	ND 10
1,1-Dichloroethene	ug/L	ND 10
1,1-Dichloroethane	ug/L	ND 10
1,2-Dichloroethene (total)	ug/L	ND 10
Chloroform	ug/L	ND 10
1,2-Dichloroethane	ug/L	ND 10
2-Butanone	ug/L	ND 10
1,1,1-Trichloroethane	ug/L	ND 10
Carbon tetrachloride	ug/L	ND 10
Bromodichloromethane	ug/L	ND 10
1,2-Dichloropropane	ug/L	ND 10
cis-1,3-Dichloropropene	ug/L	ND 10
Trichloroethene	ug/L	ND 10
Dibromochloromethane	ug/L	ND 10
1,1,2-Trichloroethane	ug/L	ND 10
Benzene	ug/L	ND 10
trans-1,3-Dichloropropene	ug/L	ND 10
Bromoform	ug/L	ND 10
4-Methyl-2-pentanone	ug/L	ND 10
2-Hexanone	ug/L	ND 10
Tetrachloroethene	ug/L	ND 10
1,1,2,2-Tetrachloroethane	ug/L	ND 10
Toluene	ug/L	ND 10
Chlorobenzene	ug/L	ND 10
Ethylbenzene	ug/L	ND 10
Styrene	ug/L	ND 10
Xylene (total)	ug/L	ND 10

Notes

NDx	-	Non-detect at associated value.
Dupl.	-	Field duplicate.
J	-	Associated value is estimated.

TABLE 3

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
BUSH INDUSTRIES
LITTLE VALLEY, NEW YORK
DECEMBER 1999

Parameter	*Analysis Date*	*Analyte*	*Blank Result*	*Sample ID*	*Sample Result*	*Qualified Sample Result*	*Units*
Volatiles	12/17/99	Acetone	3J	GW-8871-MWD1	16	ND 16	ug/L

NOTES:
J Estimated.
ND Non-detect at associated value.

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE TRIP BLANK

BUSH INDUSTRIES

LITTLE VALLEY, NEW YORK

DECEMBER 1999

Parameter	*Trip Blank Date*	*Analyte*	*Blank Result*	*Associated Sample ID*	*Sample Result*	*Qualified Sample Result*	*Units*
Volatiles	12/13/99	Acetone	10	GW-8871-MWD1	16	ND 16	ug/L
				GW-8871-MWD2	6J	ND 10	ug/L
		Methylene Chloride	0.5J	GW-8871-MWD1	2J	ND 10	ug/L

Notes:

J Estimated.

ND Non-detect at associated value.

APPENDIX A

CHAIN OF CUSTODY FORM

CHAIN OF CUSTODY RECORD 7077-3176A

CRA
CONESTOGA-ROVERS & ASSOCIATES
2055 Niagara Falls Blvd. Suite Three
Niagara Falls, NY 14304 (716)297-6150

SHIPPED TO (Laboratory Name): STL LABS

REFERENCE NUMBER: 8871

SAMPLER'S SIGNATURE: Andrew P. Kisiel PRINTED NAME: Andrew P. Kisiel

SEQ. No.	DATE	TIME	SAMPLE No.	SAMPLE TYPE	No. OF CONTAINERS	PARAMETERS: TCL VOCs	REMARKS
01	12/13/99	1030	GW-8871-MW01	GW	2	2	
02		1200	GW-8871-MW1		2	2	
03		1200	GW-8871-MW5		2	2	
04		1430	GW-8871-MW7		2	2	
05		1400	GW-8871-MW6 MS/MSD		6	6	
06		1600	GW-8871-MW4		2	2	
07		1600	GW-8871-MWD1		2	2	
08		1400	RB-8871-01	LAB WATER	2	2	
09	12/14/99	1000	GW-8871-MWD2	GW	2	2	
10		1030	GW-8871-MW2		2	2	
11		1040	GW-8871-MWD3		2	2	
12		-	TRIP BLANK	LAB WATER	2	2	

PASSED RAD SCREEN 6d

TOTAL NUMBER OF CONTAINERS: 28 HEALTH/CHEMICAL HAZARDS:

RELINQUISHED BY: ① Andrew P. Kisiel	DATE: 12/14/99 TIME: 1700	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:
RELINQUISHED BY: ③	DATE: TIME:	RECEIVED BY: ④	DATE: TIME:

METHOD OF SHIPMENT: Fed Ex WAY BILL No. 515269332 4

White –Fully Executed Copy
Yellow –Receiving Laboratory Copy
Pink –Shipper Copy
Goldenrod –Sampler Copy

SAMPLE TEAM: Andrew P. Kisiel, Kristin A. Stevens

RECEIVED FOR LABORATORY BY: DATE: 12/15/99 TIME: 10:30

Nº NF-2337

0000

APPENDIX C

ANALYTICAL RESULTS FOR NYSDEC MONITORING WELLS LV-4 AND LV-7, SAMPLED MAY 1999

CASE NARRATIVE

COMPANY: NYS DEC - Region 9
PROJECT:
SUBMISSION #: 9905000103
SDG#: 0505
Case #: SH999

NYS DEC samples were collected on 05/05/99 and received at CAS on 05/06/99 in good condition at a cooler temperature of 6.9 °C. See CAS CLP Batching sheets for a cross reference between Client ID and CAS Job # and analyses requested.

VOLATILE ORGANIC ANALYSIS

Two samples were analyzed for low level volatile organics by Method 95-4 from the NYS DEC 1995 ASP.

All Tuning criteria for BFB were within limits.

The initial and continuing calibration criteria were met for all analytes.

All internal standard areas were within QC limits.

All sample surrogate recoveries were within QC limits for recovery.

Matrix Spike/Matrix Spike Duplicate recoveries for water sample B78404 and the Blank Spike recoveries were all acceptable.

All Laboratory Blanks were free from contamination.

Library Searches against the NBS/EPA library were conducted on all samples, reanalyzes, and blanks. The 30 largest peaks within 10 % of the nearest Internal Standard were searched. A summary of detected peaks is included following the Target data. Any analyte detected was quantitated based on the closest internal standard and has been reported flagged with a "J" as estimated.

No analytical or QC problems were encountered during the analysis of this SDG.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael K. Perry
Laboratory Manager

6/16/99
Date

1 Mustard Street, Suite 250 ▪ Rochester, NY 14609-6925 ▪ Telephone (716) 288-5380 ▪ Fax (716) 288-8475

1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B78404
LV-4

Lab Name: CAS/ROCH Contract: C003784

Lab Code: 10145 Case No.: 99-5-103 SAS No.: SDG No.: 0505

Lab Sample ID: 291125 Date Received: 05/06/99

Lab File ID: A6348 Date Analyzed: 05/14/99

Purge Volume: 25 (ml) Dilution Factor: 1.0

GC Column: RESTEK 502.2 ID: 0.53 (mm) Length: 105 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/l)	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
67-64-1	Acetone	5.0	U
75-35-4	1,1-Dichloroethene	1.0	U
75-09-2	Methylene chloride	1.0	U
75-15-0	Carbon disulfide	1.0	U
156-60-5	Trans-1,2-dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	Cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
74-97-5	Bromochloromethane	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
10061-01-5	Cis-1,3-dichloropropene	1.0	U
108-88-3	Toluene	1.0	U
10061-02-6	Trans-1,3-dichloropropene	1.0	U
591-78-6	2-Hexanone	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U

U = not detected

J = estimated concentration

1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B78407
LV-7

Lab Name: CAS/ROCH Contract: C003784

Lab Code: 10145 Case No.: 99-5-103 SAS No.: SDG No.: 0505

Lab Sample ID: 291126 Date Received: 05/06/99

Lab File ID: A6351 Date Analyzed: 05/14/99

Purge Volume: 25 (ml) Dilution Factor: 1.0

GC Column: RESTEK 502.2 ID: 0.53 (mm) Length: 105 (m)

CAS NO.	COMPOUND	CONCENTRATION (ug/l)	Q
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
67-64-1	Acetone	5.0	U
75-35-4	1,1-Dichloroethene	1.0	U
75-09-2	Methylene chloride	1.0	U
75-15-0	Carbon disulfide	1.0	U
156-60-5	Trans-1,2-dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	Cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
74-97-5	Bromochloromethane	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	0.50	J
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
10061-01-5	Cis-1,3-dichloropropene	1.0	U
108-88-3	Toluene	1.0	U
10061-02-6	Trans-1,3-dichloropropene	1.0	U
591-78-6	2-Hexanone	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U

U = not detected

J = estimated concentration

DL 06/15/

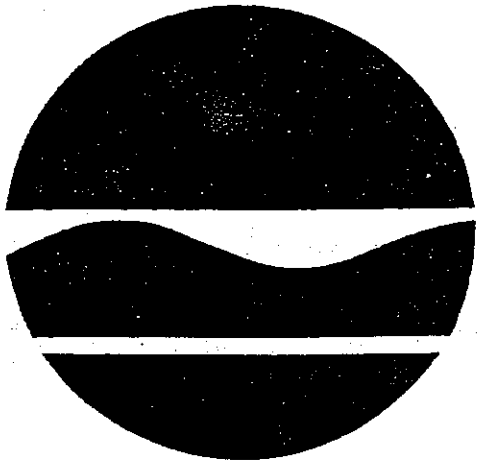
1.3.1

GEOTECHNICAL INVESTIGATION

LITTLE VALLEY

TOWNS OF LITTLE VALLEY AND SALAMANCA

CATTARAUGUS COUNTY, NEW YORK



Prepared by:
New York State Department of Environmental Conservation
Division of Water

May 1994

GEOTECHNICAL INVESTIGATION

Little Valley
Towns of Little Valley and Salamanca
Cattaraugus County, New York

NYS Department
of Environmental Conservation

ABSTRACT

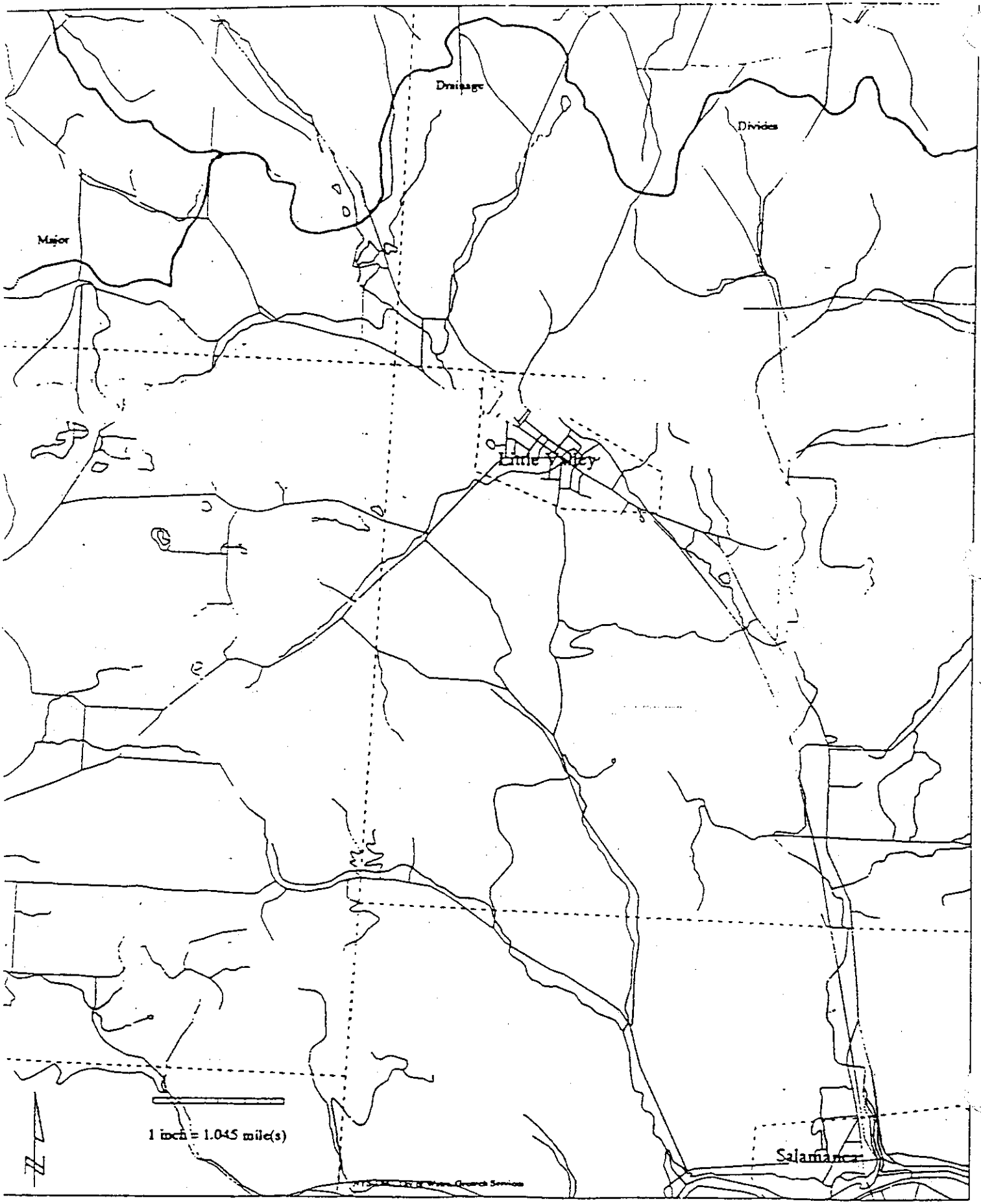
An interdepartmental study of a groundwater problem along NYS Route 353 in the Towns of Little Valley and Salamanca has been undertaken by DEC and DOH personnel. The problem involves TCE as well as trace amounts of other chemicals found in private water supply wells in the study area. Results of the study indicate that the TCE found in the residential wells is occurring in variable concentrations above the NYS groundwater standard. Information gathered through historical research suggested that multiple source areas might be the cause of the TCE contamination. Results of this study identify two areas that require further investigation.

Section 1.0 - Introduction

The New York State Department of Environmental Conservation (DEC), the State Department of Health (DOH), and the Cattaraugus County Health Department (CaCHD) have jointly conducted an evaluation of elevated Trichloroethene (TCE) levels in the Little Valley area located in the southern portion of Little Valley Township and northern Salamanca Township, Cattaraugus County, NY.(See location Figure 1.1)

This study, a multi-agency effort, was initiated because of private residential wells having objectionable levels of trichloroethene (TCE). The Little Valley TCE problem was discovered when what was thought to be a localized TCE source in the Town of Salamanca was being addressed. Subsequent upgradient "background" measurements then indicated occurrences of TCE in the groundwater aquifer between Little Valley and Salamanca. Also, in 1989 the Health Department guideline for acceptable TCE levels was decreased from 50 ug/l (ppb) to 5 ug/l. (ug/l = micrograms per liter; ppb = parts per billion; 1 ug/l = 1 ppb)

Figure 1.1 Little Valley Study Location



Section 2.0 - History

2.1 Preliminary Evaluation

Prior to the study, efforts to determine the source(s) of the TCE levels were limited to in-office assessments of local geology and limited water quality data. Preliminary evaluation of this information suggested that the origin of TCE was attributable to a long history of local industrial use of the solvent associated with cutlery manufacturing. Other possible sources of detectable TCE levels include: (a) the stockpiling of degreasing agents, (b) road side dumping, and (c) septic system cleaning.

Although the initial conclusion was technically sound based on the available information, questions were raised regarding other possible sources of contamination as noted above. It was decided to conduct a site-specific field investigation which would provide a more complete and detailed data base for evaluation purposes.

2.2 Scope of Work

The participating agencies formed a technical working group which identified the following overall objective:

Determination of the source(s) of elevated TCE occurrence in private water supply wells in the Little Valley area.

In order to meet the objective, a scope of work was developed. Each of the following tasks are described within the text of the report:

1) Literature and available data review.

2) Geologic Evaluation
   a. Reconnaissance study
   b. Shallow test borings
   c. Land survey

3) Groundwater Evaluation
   a. Installation of groundwater monitoring points
   b. Water level measurements: ground and surface water

4) Chemical Analyses

a. Groundwater samples from monitoring wells and private wells.

b. Interpretation of results.

It should be noted that due to budget constraints and a specific objective of TCE trackdown, this study was not a full scale resource evaluation.

3.0 Hydrogeologic Background

3.1 Physiography

The Little Valley area lies within the Allegheny section of the Appalachian Plateau physiographic province of western New York. These glaciated uplands have sub-rounded summits which give a rather flattopped plateau appearance when viewed from a distance. The uplands are separated by a network of "through valleys" and breached drainage divides. There is less topographic relief (600 ft.±) in the western Appalachin Plateau and the valleys contain only small ponds and streams. In contrast, to the east (see Figure 3.1) the valleys are deeply eroded "troughs" containing the Finger Lakes. Further east in the Catskill section relief approaches 3,000 feet. There is a direct relationship between the integrity of the local bedrock and physiography. Lobeck (1923), for instance, pointed out the resistance of the Chadakoin Formation to erosion produces slopes that are usually steeper than the softer Cattaraugus shales. A good example of this in the study area is the steep sided west valley wall along Route 242 in Little Valley.

3.2 Bedrock

The entire Allegheny Section is underlain by a great thickness of interbedded shales, siltstones and mostly weak and soft sandstones. The basically flat lying sedimentary rocks dip

slightly to the southwest at a low angle of about 1° or 50 feet per mile. The rock type belongs to the Conneaut Group of upper Devonian age. These rocks were formed from materials deposited in a shallow sea about 350 million years ago during the close of the Paleozoic Era. Correlation by Rickard (1975) places the local rock outcrop in the Chadakoin Formation which is up to 700 feet thick at 79° Longitude. New York State Department of Commerce (1951) identifies the rock type in a cliff 0.3 mile north of the Cattaraugus County fairgrounds as a brown shale from the Chadakoin Formation. This is based on an observed outcrop exposure 13 feet thick including a 9 inch bed of sandstone. The Chadokoin Formation is capable of yielding small to moderate amounts of water suitable for domestic needs. If the described outcrop section were below the water table, it would characteristically store and transmit water in connected openings including bedding planes, joints, and fractures.

"The horizontal joints tend to be extensive. However, their thickness (vertical dimension) differs from place to place as shown by the large differences in yield of wells that are only a few hundred feet apart. The low yields usually obtained from shale and the greater number of "dry wells" results from the fact that horizontal joints in this unit are very small and widely spaced. In fact, well drillers frequently must raise the bottom of the casing a few inches above the top of shale in order to permit water to seep into the well from the overlying unconsolidated deposits." Heath (1964)

3.3 Glacial Geology

Prior to the onset of Pleistocene Glaciation, about one million years ago, the Little Valley landscape resembled the rugged topography of the Allegheny State Park region to the south. The pre-glacial Allegheny drainage system flowed in the opposite direction as it does now. "The Allegheny River flowed northward and cut a steepwalled valley in shale and sandstone bedrock...as part of the St. Lawrence drainage system." Frimpter (1974) Muller (1975) reported the bedrock floor of the Allegany River Valley deepens northward near the Pennsylvania State line. Based on limited deep well data and studies of similar drainage reversal situations, it is likely that a northward bedrock gradient formed by pre-glacial fluvial erosion underlies the glacial and more recent stream-derived alluvium at Little Valley.

As the continental glaciers flowed southward from North-Central Canada, they covered most of the New York portion of the Allegany River Basin at least once, perhaps several times in northern parts of the area. As the ice flowed over the area, this geomorphic process deepened and widened most valleys dramatically. Extrapolations by Muller (1975) suggest that summit reduction by glacial scour in Cattaraugus County was on the order of 200 feet. The ice flow subsequently reversed the general direction of the thalweg of the valley so that the postglacial Little Valley Creek flows in its present southeasterly direction. With the final melting of the last glacial ice some 10,000+ years ago, portions of

the valley became filled with tens to one hundred or more feet of assorted sediments and the land surface took on its present configuration.

Figure 3.2 shows the general distribution of glacial units and the southern extent of different glacial ice advances in Cattaraugus County, after Tesmer (1974). One can readily see sand, silt, and gravel predominate as valley fill which are flanked by ground moraine and till along the valley walls and onto the hilltops. The valley fill materials are the most productive components of the groundwater aquifer system.

It is generally accepted that "the unconsolidated deposits in Little Valley, predominantly sand and gravel indicate that a post glacial lake did not develop there". (Frimpter, 1974) However, Village water well log data indicate that at least two interglacial stage lakes did develop in the vicinity of the Village of Little Valley.

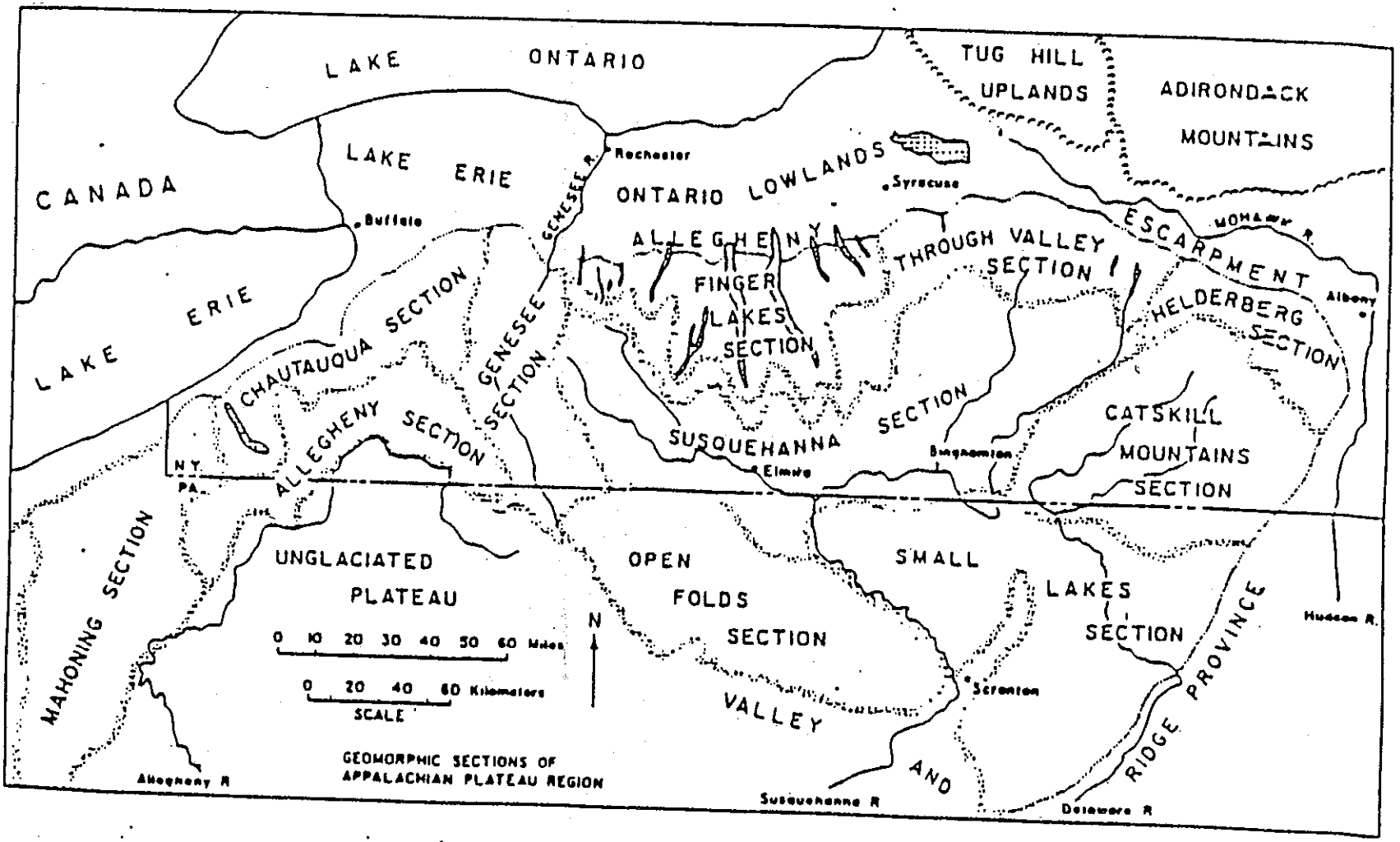


Figure 3.1 - Physiographic Provinces and Geomorphic Sections (after Coates, 1974)

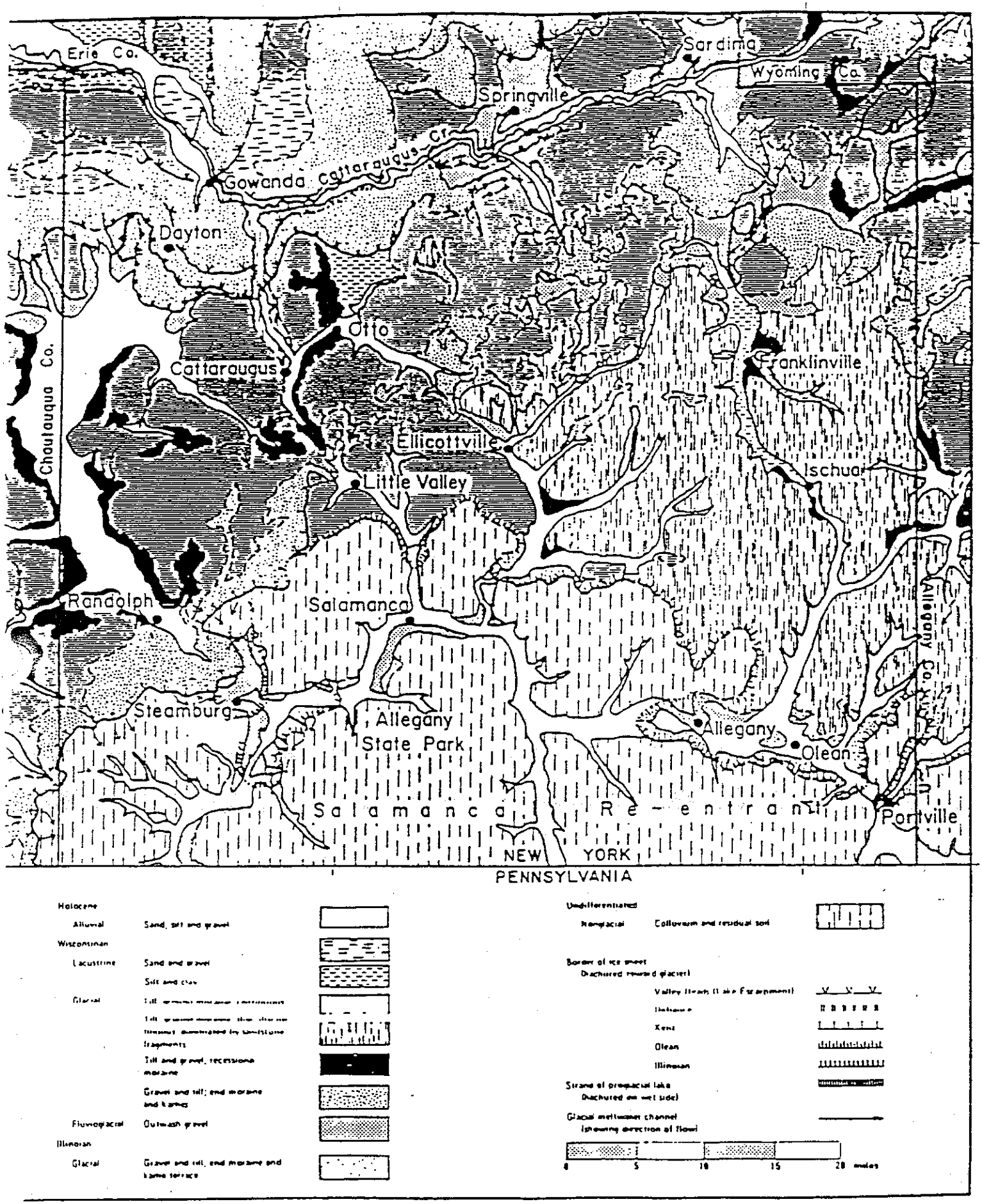


Figure 3-2 Pleistocene Geology of Cattaraugus County (after Tesmer).

Section 4.0 - Reconnaissance

Field reconnaissance, interviews with local residents, and related observations found unexpected evidence of lacustrine deposits in the vicinity of the village wellfield north of Little Valley.

4.1 Well Inventory

A well inventory was conducted to collect as much available information on subsurface conditions as possible. Waterwell logs are included in Appendix A. An examination of the well log for the Village of Little Valley Supply Well #4 reveals several important points. The primary water bearing zone (screened interval) lies about 71 ft to 90 ft below grade. This zone is thus confined because it lies directly beneath 41 ft of clay rich materials. The potentiometric surface of this zone or static water level is at 41 ft. This positive or upward gradient from the confined aquifer, and the low permeability of the clay layers, afford the aquifer natural protection from surface contamination.

Additional water to the well is also reportedly derived from a gravel interval at ⁻138 ft to ⁻139 ft. It is collected into the well through a section of slotted pipe set at the bedrock overburden interface. This is where the top of the shale rock is likely weathered and fractured.

Efforts to obtain any additional water well data in the Village of Little Valley were unsuccessful. Since the Village water wells supply water throughout the Village, residential wells are nonexistent. Residents polled replied that they were discouraged from digging or drilling their own wells where public water was available. Even the most elderly residents interviewed had no recollection of any vestige of local water wells in the Village.

Once again well log information was scant, but local drillers and residents reported the wells were finished in valley fill deposits. The exception was the Burger well which Mr. Burger reported as being a rock well. The well is only about 70 ft deep and suggests production enhancement under the scenario described earlier by Heath.

To help locate the source of TCE contamination and define the extent of groundwater contamination in the Little Valley area, the CaCHD and the NYSDOH performed an extensive amount of sampling in 1990. Over 75 private water supply wells between Little Valley and Salamanca were sampled for TCE and other parameters. With rare exception, only TCE was detected in these wells. Approximately half the wells had TCE concentrations above the groundwater standard of 5 ug/l (ppb).

TCE concentrations ranged from "non-detect" (detection level = 0.5 ug/l) to 50 ug/l. Some of the highest concentrations are found just to the south of the Village of Little Valley near the "triangle" formed by Route 242, Route 353 and Baker Road. TCE concentrations generally decrease as one proceeds south to Salamanca.

Since 1990, the health departments have continued to sample 14 water wells on a regular basis (approximately three times per year). TCE concentrations vary somewhat over time and a review of the sampling results reveals no significant trend.

Water quality sampling information for residential wells outside of the Village water district are presented in Table 4.1.

Table 4.1 Residential Water Well Data

Trichloroethene (TCE) Concentrations in ug/l (ppb)

	SAMPLING DATE											
	1990			1991		1992				1993		
Location	1Q	2Q	3Q	1Q	3Q	1Q	2Q	3Q	4Q	1Q	3Q	4Q
Burger	-	-	9	-	12	13	10	5	7	5	8	6
Valley View BC	-	-	-	19	10	15	18	11	15	10	11	-
Rolick	-	-	45	-	31	41	50	45	8	30	27	-
Winship	-	-	-	15	11	21	30	18	23	17	19	15
Sibley	-	-	20	-	7	19	ND	13	20	13	14	13
Country Garden	-	-	1	-	1	3	2	2	-	2	2	2
Hamplin	-	-	25	-	13	21	24	16	24	16	19	16
McClain	-	-	-	-	10	15	18	9	18	13	13	11
Johnson	-	-	16	-	20	12	19	-	18	15	12	13
Jusko	12	12	-	-	8	9	16	8	16	13	13	10
Felt	11	9	-	-	3	7	11	6	11	7	8	8
Barney	5	-	-	-	7	11	14	10	15	10	13	10
Bantin	-	-	5	0	3	6	8	3	-	5	7	6
Slevinski	-	-	8	-	4	7	11	6	-	7	10	7

Notes:

ND = Non Detect; Detection Level = 0.5 ug/l (ppb)
"-" = Sample Not Collected
1Q, 2Q, etc. = 1st Quarter (Jan., Feb., March), 2nd Quarter (April, May, June), etc.
All samples collected by Cattaraugus County Health Department and analyzed by NYSHD

Section 5.0 - Field Investigations

The original plan of study proposed drilling a minimum of ten test borings. The objectives of the borings included characterization of the subsurface materials comprising the local water table aquifer and completion of monitoring wells therein. Penetration through saturated materials would proceed until impermeable material or refusal, i.e. bedrock or boulders were encountered. The final depth of the borings was designed to detect the primary contaminant TCE. Given TCE's higher specific gravity than that of the water in the aquifer, it was expected to migrate and/or pool along the bottom of the first water bearing zone or water table aquifer.

5.1 Monitoring Well Installation

Monitoring wells were installed within the Village of Little Valley near suspected sources of the TCE contamination. Two wells were located near the Ninth Street Landfill (LV-1 and LV-2A); two near Bush Industries (LV-4 and LV-7); two near the former Korn Cutlery, now the Cattaraugus County Department of Public Works garage (LV-3 and LV-10); and one well was drilled near King-Hope Windows (LV-9).

One monitoring well (LV-8) was located south of Village, just to the north of the "triangle" formed by Routes 242 and 343 and Baker Road.

A total of eleven (11) borings were completed, with eight (8) wells being installed. Three (3) borings were abandoned and backfilled, as insufficient water was encountered. Well locations are provided on the site plan. (see Figure 5.1) A schematic of a typical monitor well is shown in Figure 5.2. Refer to Appendix B and Appendix C for boring logs and well schematics, respectively. At location LV-5 auger refusal occurred before material sufficient to install a well was encountered. Drilling operations at LV-6 were suspended after the lead auger became separated from the drill string and was lost. One well, LV-2, was abandoned after it could not be made to produce water even after many attempts at development. It is suspected that the target zone was somehow missed, and the screen was placed too deeply into a sampled pilot hole consisting of impermeable materials. LV-2A was later installed to replace LV-2.

Well installations took place between May 5th and June 11, 1992, with the exception of LV-2A which was installed on September 10, 1992. Borings were advanced with a CME-45 truck mounted drill rig utilizing 3 3/4 inch I.D. hollow stem augers. Two foot split spoon samples were taken in accordance with ASTM D1586 (in Appendix F) when drilling resistance indicated a change of materials. Split spoon samples were also taken at depths corresponding to screen placement. Recovered samples were logged in the field by NYSDEC staff geologists.

Borings were advanced until auger refusal or a significant impermeable unit was encountered. Care was taken not to penetrate impermeable units to avoid the possibility of introducing contaminants to deeper saturated layers of the aquifer.

When the desired depth was reached, the augers were left in place and the well screen and riser were installed within the auger annulus. The augers were then slowly retracted as sand pack consisting of clean #2 sand was added to fill in the annulus around the screen. The sand pack was continuously measured with a steel tape to a depth of about one foot above the screen. A one foot bentonite seal was then added above the sand pack. The remaining hole was backfilled with native soil to within two feet of the surface. A surface seal of cement was then constructed with sides sloping away from the well. All screens and risers were 2 inch diameter PVC or stainless steel.

All wells except LV-4 and LV-7 were finished by setting a 4 inch diameter steel protective casing over the riser and into the cement seal. The casing was fitted with a locking cap for security. LV-4 and LV-7 were each finished at grade with a 12 inch steel curb box and internal locking cap.

5.2 Well Development

Well development is the process of cleaning the face of the borehole and the formation around the outside of the well screen to permit groundwater to flow easily into the monitoring well. During any drilling process the side of the borehole tends to become smeared with clays or other fine grained materials which reduce the permeability and retards the movement of water into the well screen. If these fines are not removed, it becomes difficult and time consuming to remove sufficient water from a well before obtaining a fresh groundwater sample.

All wells were developed to increase hydraulic communication with the surrounding formation and to decrease turbidity for sampling. Four different development methods were utilized in this study. For most of the wells, especially the deeper ones, bailing with a stainless steel bailer was the preferred method. The bailer was alternately lowered and raised within the well causing a surging effect which agitated the fine grained material in the well annulus allowing it to be removed by the bailer. This procedure was repeated until the withdrawn water was relatively clear. A peristalic pump was used on the shallow wells which were within suction limits. A Brainard-Kilman positive displacement hand pump was used on some of the intermediate depth wells. A trailer mounted air compresser was borrowed from the Village of Little Valley Department of Public Works for use on LV-3 and LV-4. In

this procedure a dedicated air line was inserted inside the well to the top of the well screen. Compressed air was applied to the well, creating a surge which evacuated water and sediment from the well. After a short period of time (usually 5 to 10 seconds) the airflow was stopped, allowing water to fall back into the well, thus creating a surging action. By repeating this surging action over a period to time (generally about 45 minutes), finer sediment particles, such as very fine sand, silt, and clay particles, were removed from around the well screen. This process was continued until the water expelled from the well was relatively clear and sediment-free. At most locations, a combination of two or more of the above methods were used in order to achieve optimal development.

5.3 Monitoring Well Sampling

The DEC monitor wells and the three monitor wells installed by Bush Industries at their plant site were sampled on July 13, 1992 and December 7, 1992. Results of the monitor well sampling are summarized in Table 5.1.

The procedure outlined below for obtaining water samples from the monitoring wells was followed during both rounds of sampling. A water level reading was taken in the well and compared to the total well depth to determine the volume of standing water in the well. Three volumes of water were then removed from the well prior to sampling. The evacuation was performed by handbailing with a dedicated bailer.

Water samples were obtained using dedicated bailer samplers. The sampler permitted water to be obtained from whatever depth was desired in the well and provided a minimum of agitation or aeration of the samples. Two 40 milliliter glass vials with teflon seals were filled from each well. The samples were stored in an ice chest until delivered to the State Department of Health laboratory in Albany.

5.4 Subsurface Conditions

The original reconnaissance included meeting with local water well drillers to discuss their knowledge of the subsurface materials in the area. Each of the drillers interviewed stated that the valley consisted exclusively of sand and gravel. Although this is contrary to our findings, it must be stressed that water well drillers do not usually use split spoon samples to describe the soils they are drilling through. Instead they rely on drill cuttings. Using this method, it is easy to miss thin layers of fine materials. It should also be noted that except for the village supply wells, all water wells are located down valley of the borings drilled for this study.

Down Valley

Because of the limited resources available for this study, no borings were drilled south of the intersection of Routes 242 and 353. Our only knowledge of the subsurface here comes from conversations with the local well drillers as mentioned above, and from logs obtained for wells drilled at the Department of Transportation facility south of Elkdale. These logs show about ten feet of silt overlying sand and gravel. An approximate seven

foot deep pit near the Elkdale Country Club consisted predominantly of lacustrine silt and clay. These observations indicate that there is at least some fine grained material present, although its continuity and extent is unknown.

The geology in this area becomes complex due to the existence of the end moraine marking the southern limit of the Olean advance of the Wisconsinan glaciation. This moraine appears as a lobe extending to near the present location of the DOT facility. Deposits in this region of the valley vary from morainal till and lacustrine silt and clay to alluvium and outwash sand and gravel. Yields to wells screened within the unconsolidated materials average about 30 gallons per minute.

Information on the depth to bedrock also comes from local water well drillers. Depths to bedrock along Route 353 average around 50 feet, however bedrock is noted to be considerably deeper (100+ ft) just east of Route 353 near Whig Street.

Village

Subsurface data for the Village of Little Valley comes from the borings drilled for this study, and from logs obtained for the village supply wells and Bush Industries wells.

Three wells were installed by Geotechnical Services Section staff in the 9th Street landfill. Refer to logs for LV-1, LV-2, and LV-2A, Appendix B. Saturated peat and organic clay underlie six feet of assorted landfill garbage. Wells LV-1 and LV-2A were screened within the saturated peat unit. Water levels in these wells are about three feet below ground surface and probably represent perched conditions.

Logs for the three Bush wells describe mostly sand and gravel, with only minor amounts of fines. Groundwater here is unconfined and water levels range from about 29 feet below ground surface at U-1 to 39 feet and 47 feet at D-2 and D-1 respectively. A steep gradient exists from U-1 to D-1 and D-2.

The Village public water supply well field lies in the northwest corner of the village. Logs for these wells (Appendix A) indicate approximately 70 feet of clay overlying units of intermixed sand, gravel and clay. Bedrock was encountered at a depth of 139 feet. Water is derived mainly from a gravelly unit extending from 71 to 90 feet. Several smaller water bearing seams exist throughout the 190 feet depth of the wells. Water here is under confined conditions with the upper 70 feet of clay acting as the confining layer. Static water level was noted to be at 41 feet.

Additional subsurface data within the Village comes from the remaining wells drilled by Geotechnical Services Section. See Appendix B for logs and Figure 5.1 for well locations. In general, soils encountered consisted predominantly of sand and gravel, however numerous lenses of silt and clay were noted. Thicknesses of these fine layers ranged from less than a foot to almost ten feet. Continuity of these layers could not be determined due to the scarcity of data. Water levels varied with location, and they seem to represent water table conditions. Except for the Village supply well log, there is no information available to determine the depth to bedrock in this area.

Fig. 5.1 – Little Valley Sampling Locations

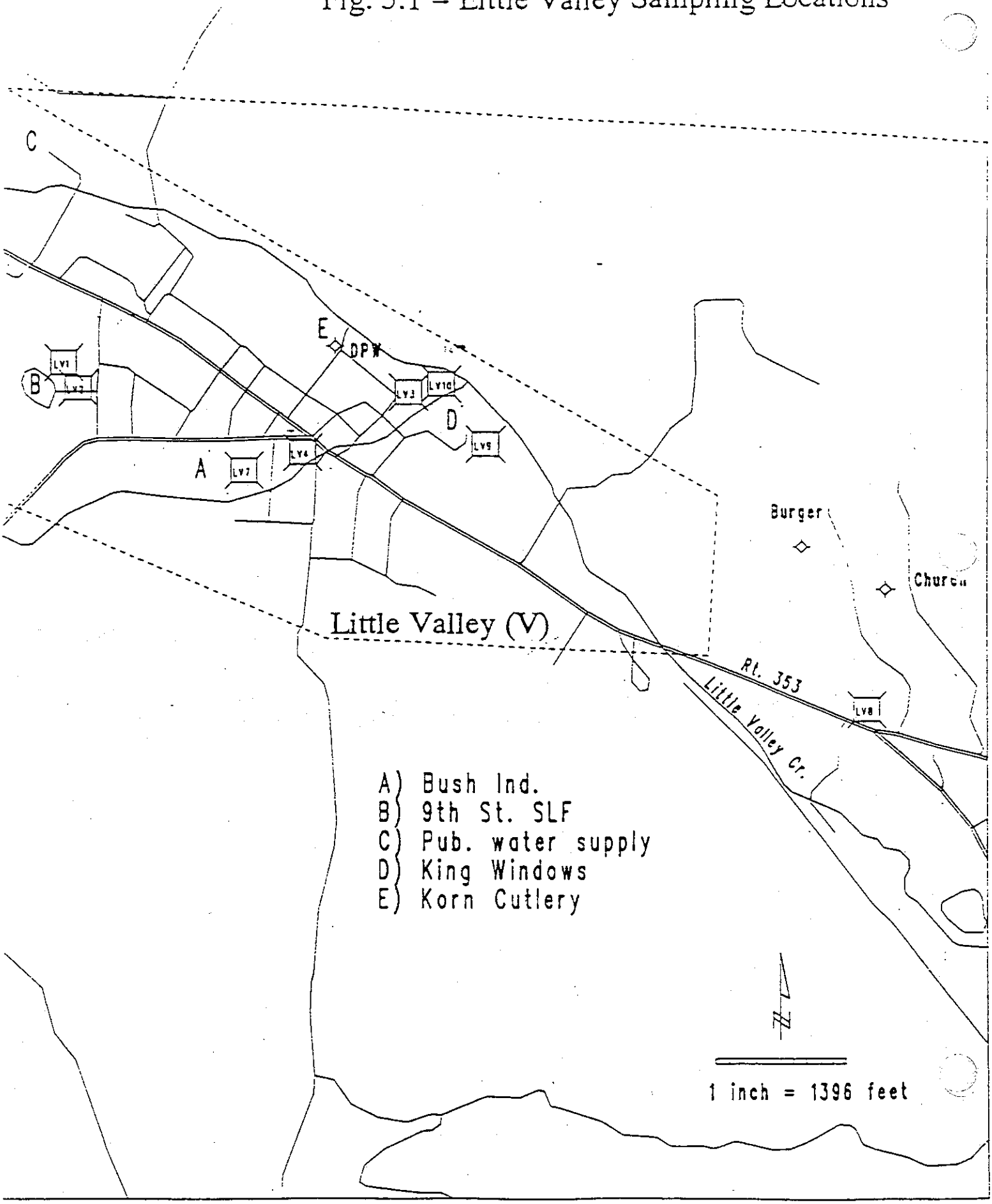


FIGURE 5.2
TYPICAL MONITORING WELL CONSTRUCTION

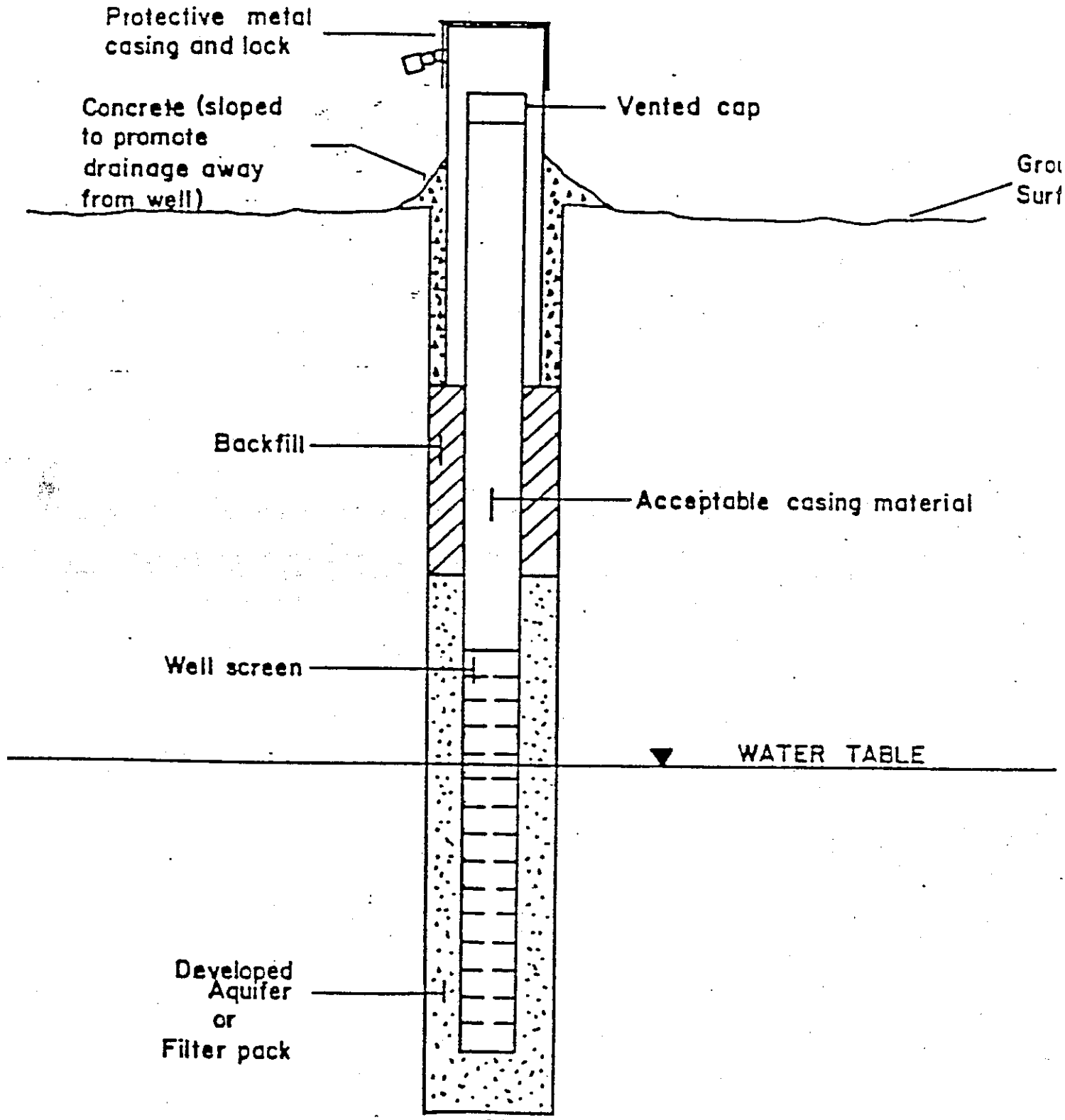


Table 5.1 Monitor Well Data

I.D.#, Location	Date Sampled and Results: 7/13/92 TCE (1)	7/13/92 Other Parameters Present (2)	12/7/92 TCE (1)	12/7/92 Other Parameters Present (2)
LV-1, Landfill	0	Yes	0	Yes
LV-2A, Landfill	-(3)	-(3)	0	No
U-1, Bush Ind.	0	No	0	No
D-1, Bush Ind.	45.0	Yes	186.0	Yes
D-2, Bush Ind.	81.0	Yes	27.0	Yes
LV-4, Rock City Inn	0.7	No	1.4	No
LV-7, Paschen/Mill St.	0	No	0	No
LV-3, Catt. Co. DPW	-(4)	-(4)	0	No
LV-10, Foss/3rd St.	0	No	0	No
LV-9, Foss/2nd St.	0	No	0	No
LV-8, Burger	0	No	0.5(5)	No

("0" = Non detectable; Detection level = 0.5 ug/l)

Notes:

(1) TCE = Trichloroethene concentration (ug/l)(ppb)
(2) Other parameters present = Yes or No; see Appendix D for details
(3) Well LV-2A installed on 9/10/92
(4) Well "dry" on date of sampling
(5) Present, but below quantifiable concentration
(6) Wells U-1, D-1 and D-2 installed by Bush Industries. All others by NYSDEC

Section 6.0 - Contaminant Background

6.1 Contaminant (TCE)

E. Fischer first obtained trichloroethene in 1864 from hexachloroethane according to Ullmann (1986). The first plant to use an acetylene-based process became operational in Jajce/Yugoslavia in 1908, a plant still producing tri- and tetrachloroethene. The acetylene-based process has been partially replaced mainly in the United States by ethylene chlorination and oxychlorination routes. Because of its high solvency and a growing demand for degreasing solvents, trichloroethene achieved rapid growth rates in the past. Since the late 1960s, however, the production rates have strongly declined as more stringent environmental regulations became effective because TCE is a suspected carcinogen.

TCE was a common degreaser used in the manufacture of cutlery products. The manufacturing process typically began by heating carbon steel in a furnace. The heated steel was then quenched in oil for controlled cooling to prevent stress fractures. The oil was then removed from the steel with a degreaser such as TCE. The steel was finally precision ground and water was used as a coolant in the finishing process.

At least six (6) different cutlery manufacturing companies

were located in the Village of Little Valley. A historical account of the cutlery business is included in Appendix G.

6.2 Contaminant Chemistry and Behavior

Trichloroethene (TCE) is a halogenated solvent and belongs to a group of organic chemicals which can be categorized as dense non-aqueous phase liquid (DNAPL) chemicals. DNAPLS are immiscible in water and have densities which are greater than that of water (1.46 g/cm3 for TCE). TCE has a relatively low solubility of 1100 mg/l, however, this is many orders magnitude higher than the NYSDEC groundwater standard of 5 ug/l or ppb (6NYCRR 703.5). The combination of low solubility, high density, and low viscosity enables DNAPL to penetrate downward into the subsurface and through the saturated zone as a separate non-aqueous phase.

The behavior of a DNAPL in the subsurface will depend on the volume of material spilled or dumped. If the input volume does not exceed the retention capacity of the vadose zone soils, then the DNAPL will form a residual in the vadose zone. Residual contents are higher in fine grained soils and are comparable to residual contents observed for petroleum hydrocarbons.

If the input volume is greater than the retention capacity of the soils, then the DNAPL will move into the groundwater zone; and given a sufficiently large input volume, will sink to the bottom of

the aquifer. Based on laboratory experiments by Schwille (1988) groundwater flow patterns will have no significant effect on the movement of DNAPL through the groundwater zone.

Fine grained soils should inhibit the migration of a DNAPL and pools may form on confining layers. If the confining stratum is sloped, DNAPL can move downslope regardless of the direction of groundwater flow. Because of this, contamination can develop upgradient and cross gradient from the point of release.

In this study, borings were terminated at the first significant confining layer for two reasons. First, since the downward migration will be inhibited by this unit, this will be the most favorable depth for finding a contaminant pool. Second, care was taken not to penetrate this first confining unit so that an avenue was not provided for contamination of lower units.

Section 7.0 - Groundwater Movement

Maps displaying groundwater contours and groundwater flow directions and gradients are presented in Figures 7.1 thru 7.4. To facilitate viewing, the study area was divided into east and west segments. The east segment consists of the 'triangle' area formed by Route 242, Route 353, and Baker Road. This area is east of the village line. The west segment contains the Village of Little Valley, the 9th St. Landfill, Bush Industries, and the former Cutleries. The maps are based on groundwater measurements made on October 21, 1992. Site numbers refer to surveyed wells and sampling points. A description of the points is included in Table H-1 which is also the legend for the survey map in Appendix H.

Groundwater flow directions and gradients were determined using the triangulation method. As expected, the water table tends to shadow or mimic the surface topography. In the eastern segment, the groundwater flow parallels the valley and Little Valley Creek in a southeasterly direction. Near sites 67, 68, 69, 70, and 71, the flow diverges as it comes from the peak above and down the sides of the promontory. The gradient is quite steep in this region. Where this flow regime converges with the main southwesterly flow (near sites 63, 64, 65, 80, and 86) some of the higher concentrations of TCE in domestic wells are found. The mechanism to explain this observation cannot be determined from the

available data. Farther south, the southwesterly flow resumes and the gradient decreases as do TCE concentrations in the private wells which have been sampled.

In the western segment, near Bush Industries, the flow is in a general east to northeast direction. It is important to note that on the Bush Industries property flow is from Bush's upgradient monitor well (U-1), passing directly under the building to the two downgradient monitor wells (D-1 and D-2). Sampling showed U-1 to be clean while D-1 and D-2 contained elevated levels of TCE. Farther northeast, near the County DPW yard, flow is toward the southwest as it comes down off the hill. It cannot be determined where these two flow regimes converge, but eventually flow is probably toward the southeast paralleling Little Valley Creek and the main valley, as it is in the eastern segment.

At the Ninth Street landfill, groundwater elevations are anomalously high representing perched conditions as these wells were installed above a shallow confining layer. Although it cannot be confirmed because of the scarcity of data, it is believed that a groundwater divide may exist, based on the surface topography, between the landfill and Route 242 (Fair Oak St.). In any event, TCE was nondetectable in the former landfill monitor well samples, thus the landfill is not likely contributing to downvalley contamination.

Figure 7.1 GROUNDWATER FLOW DIRECTIONS AND GRADIENTS - EAST

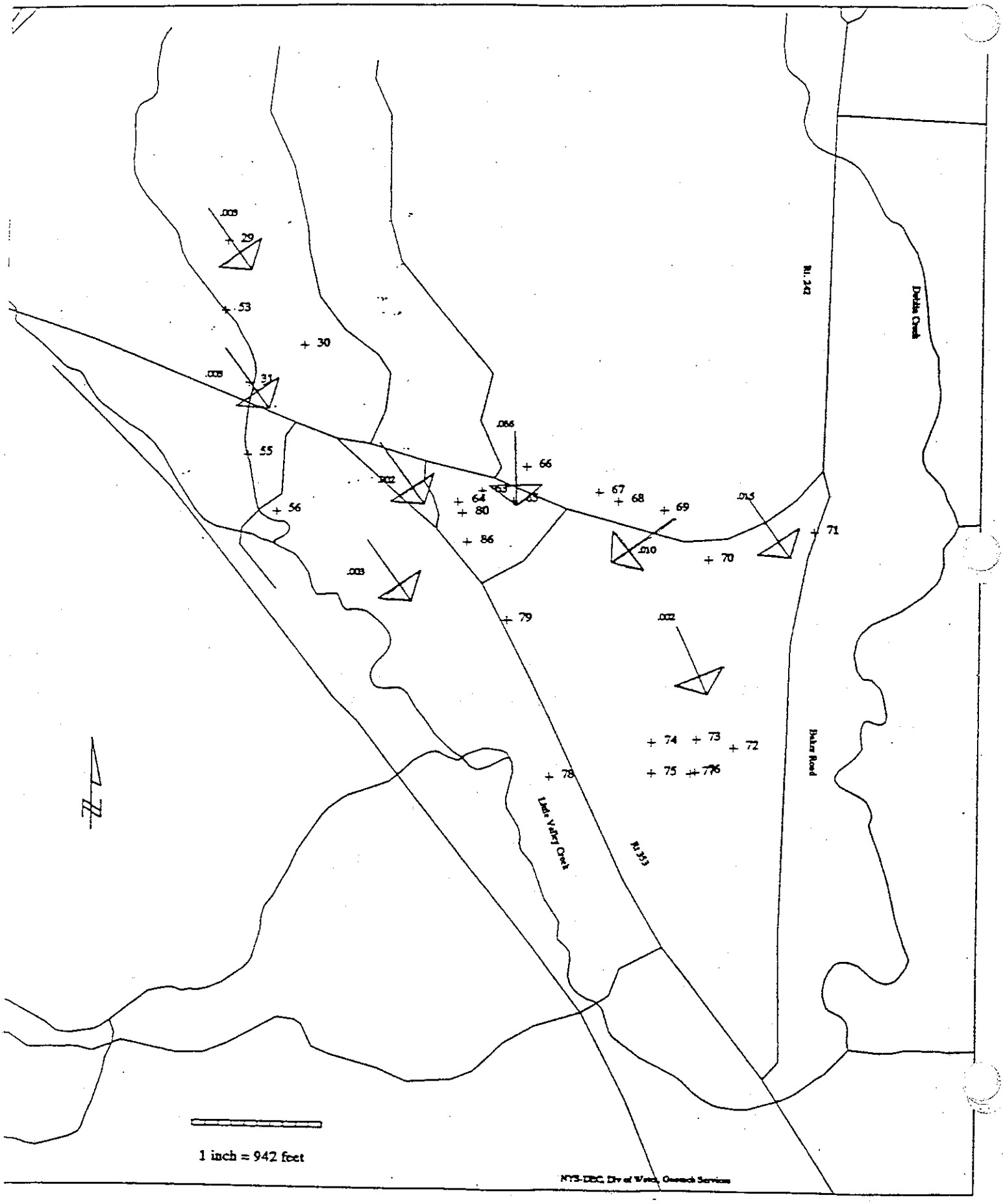


Figure 7.2 GROUNDWATER CONTOUR MAP - EAST

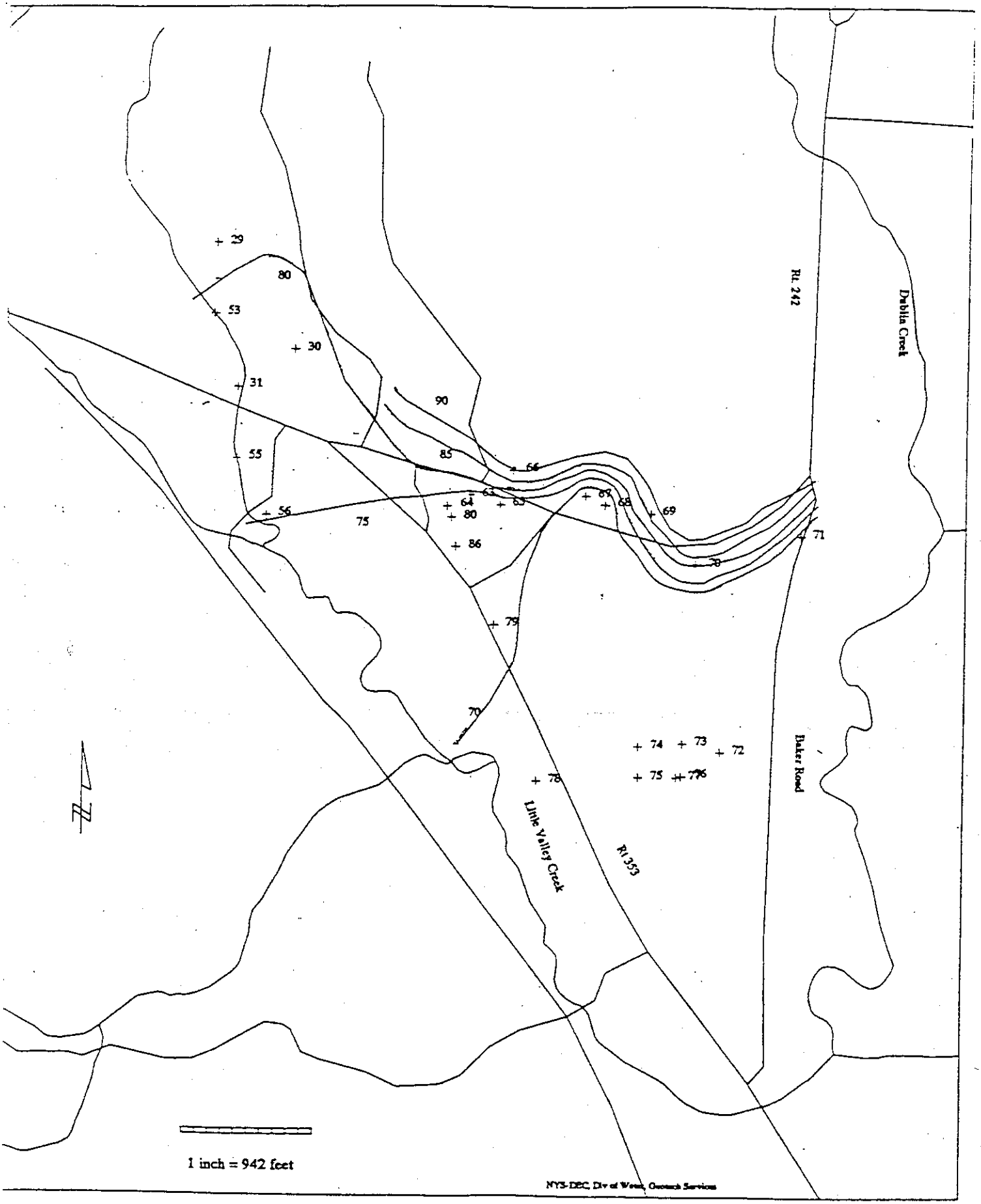


Figure 7.3 GROUNDWATER FLOW DIRECTION AND GRADIENTS - WEST

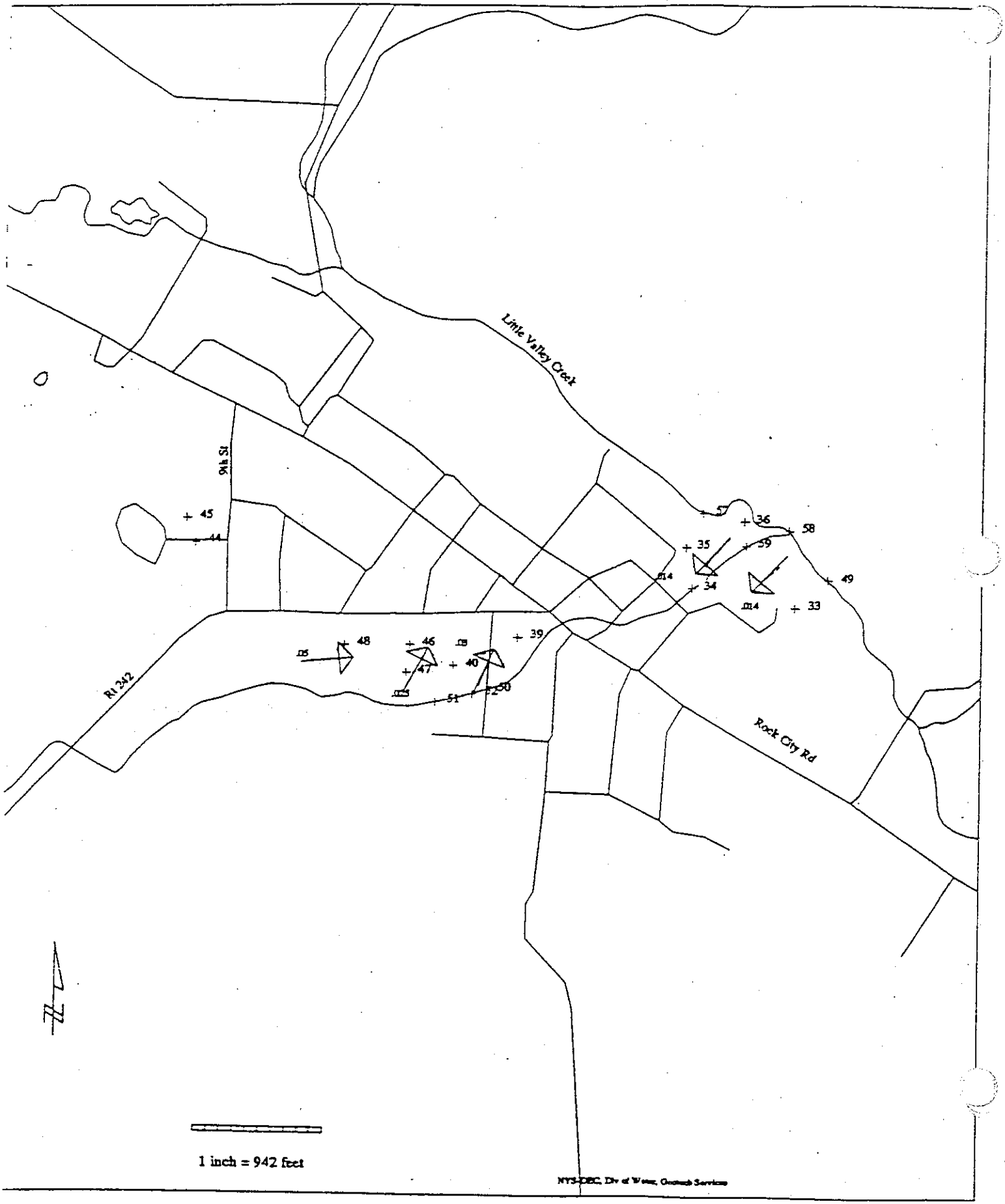
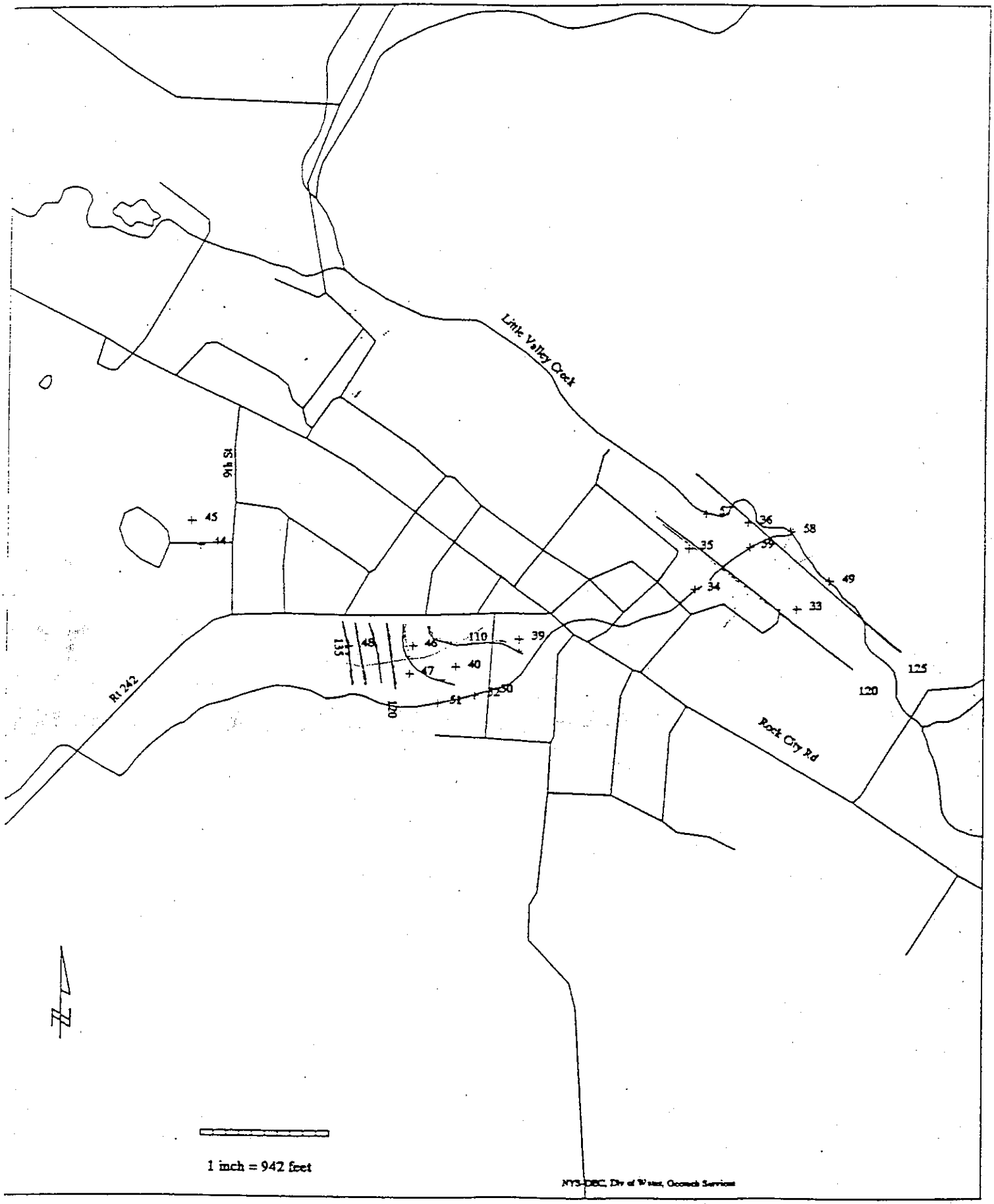


Figure 7.4 GROUNDWATER CONTOUR MAP - WEST



Section 8.0 - Findings and Conclusions

1. Results of analyses of samples from the public water supply wells for the Village of Little Valley show no evidence of contamination.

   The Little Valley Village Public Water Supply remains contaminant free because it derives its water from a confined aquifer. The water bearing zone is inherently protected by overlying low permeability materials. The Public Water Supply is also located upgradient of suspected sources of TCE contamination.

2. Results of analyses of samples from DEC monitor wells LV-1 and LV-2A downgradient of the former landfill near Ninth Street show no presence of TCE. Low levels of some hydrocarbon compounds including toluene were detected.

   The location and qualitative evidence suggests elimination of the former Ninth Street Landfill as a source of TCE contamination.

3. The two downgradient monitor wells on the property of Bush Industries Inc. revealed the site's groundwater is contaminated with volatile organic compounds including TCE.

A third monitor well located upgradient on the Bush site is free of contamination.

Qualitative evidence suggests activities at the present Bush Industries site have contributed to groundwater contamination by TCE.

4. Results from DEC monitor well LV-4 located downgradient of the Bush site revealed low levels of TCE.

Offsite migration of low level contaminated groundwater is occurring based on detection of TCE.

5. TCE was present but at a level less than 0.5 ppb in monitor well LV-8. Results from all other DEC monitor wells showed no evidence of contamination by VOCs.

There is an insufficient number of downvalley monitor wells and/or dilution of TCE diminished concentrations below analytical detection levels.

Section 9.0 - Recommendations

1. Continue discussions with Bush Industries officials. The extent of offiste migration of contaminated groundwater must be defined and mitigated by containment and remediation measures.

2. An additional subsurface investigation should be undertaken at the former Envirotech site to determine the possible extent of site contamination and contribution to downvalley receptors. Since contamination levels on the same order of magnitude were documented upgradient of this site as well as several suspected other sources, this site was not the focus of the study. Budget constraints and site access also precluded immediate investigation.

Section 10.0 - References

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Acknowledgements

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- Brian Hourigan, NYSDEC, Division of Water, Albany
- Daniel Kendall, NYSDEC, Division of Water, Albany
- Gerard Palumbo, NYSDEC, Division of Water, Buffalo

- Kevin Glaser, NYSDEC, Division of Hazardous Waste Remed., Buffalo
- Gregory Sutton, NYSDEC, Division of Hazardous Waste Remed., Buffalo

- Richard Hatch, NYSDEC, Real Property Services, Olean
- Robert Stanton, NYSDEC, Real Property Services, Olean
- James Wingate, NYSDEC, Real Property Services, Olean

- Gary Beck, Cattaraugus County Health Department, Olean
- Cameron O'Connor, NYSHD, Buffalo

The Division of Water drill rig was used to install the groundwater monitoring wells. Mark Grizer, Ed Hill, Terry Johnson, and Bob Waterhouse of the Department's Operations Unit, located in Little Valley, provided valuable assistance in terms of equipment repair, etc. Assistance was also provided by the Village of Little Valley Department of Public Works.

Funds for equipment and supplies were provided by the Division of Hazardous Waste Remediation. The New York State Health Department continues to fund the analysis of the residential water wells.

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APPENDIX A

EHMKE WELL DRILLERS

WATER • GAS • TEST BORINGS

INDUSTRIAL – RESIDENTIAL

WELL SUPPLIES – WATER SYSTEMS

WATER CONDITIONERS

104 MAIN STREET – SILVER CREEK, N. Y.

PHONE [redacted]

934-2-58

Water Supply Well # 4 3-12-65

Village of Little Valley, N.Y.

Drilling Firm: Ehmke Well Drillers

Depth: 190 ft.

Static Water Level: 41 ft.

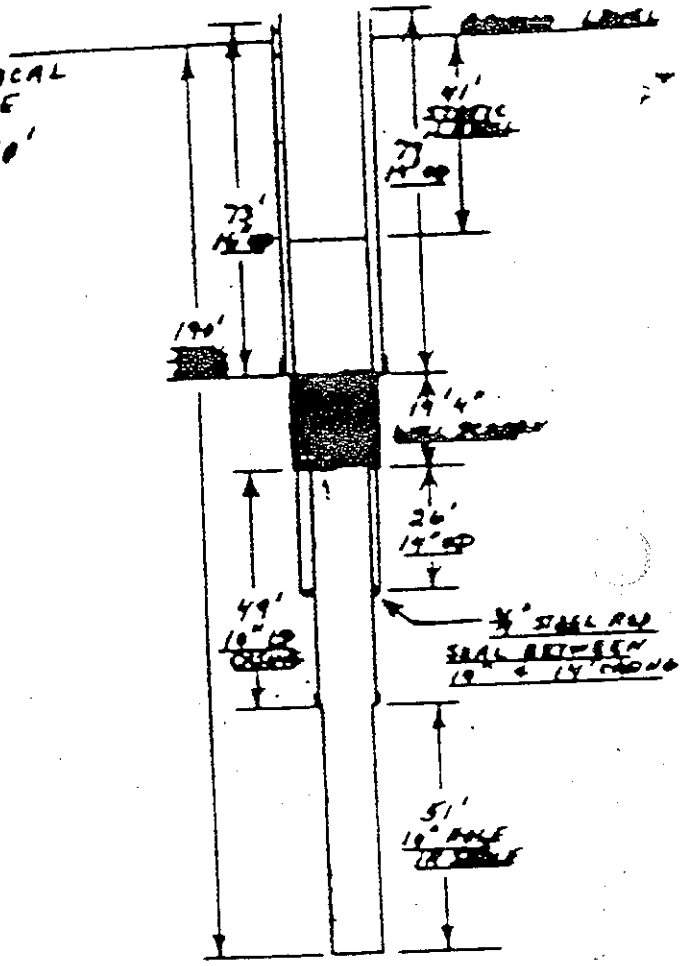
Pumping Level: 300 GPM at 45½ ft. after 27 hour vertical turbine pump test by Ehmke Well Drillers

Veins: 71 ft. to 90 ft. through 16" OD telescope size well screen (BEST)

139 ft. to 139 ft. through 10" ID slotted casing.(8 slots ¼" X 3") just above drive shoe.

Screen: JOHNSON Armco Iron "Special Size"
16" OD telescope nomenclature
Actually 15" OD---14¼" ID
Slot Size--125 continuous
Length Overall--19' 4"
Actual screen length--19 ft.
Screen welded to and bottom to 14" OD casing.

Casing: 73 ft. of 16" OD (welded joints)
74 ft. of 14" OD (above well screen)
26 ft. of 14" OD (below well screen)
49 ft. of 10 3/4" OD (from top of bed rock up inside the 14" OD)



WELL LOG

0-3 ft.	top soil
3-15 ft.	silty yellow clay
15-26 ft.	yellow clay & gravel
26-30 ft.	very sandy yellow gravel
30-57 ft.	yellow clay & gravel
57-64 ft.	sandy yellow gravel w/clay
64-71 ft.	yellow gravel w/clay
71-73 ft.	fine yellow gravel (Water Bearir
73-78 ft.	coarse yellow gravel " "
78-84 ft.	fine yellow gravel " "
84-90 ft.	coarse uniform gravel " "
90-95 ft.	coarse yellow gravel w/clay
95-108 ft.	fine yellow gravel with a lot of very fine sand.
108-111 ft.	light brown sand & gravel
111-114 ft.	dark brown sand & gravel
114-119 ft.	blue clay & gravel
119-121 ft.	uniform clean blue gravel (W=
121-125 ft.	blue clay & gravel w/sa
125-138 ft.	non uniform gravel w/cla
138-139 ft.	fine blue gravel to bed roc

– SERVING WESTERN NEW YORK SINCE 1928 –

[illegible] WELL
[illegible] Valley

DRILLING FIRM
[illegible] Well Drillers

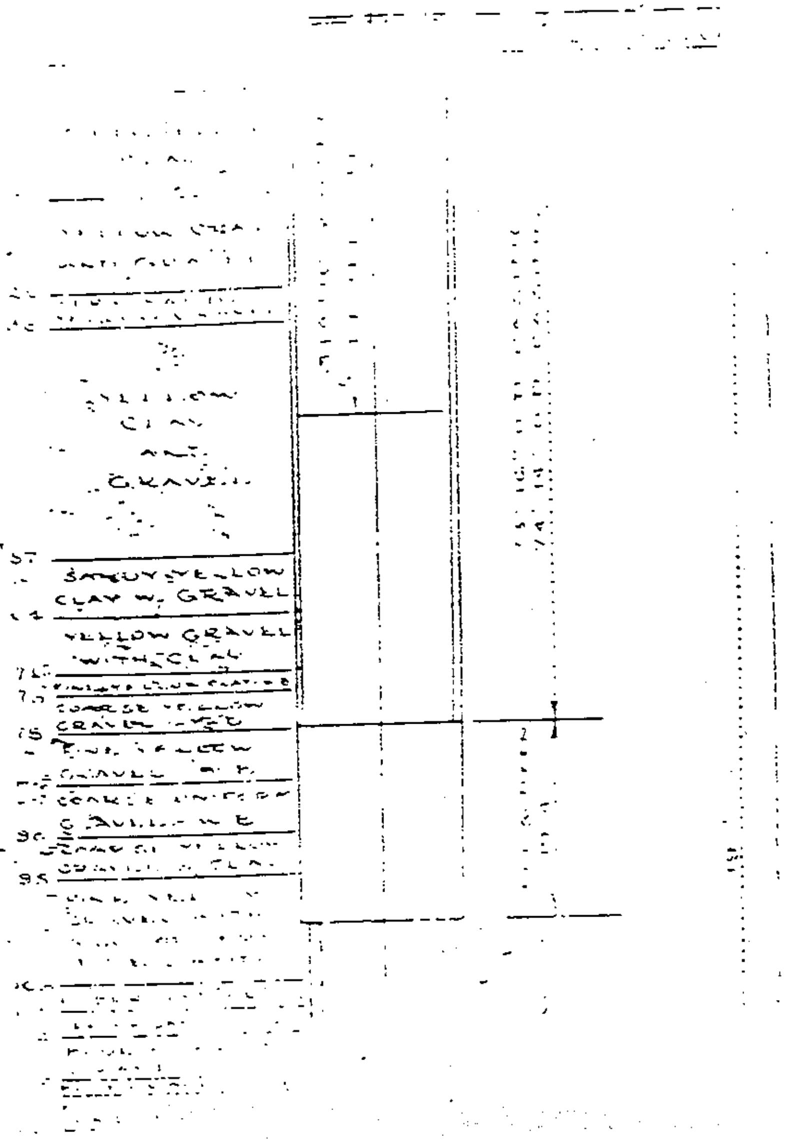
DEPTH: 190'

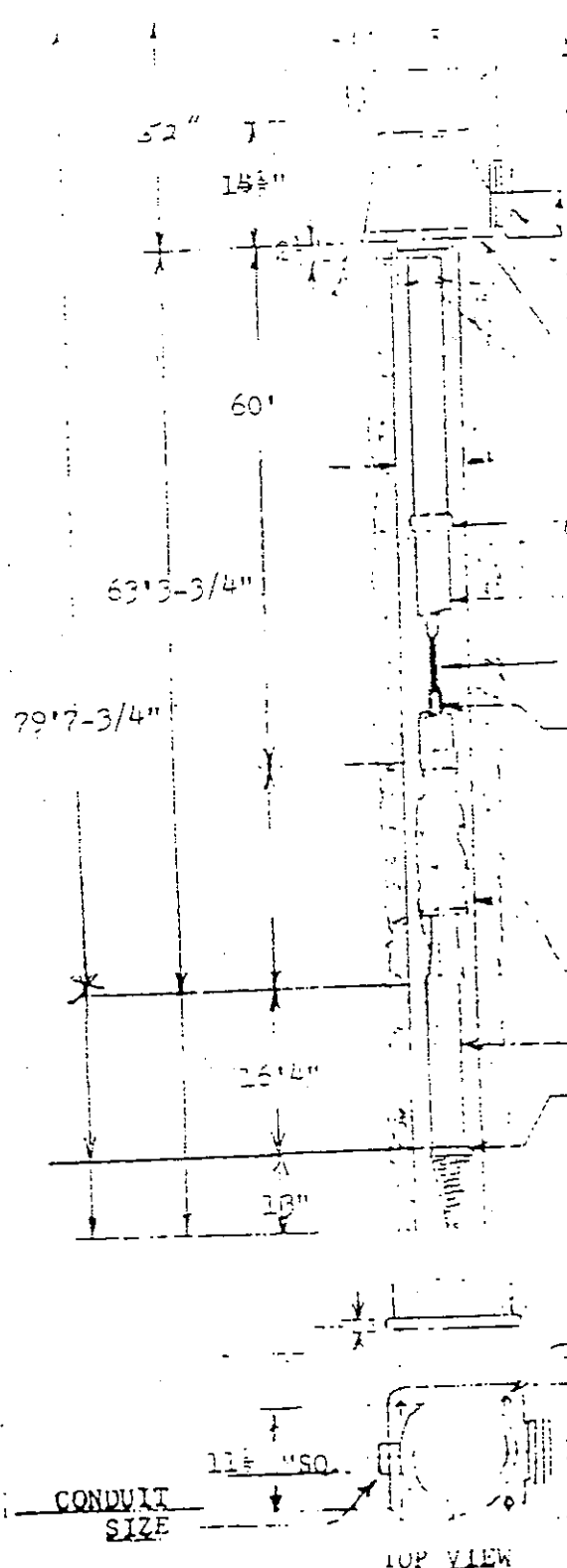
STATIC WATER LEVEL: 41'

PUMPING LEVEL: 800 GPM at 45½' after 27 hour vertical turbine pump test by [illegible] Well Drillers

[illegible]: 71' to 90' through 16" OD Telescope Well Screen (Best) [illegible] to [illegible] through 10" ID slotted casing (slots ¼"x3") [illegible] shoe.

[illegible] OD Telescope [illegible] 15" OD [illegible] 125 [illegible]





D TO FACE OF FLANGE

MOTOR F XO-3410 MFG. NORMAL TYPE VHS

H.P. 30 CY. 60 VOLTS 220/440

RPM 3600 PH. 3 FRAME 324UP Code F
DD2781PB Design F

6" std. BASE TO CL OF DISCHARGE
DISCHARGE COMPANION FLANGE FOR

DISCHARGE HEAD 6 X 6 X 12G

9½" O.D. TOP COLUMN FLANGE

13⅝" I.D. OF WELL
14" O.D. OF Inner Casing to 93' (10", ID below

6½" OD COUPLING

std
5" ID COLUMN PIPE 8-V
Thd

1" SHAFT

(None) TUBE

BOWL UNIT

6MA ASSEMBLY

5 STAGE

5 3/4" O.D. OF BOWLS

4" ID SUCTION PIPE

STRAINER

4" SIZE 6¼" O.D.

CONE TYPE

PUMP RATING

GPM 240 @ 60'
360 @ 40'
FT. FIELD HEAD 42' (100#)

AIR LINE LENGTH 71'

AIR LINE SET AT Top of Well Screen

WELL RECORD

DEPTH------190 ft.
CASING-----14" OD--0-93'
10" ID--93-190'
TOP OF SCREEN--71 ft.
BOTTOM OF SCREEN--90 ft.

Counter Clockwise
Peerless Pump Division

MFGR. FMC Corp.

SOLD TO: Water & Light Department--Village of Little Valley, New York

SERIAL NO. 303657

MODEL NO. 6MA-5--30 HP

DATE SET: March 23, 1965

FIMKE WELL DRILLER'S
104 MAIN STREET
SILVER CREEK, N.Y.

5/8" DIA. 4 HOLES

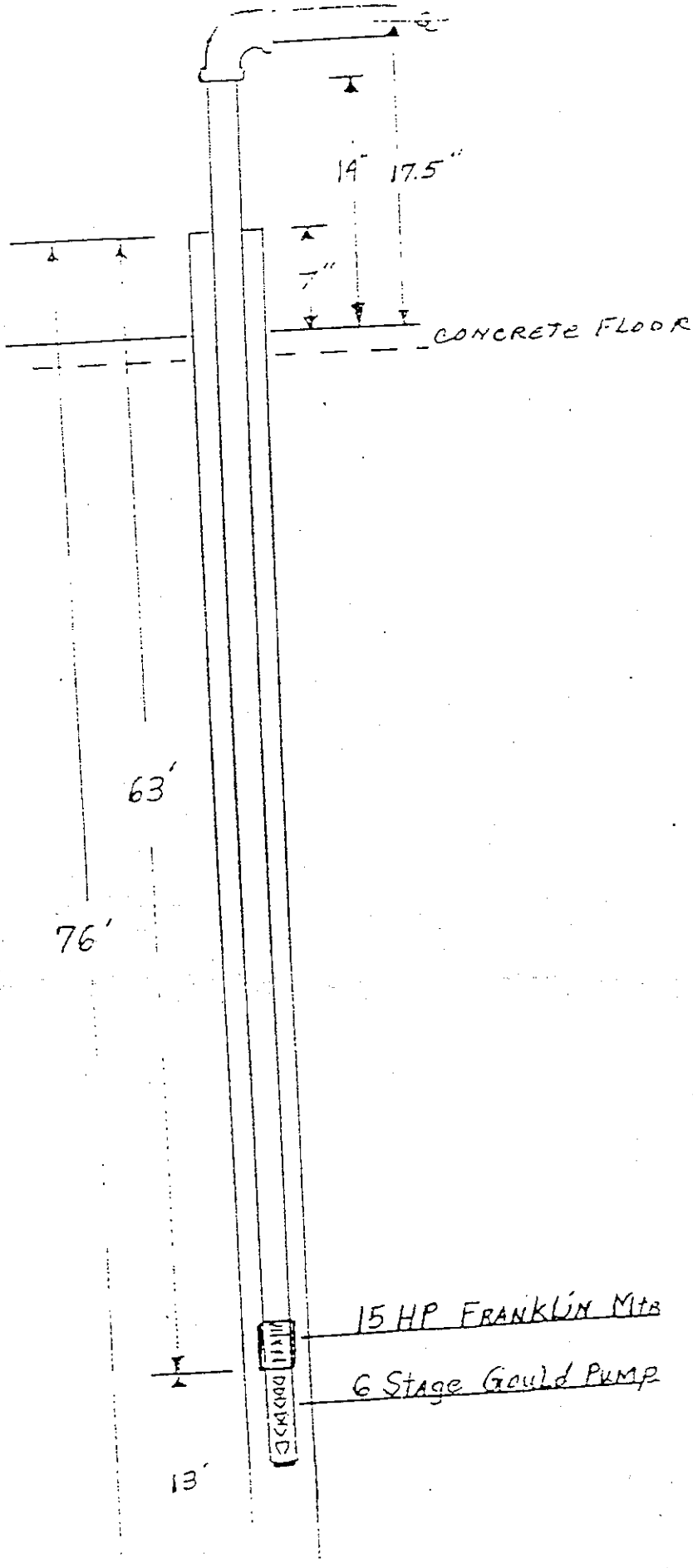
11½" SQ.

13½" SQ.

CONDUIT SIZE

TOP VIEW

NOTE: It is 74 ft. from the top of the 14" OD casing to the top of the 10" OD well screen//Bottom of air line is 5' 8" over the top of the cone strainer or point of suction, which is inside the well screen.



WELL # 1

Depth 7

Pump Depth

Casing

Discharge Dia.

15 HP FRANKLIN MO
6 STAGE GOULD PUM
INSTALLED 2/21/

APPENDIX B

New York State Department of Environmental Conservation
Division of Water - Geotechnical Services Section

Project: Little Valley Boring No. LV-2

Location: 9th st. Landfill access road

Date Start 5/5/92
Date Finish 5/5/92
Driller Dan Kendall
Assistant Brian Hourigan
Geologist John Stegulte

Groundwater

Date	Time	Depth to
5/7/92		5.68

Sample Hammer: Hammer Wt. 140 lb; Hammer Fall 30"; Sampler Type Split Spoon
Casing: Diameter 2"; Material Steel
Screen: Diameter 2"; Material Steel; Slot Size .010"
Screen Placement from 9' to 12'

Depth (ft.)	Sample Blows Per 6"	Sample No.	Sample Depth From - To	Classification and Remarks
			0-6'	Auger cuttings: 12" Topsoil Dark brown/gray SAND, some Silt, some Gravel, tr. Clay, moist (Fill)
5				
			6-12'	Auger cuttings: Dark brown saturated PEAT (Pt) ... grades to organic CLAY (OH)
10				
15				
	8 20 13 17	S-1	16-18'	Gray, dense GRAVEL, some f/c Sand, tr. Silt, tr. Clay (GW)
				Bottom of Hole 18.0' Well installed at 12.0'
20				

f - fine, m - medium, c - coarse
and - 35-50%, some - 20-35% MAJOR compon, little - 10-20% minor compon, trace - 0-10%

Density	Blows/ft
V. Loose	0-4
Loose	4-10
Medium	10-30
Dense	30-50
V. Dense	over 50

Consistency	Blows/ft
V. Soft	0-2
Soft	2-4
Medium	4-8
Stiff	8-15
V. Stiff	15-30
Hard	over 30

Unified Soil Classification System (USCS)			
Boulders	>11.8	M. Sand	.08-.02
Cobbles	2.9-11.8	F. Sand	.02-.003
C. Gravel	2.9-.75	Silts	<.003
F. Gravel	.75-.19	Clays	<.003
C. Sand	.19-.08		

New York State Department of Environmental Conservation
Division of Water - Geotechnical Services Section

Project: Little Valley Boring No. LV-3

Location: Cattaraugus Co. DPW Yard

Date Start 5/6/92

Date Finish 5/12/92

Driller Brian Haurig

Assistant Dan Kendall

Geologist John Stegville

Groundwater Date	Time	Depth to
5/12/92		16.61

Sample Hammer: Hammer Wt. 140 lb; Hammer Fall 30"; Sampler Type Split Spoon

Casing: Diameter 2"; Material PVC

Screen: Diameter 2"; Material PVC; Slot Size .010"

Screen Placement from 17' to 27'

Depth (ft.)	Sample Blows Per 6"	Sample No.	Sample Depth From - To	Classification and Remarks
			0-2'	Auger cuttings: Brown/gray Gravel, some Sand (Fill)
			2'- 9'	Auger cuttings: Dark brown SAND and Gravel, little Silt, tr. Clay, moist (SW)
5				
			9'- 14'	... becomes wet
10				
				... becomes saturated (drilling difficult)
15				
	40 75	S-1	17- 18'	Dark brown, v. dense SAND and Gravel, little Silt, tr. Clay; wet (SW)
20				... becomes saturated, gravel content increases
25				

f - fine, m - medium, c - coarse

and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%

MAJOR componer, minor componer

Density	Blows/ft
V. Loose	0-4
Loose	4-10
Medium	10-30
Dense	30-50
V. Dense	over 50

Consistency	Blows/ft
V. Soft	0-2
Soft	2-4
Medium	4-8
Stiff	8-15
V. Stiff	15-30
Hard	over 30

Unified Soil Classification System (USCS)

Boulders	>11.8	M. Sand	.08-.02
Cobbles	2.9-11.8	F. Sand	.02-.003
C. Gravel	2.9-.75	Silts	<.003
F. Gravel	.75-.19	Clays	<.003
C. Sand	.19-.08		

New York State Department of Environmental Conservation
Division of Water - Geotechnical Services Section

Project: Little Valley Boring No. LV-4

Location: Rock City Inn

Date Start 5/12/92

Date Finish 5/13/92

Driller Brian Hourigan

Assistant Tom Everts

Geologist Brian Hourigan

Groundwater

Date	Time	Depth to

Sample Hammer: Hammer Wt. 140 lb; Hammer Fall 30"; Sampler Type Split Spoon

Casing: Diameter 2"; Material PVC

Screen: Diameter 2"; Material PVC; Slot Size .010"

Screen Placement from 32' to 42'

Depth (ft.)	Sample Blows Per .6"	Sample No.	Sample Depth From - To	Classification and Remarks
			0-30'	Auger cuttings: Brown/gray GRAVEL, some Sand, little Silt, tr. Clay, moist (GW)
5				
10				
15				... intermittent fine lenses.
20				
25				

f - fine; m - medium; c - coarse

and = 35-50%; some = 20-35%; little = 10-20%; trace = 0-10%; MAJOR compone; minor compone

Density	Blows/ft
V. Loose	0-4
Loose	4-10
Medium	10-30
Dense	30-50
V. Dense	over 50

Consistency	Blows/ft
V. Soft	0-2
Soft	2-4
Medium	4-8
Stiff	8-15
V. Stiff	15-30
Hard	over 30

Unified Soil Classification System (USCS)

Boulders	>11.8	M. Sand	.08-.02
Cobbles	2.9-11.8	F. Sand	.02-.003
C. Gravel	2.9-.75	Silts	<.003
F. Gravel	.75-.19	Clays	<.003
C. Sand	.19-.08		

New York State Department of Environmental Conservation
Division of Water - Geotechnical Services Section

Project: Little Valley Boring No. LV-5

Location: Merle Burger Property

Date Start 5/13/92
Date Finish 5/13/92
Driller Brian Hourigan
Assistant Tom Everts
Geologist Brian Hourig

Groundwater Date	Type	Depth to

Sample Hammer: Hammer Wt. 140 lb; Hammer Fall 30"; Sampler Type Split Spoon
Casing: Diameter 2"; Material PVC
Screen: Diameter 2"; Material PVC; Slot Size .010"
Screen Placement from ____ to ____

f - fine, m - medium, c - coarse
and = 35-50%, some = 20-35%, little = 10-20%, trace = 0-10%
MAJOR compone, minor compone

Depth (ft.)	Sample Blows Per 6"	Sample No.	Sample Depth From - To	Classification and Remarks
			0-7'	Auger cuttings: 6" Topsoil Light brown SILT, some Clay, little f/c Sand, tr. Gravel, moist (ML) Small gravel seam at 4'
5			7'-9'	GRAVEL and f/c Sand, moist (GW) (difficult drilling)
10				Bottom of hole 9.0' Auger refusal Boring terminated because of difficult dri g Cutting teeth on lead auger were completely worn down
15				
20				
25				

Density	Blows/ft
V. Loose	0-4
Loose	4-10
Medium	10-30
Dense	30-50
V. Dense	over 50

Consistency	Blows/ft
V. Soft	0-2
Soft	2-4
Medium	4-8
Stiff	8-15
V. Stiff	15-30
Hard	over 30

Unified Soil Classification System (USCS)

Boulders	>11.8	M. Sand	.08-.02
Cobbles	2.9-11.8	F. Sand	.02-.003
C. Gravel	2.9-.75	Silts	<.003
F. Gravel	.75-.19	Clays	<.003
C. Sand	.19-.08		

New York State Department of Environmental Conservation
Division of Water - Geotechnical Services Section

Project: Little Valley Boring No. LV-7

Location: 111 Mill St Residence

Date Start 3 June 1992
Date Finish 4 June 1992
Driller Brian Hourigan
Assistant Greg Sutton
Geologist John Stegville

Groundwater: Date | Time | Depth to

Sample Hammer: Hammer Wt. 140 lb; Hammer Fall 30"; Sampler Type Split Spoon

Casing: Diameter 2"; Material PVC

Screen: Diameter 2"; Material PVC; Slot Size .010"

Screen Placement from 37.3 to 52.3

Depth (ft.)	Sample Blows Per 6"	Sample No.	Sample Depth From - To	Classification and Remarks
			0-21'	Same as LV-6
5				
10				
15				
20				
			21'-32'	Mostly Sand and Gravel, with intermittent fin lenses
25				

f - fine; m - medium; c - coarse

and - 35-50%; some - 20-35%; little - 10-20%; trace - 0-10%

MAJOR compon
minor compon

Density	Blows/ft
V. Loose	0-4
Loose	4-10
Medium	10-30
Dense	30-50
V. Dense	over 50

Consistency	Blows/ft
V. Soft	0-2
Soft	2-4
Medium	4-8
Stiff	8-15
V. Stiff	15-30
Hard	over 30

Unified Soil Classification System (USCS)

Boulders	>11.8	M. Sand	.08-.02
Cobbles	2.9-11.8	F. Sand	.02-.003
C. Gravel	2.9-.75	Silts	<.003
F. Gravel	.75-.19	Clays	<.003
C. Sand	.19-.08		

Division of Water - Geotechnical Services Section

Project: _____ Boring No. LV-7

Location: _____

Date Finish _____

Driller _____

Assistant _____

Geologist _____

Groundwater Date	Time	Depth to

Sample Hammer: Hammer Wt. _____ Hammer Fall _____ Sampler Type _____

Casing: Diameter _____ Material _____

Screen: Diameter _____ Material _____ Slot Size _____

Screen Placement from _____ to _____

f - fine, m - medium, c - coarse

and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%

MAJOR compone

minor compone

Depth (ft.)	Sample Blows Per 6"		Sample No.	Sample Depth From - To	Classification and Remarks
55					... drilling became easier
	7	12	S-3	58'-60'	Brown, v. stiff CLAY and Silt, little Sand, little Grav
	15	19			moist (CL-ML)
60					Bottom of hole 60.0'
					Well installed at 57.3'

Density	Blows/ft
V. Loose	0-4
Loose	4-10
Medium	10-30
Dense	30-50
V. Dense	over 50

Consistency	Blows/ft
V. Soft	0-2
Soft	2-4
Medium	4-8
Stiff	8-15
V. Stiff	15-30
Hard	over 30

Unified Soil Classification System (USCS)			
Boulders	>11.8	M. Sand	.08-.02
Cobbles	2.9-11.8	F. Sand	.02-.003
C. Gravel	2.9-.75	Silts	<.003
F. Gravel	.75-.19	Clays	<.003
C. Sand	.19-.08		

Division of Water - Geotechnical Services Section

Project: _____ Boring No. LV-8

Location: _____

Date Finish _____

Driller _____

Assistant _____

Geologist _____

Groundwater

Date	Time	Depth to

Sample Hammer: Hammer Wt. _____ Hammer Fall _____ Sampler Type _____

Casing: Diameter _____ Material _____

Screen: Diameter _____ Material _____ Slot Size _____

Screen Placement from _____ to _____

f - fine, m - medium, c - coarse

and = 35-50%, some = 20-35%, little = 10-20%, trace = 0-10%

MAJOR comp, minor comp

Depth (ft.)	Sample Blows Per 6"	Sample No.	Sample Depth From - To	Classification and Remarks
30				
35				... drilling becomes difficult
	12 12	S-1	36'-37'	Brown, v. dense f/c SAND, some Gravel, some Silt, mast CTill
	50/12"			Bottom of hole 37.0'
40				Well installed at 36.5'

Density	Blows/ft
V. Loose	0-4
Loose	4-10
Medium	10-30
Dense	30-50
V. Dense	over 50

Consistency	Blows/ft
V. Soft	0-2
Soft	2-4
Medium	4-8
Stiff	8-15
V. Stiff	15-30
Hard	over 30

Unified Soil Classification System (USCS)

Boulders	>11.8	M. Sand	.08-.02
Cobbles	2.9-11.8	F. Sand	.02-.003
C. Gravel	2.9-.75	Silts	<.003
F. Gravel	.75-.19	Clays	<.003
C. Sand	.19-.08		

TEST BORING LOG
New York State Department of Environmental Conservation
Division of Water - Geotechnical Services Section

Project: Little Valley Boring No. LV-10
Location: Fuss Property near Little Valley Creek

Sheet No. 1 of 1
Date Start 11 June 1992
Date Finish 11 June 1992
Driller Dan Kendall
Assistant Tom Ever
Geologist John Stegville

Groundwater Date	Time	Depth to

Sample Hammer: Hammer Wt. ____ Hammer Fall ____ Sampler Type ____
Casing: Diameter 2" Material PVC
Screen: Diameter 2" Material PVC Slot Size .010
Screen Placement from 1.0 to 11.0

f - fine, m - medium, c - coarse
and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%
MAJOR compor, minor compor

Depth (ft.)	Sample Blows Per 6"	Sample No.	Sample Depth From - To	Classification and Remarks
				1.0' Topsoil
			1' - 9'	Light brown, Silt, some f/c Sand, little Gravel, little Clay, wet (SM)
5				
			9'-11'	Gravel and Cobbles, some Sand (GW) drilling difficult
10				
				Auger refusal 11.0'
				Spoon refusal 11.0'
				Well installed at 11.0'
15				

Density	Blows/ft
V. Loose	0-4
Loose	4-10
Medium	10-30
Dense	30-50
V. Dense	over 50

Consistency	Blows/ft
V. Soft	0-2
Soft	2-4
Medium	4-8
Stiff	8-15
V. Stiff	15-30
Hard	over 30

Unified Soil Classification System (USCS)

Boulders	>11.8	M. Sand	.08-.02
Cobbles	2.9-11.8	F. Sand	.02-.003
C. Gravel	2.9-.75	Silts	<.003
F. Gravel	.75-.19	Clays	<.003
C. Sand	.19-.08		

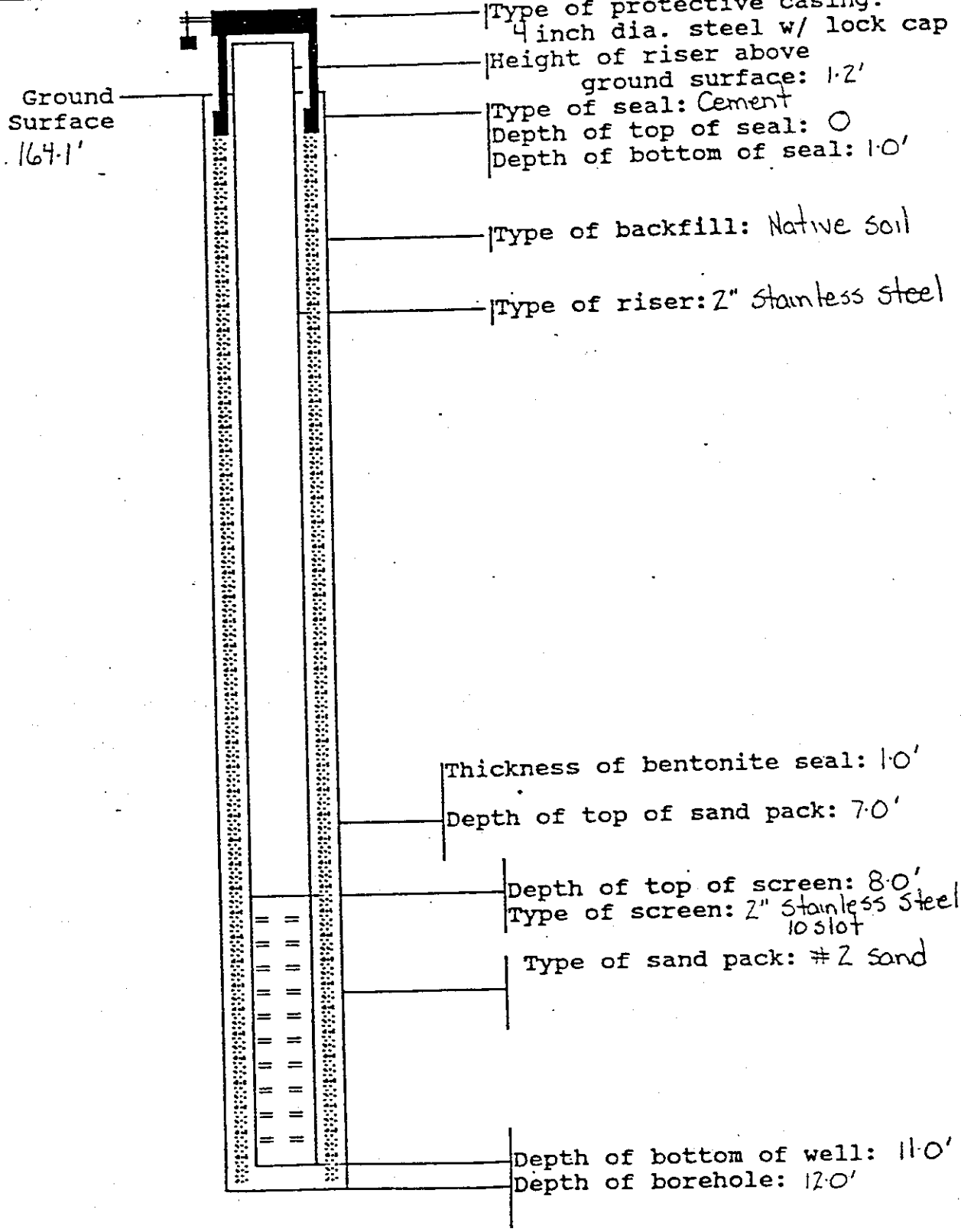
APPENDIX C

SUMMARY OF WELL INSTALLATION

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEOTECHNICAL SERVICES SECTION

PROJECT: Little Valley
DATE INSTALLED: 10 Sep 1992

BORING NO: LV-2A

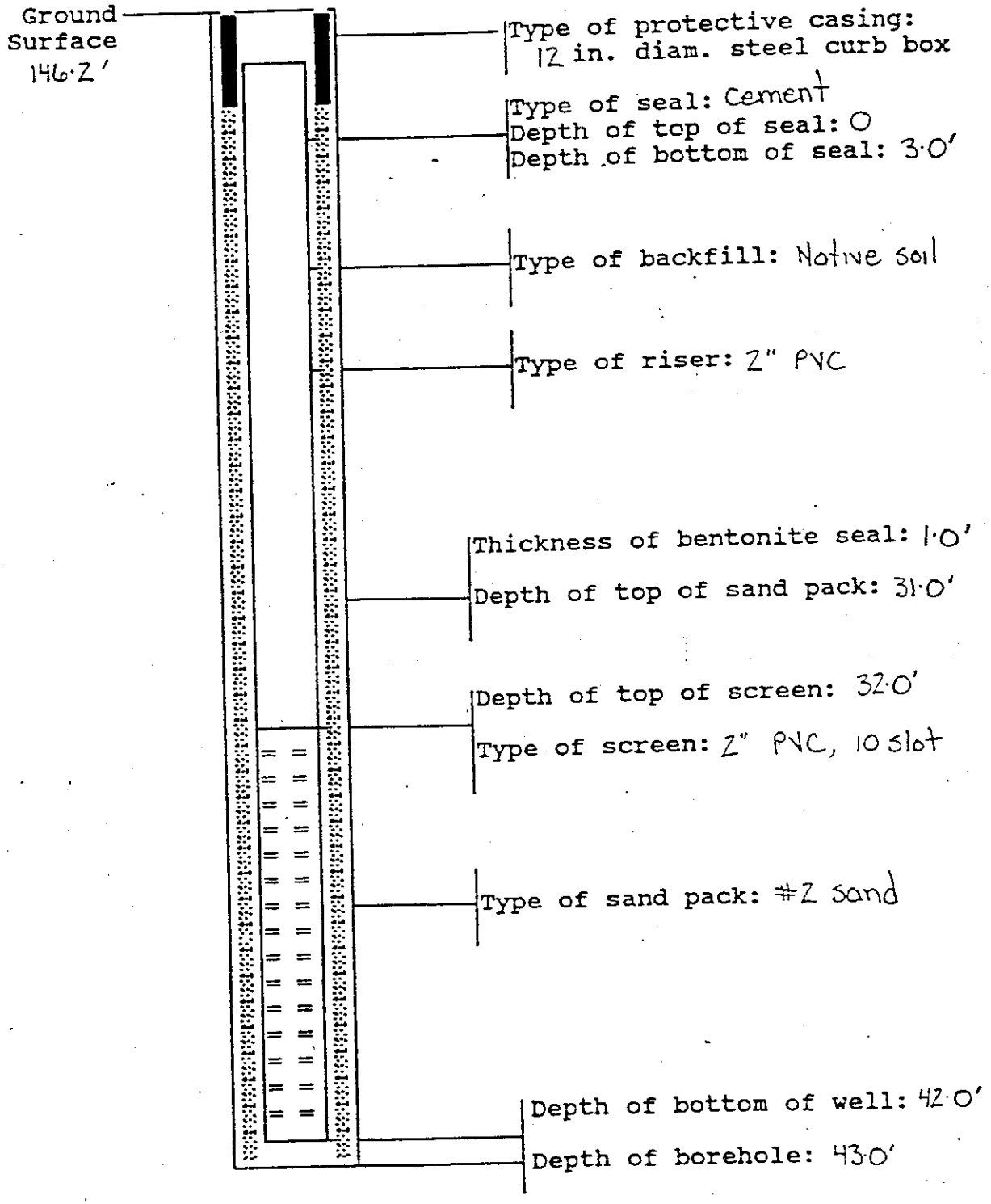


SUMMARY OF WELL INSTALLATION

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEOTECHNICAL SERVICES SECTION

PROJECT: Little Valley
DATE INSTALLED: 13 May 1992

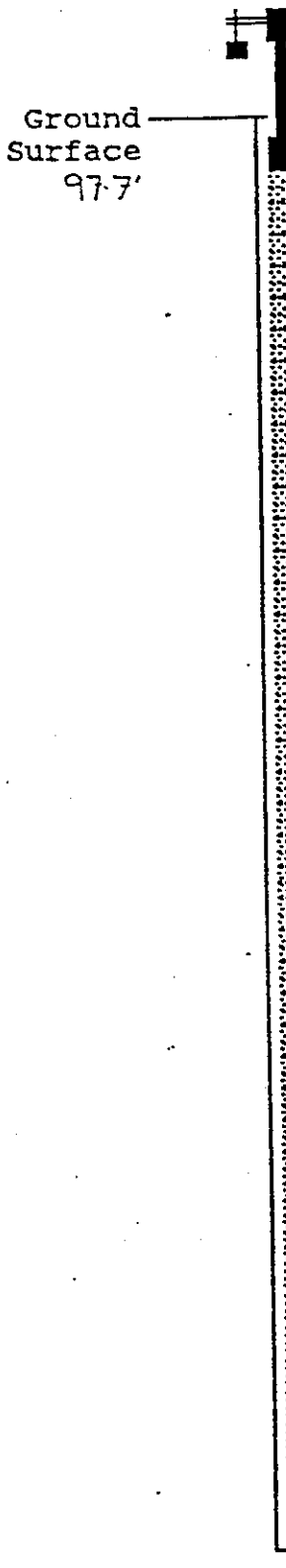
BORING NO: LV-4



SUMMARY OF WELL INSTALLATION

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEOTECHNICAL SERVICES SECTION

PROJECT: Little Valley
DATE INSTALLED: 9 June 1992 BORING NO: LV-8

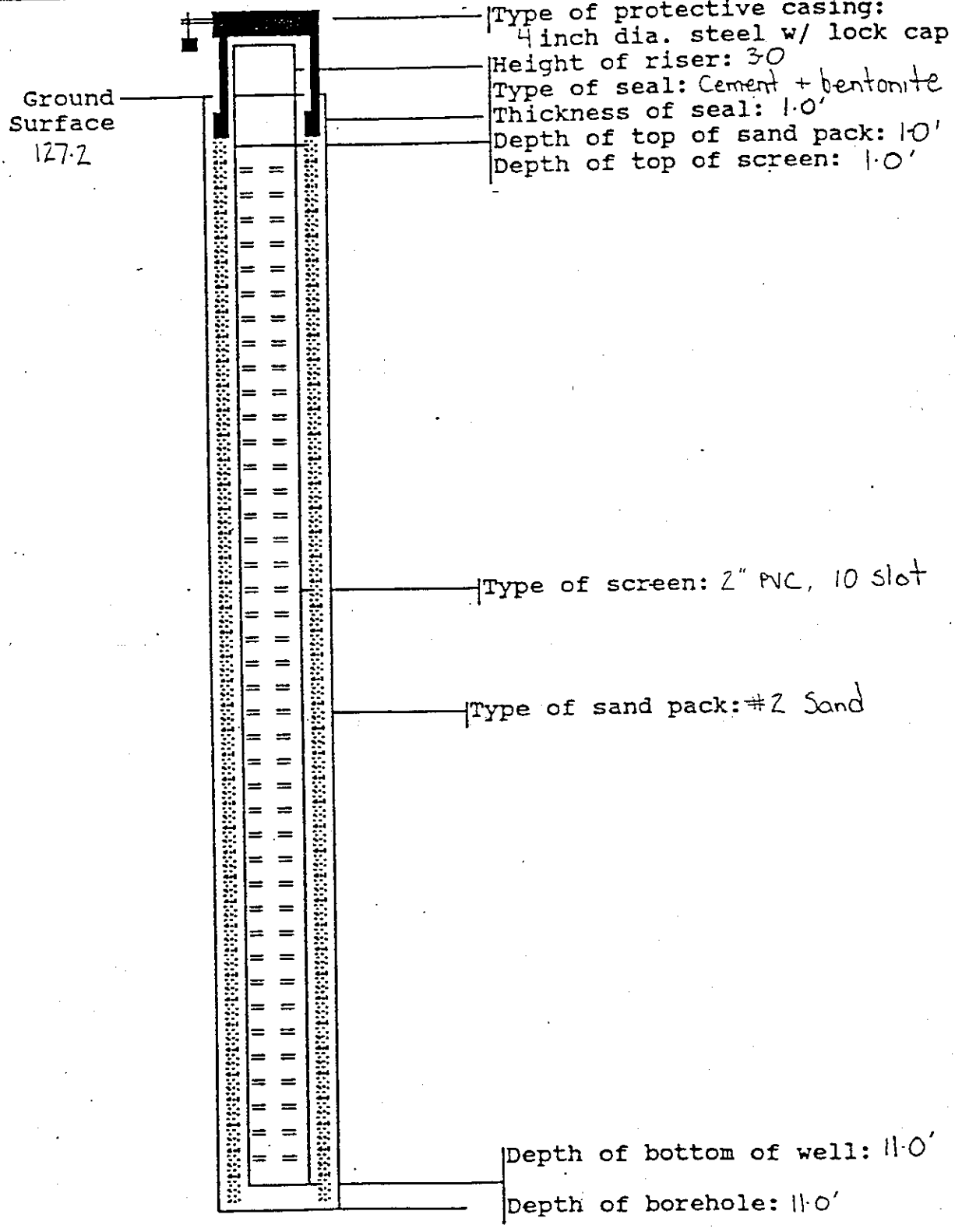


Type of protective casing: 4 inch dia. steel w/ lock cap
Height of riser: 3.6'
Type of seal: Cement
Depth of top of seal: 0'
Depth of bottom of seal: 1.0'
Type of backfill: Native soil
Type of riser: 2" PVC
Thickness of bentonite seal: 1.0'
Depth of top of sand pack: 25.5'
Depth of top of screen: 26.5'
Type of screen: 2" PVC, 10 slot
Type of sand pack: #2 Sand
Depth of bottom of well: 36.5'
Depth of borehole: 37.0'

SUMMARY OF WELL INSTALLATION

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
GEOTECHNICAL SERVICES SECTION

PROJECT: Little Valley
DATE INSTALLED: 11 June 1992 BORING NO: LV-10



EHMKE WELL DRILLERS

WATER • GAS • TEST BORINGS

INDUSTRIAL – RESIDENTIAL

WELL SUPPLIES – WATER SYSTEMS

WATER CONDITIONERS

104 MAIN STREET – SILVER CREEK, N. Y.

PHONE [redacted]

934-2658

Water Supply Well # 4 3-12-65

Village of Little Valley, N.Y.

Drilling Firm: Ehmke Well Drillers

Depth: 190 ft.

Static Water Level: 41 ft.

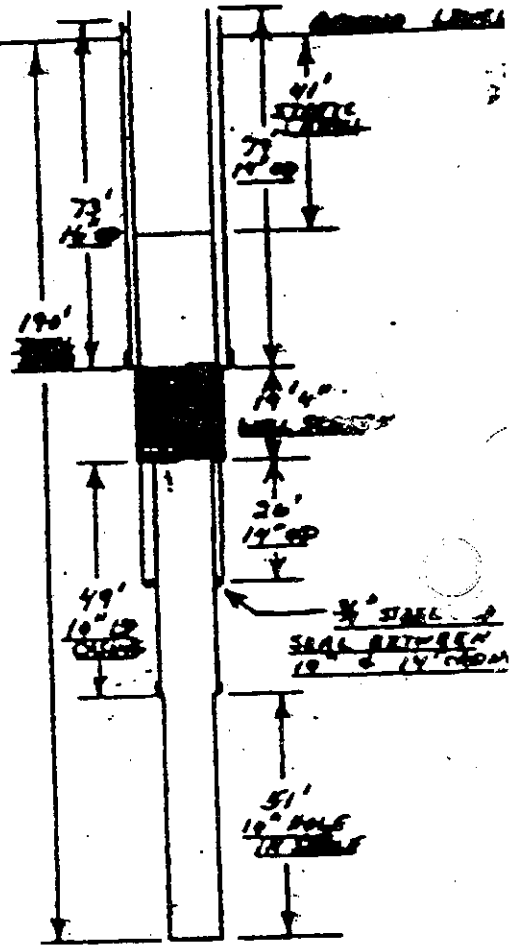
Pumping Level: 300 GPM at 45½ ft. after 27 hour vertical turbine pump test by Ehmke Well Drillers

Veins: 71 ft. to 90 ft. through 16" OD telescope size well screen (BEST)

139 ft. to 139 ft. through 10" ID slotted casing. (8 slots ¼" X 3") just above drive shoe.

Screen: JOHNSON Armco Iron "Special Size"
16" OD telescope nomenclature
Actually 15" OD--14¼" ID
Slot Size--125 continuous
Length Overall--19' 4"
Actual screen length--19 ft.
Screen welded to and bottom to 14" OD casing.

Casing: 73 ft. of 16" OD (welded joints)
74 ft. of 14" OD (above well screen)
26 ft. of 14" OD (below well screen)
49 ft. of 10 3/4" OD (from top of bed rock up inside the 14" OD)

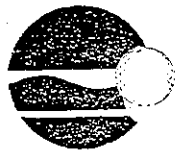


WELL LOG

0-3 ft.	top soil
3-15 ft.	silty yellow clay
15-26 ft.	yellow clay & gravel
26-30 ft.	very sandy yellow gravel
30-57 ft.	yellow clay & gravel
57-64 ft.	sandy yellow gravel w/clay
64-71 ft.	yellow gravel w/clay
71-73 ft.	fine yellow gravel (Water Bearing)
73-73 ft.	coarse yellow gravel " "
73-84 ft.	fine yellow gravel " "
84-90 ft.	coarse uniform gravel " "
90-95 ft.	coarse yellow gravel w/clay
95-108 ft.	fine yellow gravel with a lot of very fine sand.
108-111 ft.	light brown sand & gravel
111-114 ft.	dark brown sand & gravel
114-119 ft.	blue clay & gravel
119-121 ft.	uniform clean blue gravel (W
121-125 ft.	blue clay & gravel w/sand
125-138 ft.	non uniform gravel w/cl
138-139 ft.	fine blue gravel to bed

APPENDIX E

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-3508



Thomas C. Jorling
Commissioner

OCT 2 2 1993

MEMORANDUM

TO: Bureau Directors, Regional Water Engineers and Section Chiefs

SUBJECT: Division of Water Technical and Operational Guidance Series (1.1.1)
AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES
(Originator: John Zambrano)

I. Purpose

The attachment to this memorandum provides a compilation of ambient water quality standards and guidance values for toxic and non-conventional pollutants for use in department programs, including the SPDES permit program.

II. Discussion

This edition is being issued to add guidance values for more than 50 substances that have been developed subsequent to the previous (11/15/91) edition. Specifically, this edition includes the changes listed below.

1. Addition of 51 entries in Table 1. All of these added entries provide health (water source) guidance values for surface waters, and eight provide values for groundwater as well.

2. Removal of those substances from Table 2 or Table 3 that are now included in Table 1, as described above.

3. Revision of four entries in Table 1 to add surface water health (water source) guidance values.

4. Identification of approximately 12 additional substances regulated by the POC groundwater standard (Table 2).

AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

New York State
Department of Environmental Conservation
Division of Water
Albany, New York

October 1993

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TABLE OF CONTENTS

INTRODUCTION

This document presents Division of Water ambient water quality standards and guidance values. The authority for these values is derived from Article 17 of the Environmental Conservation Law and 6 NYCRR Parts 700-705, Water Quality Regulations.

Standards and guidance values for toxic and non-conventional pollutants are presented in Table 1. This Table includes all of the division's numerical standards and guidance values established as of the date of this document except standards for dissolved oxygen, dissolved solids, coliforms, pH, color, odor and turbidity. The reader is referred to Part 703 for the excepted standards.

Section I of this Introduction provides a description of the columns in Table 1. Section II provides guidance on certain aspects of development, interpretation and use of standards and guidance values. Section III concerns the principal organic contaminant (POC) groundwater standard, which is a general standard. It provides detailed instructions on its applicability to specific substances.

I. DESCRIPTION OF COLUMNS IN TABLE 1

A. Standard and Guidance Value

Standards and guidance values are ambient water quality values that are set to protect the state's waters. They both are derived according to scientific procedures that are in regulation (6 NYCRR Part 702).

A standard is a value that has been promulgated and placed into regulation. The standards for the surface water and groundwater classes are extracted from Part 703 of Title 6. Surface water and groundwater standards were last revised effective September 1, 1991.

A guidance value may be used where a standard for a substance or group of substances has not been established for a particular water class and type of value (section 702.15).

In addition to specific guidance values, the regulations (702.15(a)(1)(ii)) allow the department to develop a health (water source) "general organic guidance value" of 50 ug/L for an individual organic substance. The department can derive this value where procedures in 702.3 - 702.7 do not yield a more stringent value and where adequate and sufficient oncogenic

- for organic substances that have an ambient groundwater standard of 50 ug/L, the groundwater effluent limitation shall be 50 ug/L; and

- for substances that have an ambient groundwater standard other than 50 ug/L, the groundwater effluent limitation shall be determined using site specific considerations.

4. Total of Organic Chemicals [§]

Subparagraph 702.16(b)(3) of the water quality regulations specifies, for the purpose of deriving effluent limitations for surface water, an ambient value of 100 ug/L for the total of organic substances having a standard or guidance value established pursuant to the human-health methodologies. The only substances included in this total are those listed in Table 1 of this TOGS that have both the symbol "§" above the name and a health (water source) [H(WS)] type standard or guidance value for surface water.

A groundwater effluent limitation shall be established at 100 ug/L for the total of certain organic substances. The substances included in this total are those listed in Table 1 of this TOGS that have both the symbol "§" above the name and a standard or guidance value for groundwater. This includes all substances covered by the principal organic contaminant groundwater standard (Table 1, page 41), whether they are listed in this TOGS or not (see I.C. above and III below).

III. DETERMINATION OF APPLICABILITY OF POC STANDARD TO SPECIFIC SUBSTANCES

A. Introduction

The POC standard for groundwater (Table 1, page 41) is a general standard that applies individually to an unlimited number of substances in six chemical classes. Consequently, its applicability to specific substances must be determined.

The POC standard was developed by the New York State Department of Health (DOH) for drinking water. The definitions of the six POC classes (6 NYCRR section 700.1 and Table 5 of this TOGS), obtained from the DOH regulations, are definitive for the first two classes, but require interpretation for the others. Furthermore, some substances that meet the definition of a particular POC class may not be regulated by the POC standard because

Definitions of POC Classes 1 and 2:

Class 1 - Halogenated alkane*: Compound containing carbon (C), hydrogen (H) and halogen (X) where X = fluorine (F), chlorine (Cl), bromide (Br) and/or iodine (I), having the general formula $C_nH_yX_z$, where $y + z = 2n + 2$; n, y and z are integer variables; n and z are equal to or greater than one and y is equal to or greater than zero.

Class 2 - Halogenated ether: Compound containing carbon (C), hydrogen (H), oxygen (O) and halogen (X) (where X = F, Cl, Br and/or I) having the general formula $C_nH_yX_zO$, where $y + z = 2n + 2$; the oxygen is bonded to two carbons; n, y and z are integer variables; n is equal to or greater than two, y is equal to or greater than zero and z is equal to or greater than one.

Step 5: Although the definitions of the remaining classes are in regulation and reproduced in Table 5, determinations beyond this point involve interpretations, including chemical comparisons with previously determined substances. The user, therefore, should contact the Criteria and Standards Section (CSS) staff (Scott Stoner or Arline Sumner, 518-457-3651) for assistance. The CSS will make the determination, consulting with the DOH as needed. Provision of the CAS number and structure of the substance will facilitate the determination.

*Note: This definition does not mention the specific exclusions listed in the definition in regulation (6 NYCRR 700.1 and Table 5) because those excluded substances are listed in Table 1 of this TOGS and thus covered by Step 1 of this procedure.

TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: October 1993

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§	A, A-S, AA, AA-S		0.002	H(WS)	A
Aldrin	GA	ND		H(WS)	F
(309-00-2)	A, A-S, AA, AA-S, B, C, D	*		H(B)	
	SA, SB, SC, SD	*		H(B)	
	I		*	H(B)	
Remarks: * Refer to entry for "Aldrin and Dieldrin."					
§	A, A-S, AA, AA-S, B, C, D	0.001		H(B)	K
Aldrin & Dieldrin	SA, SB, SC, SD	0.001		H(B)	K
(309-00-2; 60-57-1)	I		0.001	H(B)	K
Remarks: Values listed apply to sum of these substances.					
§	A, A-S, AA, AA-S		50	H(WS)	Z
Alkyl dimethyl benzyl ammonium chloride	GA		50	H(WS)	Z
(68391-01-5)	A, A-S, AA, AA-S, B, C	*		A	
Remarks: * Refer to entry for "Quaternary ammonium compounds."					
§	A, A-S, AA, AA-S		50*	H(WS)	Z
Alkyl diphenyl oxide sulfonates	GA		50*	H(WS)	Z
(Not Applicable)					
Remarks: * Applies to each alkyl diphenyl oxide sulfonate individually.					
Aluminum, ionic	A, A-S, AA, AA-S, B, C	100		A	N
(Not Applicable)					
§	A, A-S, AA, AA-S		50	H(WS)	Z
Ametryn	GA	50		H(WS)	J
(834-12-8)					
§	A, A-S, AA, AA-S	*		H(WS)	
Aminocresols	GA	*		H(WS)	
(95-84-1;	A, A-S, AA, AA-S, B, C	**		A	
2835-95-2;	D	**		A	
2835-99-6)					
Remarks: * Refer to entry for "Phenolic compounds (total phenols)." ** Refer to entry for "Phenols, total unchlorinated."					

TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: October 1993

MICROGRAMS/LITER

SUBSTANCE (CAS NO.)	WATER CLASSES	STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
Ammonia and Ammonium (7664-41-7; Not Applicable)	A, A-S, AA, AA-S	2,000*		H(WS)	H
	GA	2,000*		H(WS)	H
	A, A-S, AA, AA-S, B, C	**		A	N
	D	**		A	Q

Remarks: * NH_3 + NH_4^+ as N.

** Un-ionized ammonia as NH_3; tables below provide the standard in ug/l at varying pH and temperature for different classes and specifications. Linear interpolation between the listed pH values and temperatures is applicable.

Classes A,A-S, AA, AA-S, B, C with the (T) or (TS) Specification

pH	0°C	5°C	10°C	15°-30°C
6.50	0.7	0.9	1.3	1.9
6.75	1.2	1.7	2.3	3.3
7.00	2.1	2.9	4.2	5.9
7.25	3.7	5.2	7.4	11
7.50	6.6	9.3	13	19
7.75	11	15	22	31
8.0-9.0	13	18	25	35

Classes A, A-S, AA, AA-S, B, C without the (T) or (TS) Specification

pH	0°C	5°C	10°C	15°C	20°-30°C
6.50	0.7	0.9	1.3	1.9	2.6
6.75	1.2	1.7	2.3	3.3	4.7
7.00	2.1	2.9	4.2	5.9	8.3
7.25	3.7	5.2	7.4	11	15
7.50	6.6	9.3	13	19	26
7.75	11	15	22	31	43
8.0-9.0	13	18	25	35	50

Class D

pH	0°C	5°C	10°C	15°C	20°C	25°-30°C
6.50	9.1	13	18	26	36	51
6.75	15	21	30	42	59	84
7.00	23	33	46	66	93	131
7.25	34	48	68	95	140	190
7.50	45	64	91	130	180	260
7.75	56	80	110	160	220	320
8.0-9.0	65	92	130	180	260	370

TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: October 1993

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ Aniline (62-53-3)	A, A-S, AA, AA-S		1	H(WS)	A
	GA	5		H(WS)	J
§ Anthracene (120-12-7)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
Antimony (Not Applicable)	A, A-S, AA, AA-S		3	H(WS)	B
	GA		3	H(WS)	B
Arsenic (Not Applicable)	A, A-S, AA, AA-S	50		H(WS)	G
	GA	25		H(WS)	F
	A, A-S, AA, AA-S, B, C	190*		A	N
	D	360*		A	Q
	SA, SB, SC	63*		A	N
	I		36*	A	N
	SD	120*		A	Q

Remarks: * Dissolved arsenic form.

Aryltriazoles (Not Applicable)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z

Remarks: Applies to each aryltriazole individually.

§ Atrazine (1912-24-9)	A, A-S, AA, AA-S		3*	H(WS)	G
	GA	7.5		H(WS)	F

Remarks: * This substance did not receive a review beyond determining the existence of a Specific MCL. A more in-depth review, currently underway, could lead to a more (but not less) stringent guidance value.

§ Azinphosmethyl (86-50-0)	A, A-S, AA, AA-S		0.07	H(WS)	A
	GA	4.4		H(WS)	F
	A, A-S, AA, AA-S, B, C	0.005		A	N
	SA, SB, SC	0.01		A	N
	I		0.01	A	N
§ Azobenzene (103-33-3)	A, A-S, AA, AA-S		0.5	H(WS)	A
	GA	5		H(WS)	J
Barium (Not Applicable)	A, A-S, AA, AA-S	1,000		H(WS)	G
	GA	1,000		H(WS)	F

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TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: October 1993

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ Bis(2-ethylhexyl) phthalate (117-81-7)	A, A-S, AA, AA-S GA A, A-S, AA, AA-S, B, C	 50 0.6	4	H(WS) H(WS) A	A J N
Boric acid, Borates & Metaborates (Not Applicable)	A, A-S, AA, AA-S GA		125 125	H(WS) H(WS)	B B
Remarks: Applies as boron equivalents. Values listed apply to sum of these substances.					
Boron (Not Applicable)	GA A, A-S, AA, AA-S, B, C SA, SB, SC I	1,000 10,000 1,000	 1,000	H(WS) A A A	H N N N
Remarks: Aquatic standards and guidance value apply to acid-soluble form.					
§ [acil. (3[4-40-9)	GA	4.4		H(WS)	F
Bromide (Not Applicable)	A, A-S, AA, AA-S GA		2,000 2,000	H(WS) H(WS)	B B
§ Bromobenzene (108-86-1)	A, A-S, AA, AA-S GA	 5	5*	H(WS) H(WS)	I J
Remarks: * This substance did not receive a review beyond determining that it is in a principal organic contaminant class and that it does not have a more stringent Specific MCL. A more in-depth review, currently underway, could lead to a more (but not less) stringent guidance value.					
§ Bromochloromethane (74-97-5)	A, A-S, AA, AA-S GA	 5	5	H(WS) H(WS)	I J
Bromodichloromethane (75-27-4)	A, A-S, AA, AA-S GA		50 50	H(WS) H(WS)	Z Z
Bromoform (75-25-2)	A, A-S, AA, AA-S GA		50 50	H(WS) H(WS)	Z Z

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TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: October 1993

MICROGRAMS/LITER

SUBSTANCE (CAS NO.)	WATER CLASSES	STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ Butyl isopropyl phthalate (Not Applicable)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
Cadmium (Not Applicable)	A, A-S, AA, AA-S	10		H(WS)	G
	GA	10		H(WS)	F
	A, A-S, AA, AA-S, B, C	*		A	N
	D	**		A	Q
	SA, SB, SC, I	7.7		A	N
	SD	21		A	Q
	SA, SB, SC, I, SD		2.7	H(B)	K
Remarks: * exp(0.7852 [ln (ppm hardness)] - 3.490) **exp(1.128 [ln (ppm hardness)] - 3.828) Aquatic standards and guidance values apply to acid-soluble form.					
§ Captan (133-06-2)	GA	18		H(WS)	F
§ Carbaryl (63-25-2)	GA	29		H(WS)	F
§ Carbofuran (1563-66-2)	A, A-S, AA, AA-S	15		H(WS)	B
	GA		15	H(WS)	B
	A, A-S, AA, AA-S, B, C	1.0		A	N
	D	10		A	Q
§ Carbon tetrachloride (56-23-5)	A, A-S, AA, AA-S		0.4	H(WS)	A
	GA	5		H(WS)	F
§ Carboxin (5234-68-4)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA	50		H(WS)	J
§ Chloramben (Not Applicable)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA	50		H(WS)	J
Remarks: Includes: related forms that convert to the organic acid upon acidification to a pH of 2 or less; and esters of the organic acid.					
§ Chlordane (57-74-9)	A, A-S, AA, AA-S		0.02	H(WS)	A
	GA	0.1		H(WS)	F
	A, A-S, AA, AA-S, B, C, D		0.002	H(B)	K
	SA, SB, SC, I, SD		0.002	H(B)	K

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: October 1993

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SUBSTANCE (CAS NO.)	WATER CLASSES	STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ 5-Chloro-o-toluidine (95-79-4)	A, A-S, AA, AA-S		0.7	H(WS)	A
	GA	5		H(WS)	J
Chromium (Not Applicable)	A, A-S, AA, AA-S	50		H(WS)	G
	GA	50		H(WS)	G
	A, A-S, AA, AA-S, B, C	*		A	N
	D	**		A	Q

Remarks: * exp(0.819 [ln (ppm hardness)] + 1.561)
** exp(0.819 [ln (ppm hardness)] + 3.688)
Aquatic standards apply to acid-soluble form.

Chromium (hexavalent) (Not Applicable)	GA	50		H(WS)	F
	A, A-S, AA, AA-S, B, C	11		A	N
	D	16		A	Q
	SA, SB, SC	54		A	N
	I		50	A	N
	SD	1,200		A	Q

Remarks: Aquatic standards and guidance value apply to acid-soluble form.

Chrysene (218-01-9)	A, A-S, AA, AA-S		0.002	H(WS)	A,E
	GA		0.002	H(WS)	A,E
Cobalt (Not Applicable)	A, A-S, AA, AA-S, B, C	5		A	N
	D		110	A	Q

Remarks: Aquatic standard and guidance value apply to acid-soluble form.

Copper (Not Applicable)	A, A-S, AA, AA-S	200		H(WS)	H
	GA	200		H(WS)	H
	A, A-S, AA, AA-S, B, C	*		A	N
	D	**		A	Q
	SA, SB, SC, I	2.9		A	N
	SD	2.9		A	Q

Remarks: * exp(0.8545 [ln (ppm hardness)] - 1.465)
** exp(0.9422 [ln (ppm hardness)] - 1.464)
Aquatic standards apply to dissolved form.

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TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

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SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
Cyanide	A, A-S, AA, AA-S	100		H(WS)	H
(Not Applicable)	GA	100		H(WS)	H
	A, A-S, AA, AA-S, B, C	5.2*		A	N
	D	22*		A	Q
	SA, SB, SC	1.0*		A	N
	I		1.0*	A	N
	SD	1.0*		A	Q
Remarks: * As free cyanide - the sum of HCN and CN^- expressed as CN.					
§	A, A-S, AA, AA-S		50	H(WS)	Z
Dalapon	GA	50		H(WS)	J
(Not Applicable)					
Remarks: Includes: related forms that convert to the organic acid upon acidification to a pH of 2 or less; and esters of the organic acid.					
§	A, A-S, AA, AA-S	0.01		H(WS)	A
DDT, DDD & DDE	GA	ND		H(WS)	F
[illegible]-29-3; 72-54-8;	A, A-S, AA, AA-S, B, C, D	0.001		A	S
[illegible]-55-9)	SA, SB, SC, SD	0.001		A	S
	I		0.001	A	S
Remarks: Values listed apply to sum of these substances.					
§	A, A-S, AA, AA-S		5	H(WS)	I
Dechlorane Plus	GA	5		H(WS)	J
(13560-89-9)					
§	A, A-S, AA, AA-S, B, C	0.1		A	N
Demeton	SA, SB, SC	0.1		A	N
(8065-48-3; 298-03-3;	I		0.1	A	N
126-75-0)					
Remarks: Values listed apply to sum of these substances.					
§	GA	0.7		H(WS)	F
Diazinon	A, A-S, AA, AA-S, B, C	0.08		A	N
(333-41-5)					
§	A, A-S, AA, AA-S		50	H(WS)	Z
Dibromochloromethane	GA		50	H(WS)	Z
(124-48-1)					

TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: October 1993

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ 1,2-Dichlorobenzene & 1,4-Dichlorobenzene (95-50-1; 106-46-7)	A, A-S, AA, AA-S	30*		H(WS)	D
	GA	4.7		H(WS)	F
	A, A-S, AA, AA-S, B, C	**		A	
	D	**		A	
	SA, SB, SC, I		**	A	
	SD		**	A	

Remarks: Value applies to the sum of these substances, except as noted below.
* Applies to 1,4-Dichlorobenzene only.
** Refer to entry for "Dichlorobenzenes."

§ 1,3-Dichlorobenzene (541-73-1)	A, A-S, AA, AA-S	20		H(WS)	D
	GA	5		H(WS)	J
	A, A-S, AA, AA-S, B, C	*		A	
	D	*		A	
	SA, SB, SC, I		*	A	
	SD		*	A	

Remarks: * Refer to entry for "Dichlorobenzenes."

[illegible]lorobenzenes (95-50-1; 106-46-7; 541-73-1; 25321-22-6)	A, A-S, AA, AA-S, B, C	5		A	N,T
	D	50		A	R
	SA, SB, SC, I		5	A	N,T
	SD		50	A	R

Remarks: Values listed apply to sum of these substances.

§ 3,4-Dichlorobenzo-trifluoride (328-84-7)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J

§ Dichlorodifluoromethane (75-71-8)	A, A-S, AA, AA-S		5*	H(WS)	I
	GA	5		H(WS)	J

Remarks: * This substance did not receive a review beyond determining that it is in a principal organic contaminant class and that it does not have a more stringent Specific MCL. A more in-depth review, currently underway, could lead to a more (but not less) stringent guidance value.

§ [illegible],1-Dichloroethane (75-34-3)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J

§ [illegible],2-Dichloroethane ([illegible]07-06-2)	A, A-S, AA, AA-S	0.8		H(WS)	A
	GA	5		H(WS)	J

TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

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SUBSTANCE (CAS NO.)	WATER CLASSES	STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§	A, A-S, AA, AA-S		5*	H(WS)	I
1,1-Dichloropropene	GA	5		H(WS)	J
(563-58-6)					

Remarks: * This substance did not receive a review beyond determining that it is in a principal organic contaminant class and that it does not have a more stringent Specific MCL. A more in-depth review, currently underway, could lead to a more (but not less) stringent guidance value.

§	A, A-S, AA, AA-S		5*	H(WS)	I
cis-1,3-Dichloropropene	GA	5		H(WS)	J
(10061-01-5)					

Remarks: * This substance did not receive a review beyond determining that it is in a principal organic contaminant class and that it does not have a more stringent Specific MCL. A more in-depth review, currently underway, could lead to a more (but not less) stringent guidance value.

§	A, A-S, AA, AA-S		5*	H(WS)	I
trans-1,3-Dichloropropene	GA	5		H(WS)	J
(10061-02-6)					

Remarks: * This substance did not receive a review beyond determining that it is in a principal organic contaminant class and that it does not have a more stringent Specific MCL. A more in-depth review, currently underway, could lead to a more (but not less) stringent guidance value.

§	A, A-S, AA, AA-S		5	H(WS)	I
Dichlorotoluenes	GA	5		H(WS)	J
(32768-54-0; 95-73-8; 19398-61-9; 118-69-4; 35-75-0; 25186-47-4)					

Remarks: Values listed apply to each isomer (2,3-, 2,4-, 2,5-, 2,6-, 3,4- and 3,5-) individually.

§	A, A-S, AA, AA-S		0.0009	H(WS)	A
Dieldrin	GA	ND		H(WS)	F
(60-57-1)	A, A-S, AA, AA-S, B, C, D	*		H(B)	
	SA, SB, SC, SD	*		H(B)	
	I		*	H(B)	

Remarks: * Refer to entry for "Aldrin and Dieldrin."

§	A, A-S, AA, AA-S		50	H(WS)	Z
Di(2-ethylhexyl) adipate	GA		50	H(WS)	Z
103-23-1)					

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SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ Diquat dibromide 85-00-7	A, A-S, AA, AA-S		20*	H(WS)	G
	GA		20*	H(WS)	G

Remarks: * This substance did not receive a review beyond determining that a final MCL has been promulgated by USEPA. A more in-depth review, currently underway, may lead to a more (but not less) stringent guidance value.

§ Dodecylguanidine acetate and Dodecylguanidine hydrochloride (2439-10-3; 13590-97-1)	A, A-S, AA, AA-S		50	H(WS)	B
	GA		50	H(WS)	B

Remarks: Values listed apply to sum of these substances.

§ Dyphylline (479-18-5)	A, A-S, AA, AA-S	50		H(WS)	B,E
	GA		50	H(WS)	B,E
§ dosulfan ,. 15-29-7)	A, A-S, AA, AA-S, B, C	0.009		A	
	D	0.22		A	
	SA, SB, SC	0.001		A	N
	I		0.001	A	N
	SD	0.034		A	Q
§ Endothall (145-73-3)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
§ Endrin (72-20-8)	A, A-S, AA, AA-S	0.2		H(WS)	G
	GA	ND		H(WS)	F
	A, A-S, AA, AA-S, B, C, D	0.002		H(B)	K
	SA, SB, SC, SD	0.002		H(B)	K
	I		0.002	H(B)	K
§ Ethylbenzene (100-41-4)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
§ Ethylene chlorohydrin (107-07-3)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z

TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

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SUBSTANCE (CAS NO.)	WATER CLASSES	STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
Foaming agents (Not Applicable)	GA	500		H(WS)	F
Remarks: Determined as methylene blue active substances (MBAS) or by other tests as specified by the Commissioner.					
§ Folpet (133-07-3)	GA	50		H(WS)	J
§ Glyphosate (1071-83-6)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
Gross alpha radiation (Not Applicable)	A, A-S, AA, AA-S	*		H(WS)	G
	GA	*		H(WS)	G
Remarks: * 15 picocuries per liter, excluding radon and uranium.					
Gross beta radiation (Not Applicable)	A, AA	*		H(WS)	H
	A-S, AA-S		*	H(WS)	H
	GA	*		H(WS)	H
Remarks: * 1,000 picocuries per liter, excluding strontium-90 and alpha emitters.					
§ Guaifenesin (93-14-1)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
§ Heptachlor & Heptachlor epoxide (76-44-8; 1024-57-3)	A, A-S, AA, AA-S	0.009		H(WS)	A
	GA	ND		H(WS)	F
	A, A-S, AA, AA-S, B, C, D	0.001		A	S
	SA, SB, SC, SD	0.001		A	S
	I		0.001	A	S
Remarks: Values listed apply to the sum of these substances.					
§ Hexachlorobenzene (118-74-1)	A, A-S, AA, AA-S		0.02	H(WS)	A
	GA	0.35		H(WS)	F
§ Hexachlorobutadiene (87-68-3)	A, A-S, AA, AA-S	0.5		H(WS)	A
	GA	5		H(WS)	J
	A, A-S, AA, AA-S, B, C	1.0		A	N
	D	10		A	Q
	SA, SB, SC	0.3		A	N
	I		0.3	A	N
	SD	3.0		A	Q

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TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

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SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ 1-Hydroxyethylidene-1,1-diphosphonic acid (2809-21-4)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
§ 2-(2-Hydroxy-3,5-di-tert-pentylphenyl)-benzotriazole (25973-55-1)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
§ Indeno (1,2,3-cd) pyrene (193-39-5)	A, A-S, AA, AA-S		0.002	H(WS)	A,E
	GA		0.002	H(WS)	A,E
Iron (Not Applicable)	A, A-S, AA, AA-S	300		H(WS)	G
	GA	300*		H(WS)	F
	A, A-S, AA, AA-S, B, C	300		A	N
	D	300		A	
Remarks: * Also see entry for "Iron and Manganese."					
Iron and Manganese (Not Applicable)	GA	500		H(WS)	F
Remarks: Value listed applies to the sum of these substances.					
§ Isodecyl diphenyl phosphate (29761-21-5)	A, A-S, AA, AA-S, B, C	1.7		A	N
	D	22		A	Q
§ Isophorone (78-59-1)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
§ Isopropylbenzene (98-82-8)	A, A-S, AA, AA-S		5*	H(WS)	I
	GA	5		H(WS)	J

Remarks: * This substance did not receive a review beyond determining that it is in a principal organic contaminant class and that it does not have a more stringent Specific MCL. A more in-depth review, currently underway, could lead to a more (but not less) stringent guidance value.

TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

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SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ Malathion (121-75-5)	GA	7.0		H(WS)	F
	A, A-S, AA, AA-S, B, C	0.1		A	N
	SA, SB, SC	0.1		A	N
	I		0.1	A	N
§ Mancozeb (8018-01-7)	GA	1.8		H(WS)	F
§ Maneb (12427-38-2)	GA	1.8		H(WS)	F
Manganese (Not Applicable)	A, A-S, AA, AA-S	300		H(WS)	G
	GA	300*		H(WS)	F
Remarks: * Also see entry for "Iron and Manganese."					
§ Mercaptobenzothiazole 9-30-4)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
Mercury (Not Applicable)	A, A-S, AA, AA-S	2		H(WS)	G
	GA	2		H(WS)	F
	A, A-S, AA, AA-S, B, C, D		0.2	H(B)	K
	SA, SB, SC, I, SD		0.1	H(B)	K
§ Methacrylic acid (79-41-4)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
§ Methoxychlor (72-43-5)	A, A-S, AA, AA-S	35		H(WS)	H
	GA	35		H(WS)	F
	A, A-S, AA, AA-S, B, C	0.03		A	N
	SA, SB, SC	0.03		A	N
	I		0.03	A	N
§ Methoxyethylbenzenes (4013-34-7; 3558-60-9)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
Remarks: Values listed apply to each isomer [(2-Methoxyethyl)benzene and (1-Methoxyethyl)benzene] individually.					

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TABLE 1 (continued)

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SUBSTANCE (CAS NO.)	WATER CLASSES	STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ Metribuzin (21087-64-9)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA	50		H(WS)	J
§ Mirex (2385-85-5)	A, A-S, AA, AA-S		0.04	H(WS)	A
	GA	5		H(WS)	J
	A, A-S, AA, AA-S, B, C	0.001		A	N
	D	0.001		A	Q
	SA, SB, SC	0.001		A	N
	I		0.001	A	N
	SD		0.001	A	Q
§ Nabam (142-59-6)	GA	1.8		H(WS)	F
§ Naphthalene (91-20-3)	A, A-S, AA, AA-S	10		H(WS)	D
	GA		10	H(WS)	D
Niacinamide (98-92-0)	A, A-S, AA, AA-S	500		H(WS)	B
	GA		500	H(WS)	B
Nickel (Not Applicable)	A, A-S, AA, AA-S, B, C	*		A	N
	D	**		A	Q
	SA, SB, SC	7.1		A	N
	I		7.1	A	N
	SD	140		A	Q

Remarks: * exp (0.76 [ln (ppm hardness)] + 1.06)
** exp (0.76 [ln (ppm hardness)] + 4.02)
Aquatic standards and guidance value apply to acid-soluble form.

§ Nitralin (4726-14-1)	GA	35		H(WS)	F
Nitrate and Nitrite, total (expressed as N) (Not Applicable)	A, A-S, AA, AA-S	10,000*		H(WS)	G
	GA	10,000		H(WS)	H

Remarks: Value listed applies to the sum of these substances, except as noted below.
* Applies only to nitrate.

TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

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SUBSTANCE (CAS NO.)	WATER CLASSES	STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ Phenanthrene (85-01-8)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
§ Phenol (108-95-2)	A, A-S, AA, AA-S	*		H(WS)	
	GA	*		H(WS)	
	A, A-S, AA, AA-S, B, C, D	**		A	
Remarks: * Refer to entry for "Phenolic compounds (total phenols)." ** Refer to entry for "Phenols, total unchlorinated."					
§ Phenolic compounds (total phenols) (Not Applicable)	A, A-S, AA, AA-S	1		H(WS)	H
	GA	1		H(WS)	F
Remarks: Value listed applies to the sum of these substances.					
§ Phenols, total chlorinated (Not Applicable)	A, A-S, AA, AA-S	*		H(WS)	
	GA	*		H(WS)	
	A, A-S, AA, AA-S, B, C, D	1.0		A	R
Remarks: Value listed applies to the sum of these substances. * Refer to entry for "Phenolic compounds (total phenols)."					
§ Phenols, total unchlorinated (Not Applicable)	A, A-S, AA, AA-S, B, C, D	5.0		A	R
Remark: Value listed applies to sum of these substances.					
§ Phenyl ether (101-84-8)	A, A-S, AA, AA-S	10		H(WS)	D
	GA		10	H(WS)	D
§ Phenylpropanolamine (14838-15-4)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
§ 3-Phenyl-1-propene (637-50-3)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
§ cis-1-Phenyl-1-propene (766-90-5)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J

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TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: October 1993

MICROGRAMS/LITER

SUBSTANCE (CAS NO.)	WATER CLASSES	STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ Principal organic contaminant (Not Applicable)	GA	5		H(WS)	J

Remarks: This standard applies to any and every individual substance that is in one of the principal organic contaminant classes as defined in 6 NYCRR 700.1 (see Table 5 of this TOGS), except any substance that has a standard for class GA waters listed elsewhere in this Table. Refer to the Introduction of this TOGS for guidance on determining the applicability of the POC standard to individual substances.

A less stringent guidance value for an individual substance may be substituted for this standard if so determined by the Commissioner of the New York State Department of Health, pursuant to 10 NYCRR §5-1.51(g).

§ Prometon (1610-18-0)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA	50		H(WS)	J
§ Propachlor (918-16-7)	GA	35		H(WS)	F
§ Propanil (709-98-8)	GA	7.0		H(WS)	F
§ Propazine (139-40-2)	GA	16		H(WS)	F
§ Propham (122-42-9)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA	50		H(WS)	J
§ n-Propylbenzene (103-65-1)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
§ Pyrene (129-00-0)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z

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NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: October 1993

SUBSTANCE (CAS NO.)	WATER CLASSES	MICROGRAMS/LITER STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ Simazine (122-34-9)	A, A-S, AA, AA-S		4*	H(WS)	G
	GA	50		H(WS)	J

Remarks: * This substance did not receive a review beyond determining that a final MCL has been promulgated by USEPA. A more in-depth review, currently underway, may lead to a more (but not less) stringent guidance value.

Sodium (Not Applicable)	GA	20,000		H(WS)	H
Strontium 90 (Not Applicable)	A, A-S, AA, AA-S	*		H(WS)	G

Remarks: * 8 pCi/L
If two or more radionuclides are present, the sum of their doses shall not exceed annual potential dose of 4 millirems per year.

§ Styrene (100-42-5)	A, A-S, AA, AA-S	50		H(WS)	D
	GA	5		H(WS)	J
Sulfate (Not Applicable)	A, A-S, AA, AA-S	250,000		H(WS)	G
	GA	250,000		H(WS)	F
Sulfides, total (Not Applicable)	A, A-S, AA, AA-S		50*	H(WS)	D
	GA		50*	H(WS)	D
	A, A-S, AA, AA-S, B, C	**		A	
	SA, SB, SC	**		A	
	I		**	A	

Remarks: Values listed apply to sum of these substances.
* Expressed as hydrogen sulfide.
** Refer to entry for "Hydrogen Sulfide."

Sulfite (Not Applicable)	A, A-S, AA, AA-S, B, C	200		A	N
§ Tebuthiuron (34014-18-1)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA	50		H(WS)	J
§ Terbacil (5902-51-2)	GA	50		H(WS)	J

TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: October 1993

MICROGRAMS/LITER

SUBSTANCE (CAS NO.)	WATER CLASSES	STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ Theophylline (58-55-9)	A, A-S, AA, AA-S	40		H(WS)	B
	GA		40	H(WS)	B
§ Thiram (137-26-8)	GA	1.8		H(WS)	F
§ Toluene (108-88-3)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
§ o-Toluidine (95-53-4)	A, A-S, AA, AA-S		0.6	H(WS)	A
	GA	5		H(WS)	J
§ Tolyltriazole (29385-43-1)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z
Toxaphene (8001-35-2)	A, A-S, AA, AA-S		0.01	H(WS)	
	GA	ND		H(WS)	
	A, A-S, AA, AA-S, B, C	0.005		A	N
	D	1.6		A	Q
	SA, SB, SC	0.005		A	N
	I		0.005	A	N
	SD		0.07	A	Q
§ 1,2,4-Tribromobenzene (615-54-3)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
§ Tributyltin oxide (56-35-9)	A, A-S, AA, AA-S		50	H(WS)	Z
	GA		50	H(WS)	Z

TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: October 1993

MICROGRAMS/LITER

SUBSTANCE (CAS NO.)	WATER CLASSES	STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
§ 1,2,3-Trichloropropane (96-18-4)	A, A-S, AA, AA-S		5*	H(WS)	I
	GA	5		H(WS)	J
§ cis-1,2,3-Trichloropropene (13116-57-9)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
§ trans-1,2,3-Trichloropropene (13116-58-0)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
§ alpha,2,4-Trichlorotoluene (94-99-5)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
§ ha,2,6-Trichlorotoluene (2014-83-7)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
§ alpha,3,4-Trichlorotoluene (102-47-6)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
lpha,alpha,2-Trichlorotoluene 38-66-4)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
§ alpha,alpha,4-Trichlorotoluene 13940-94-8)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
§ 2,3,4-Trichlorotoluene 7359-72-0)	A, A-S, AA, AA-S		0.34	H(WS)	B,E
	GA	5		H(WS)	J
§ 2,3,5-Trichlorotoluene (56961-86-5)	A, A-S, AA, AA-S		0.34	H(WS)	B,E
	GA	5		H(WS)	J
§ 2,3,6-Trichlorotoluene (2077-46-5)	A, AS, AA, AA-S		0.34	H(WS)	B
	GA	5		H(WS)	J

Remark: * This substance did not receive a review beyond determining that it is in a principal organic contaminant class and that it does not have a more stringent Specific MCL. A more in-depth reivew, currently underway, could lead to a more (but not less) stringent guidance value.

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TABLE 1 (continued)

NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES

Date of Revision: October 1993

MICROGRAMS / LITER

SUBSTANCE (CAS NO.)	WATER CLASSES	STANDARD	GUIDANCE VALUE	TYPE	BASIS CODE
Vanadium (Not Applicable)	A, A-S, AA, AA-S, B, C	14		A	N
	D	190		A	O
Remarks: Values listed apply to acid-soluble form.					
§ Vinyl chloride (75-01-4)	A, A-S, AA, AA-S		0.3	H(WS)	A
	GA	2		H(WS)	G
§ Xylenes (95-47-6; 108-38-3; 106-42-3; 1330-20-7)	A, A-S, AA, AA-S		5	H(WS)	I
	GA	5		H(WS)	J
Remarks: Values listed applies to each isomer (1,2-, 1,3-, and 1,4-) individually.					
Zinc (Not Applicable)	A, A-S, AA, AA-S	300		H(WS)	H
	GA	300		H(WS)	H
	A, A-S, AA, AA-S, B, C	30		A	N
	D	*		A	Q
	SA, SB, SC	58		A	
	I		67	A	
	SD	170		A	

Remarks: * exp (0.83 [ln (ppm hardness)] + 1.95)
Aquatic standards and guidance value apply to acid-soluble form.

Note: **The department has proposed revisions to the aquatic values for zinc. New standards are likely to be adopted and would become effective in about two months. An insert sheet for this TOGS with the new zinc values will be available at that time.**

§ Zineb (12122-67-7)	GA	1.8		H(WS)	F
§ Ziram (137-30-4)	GA	4.2		H(WS)	F

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TABLE 2 (Continued)

PARTIAL LIST OF SUBSTANCES REGULATED BY
THE PRINCIPAL ORGANIC CONTAMINANT (POC)
GROUNDWATER STANDARD OF 5 ug/L

October, 1993

Note: Refer to Section III of Introduction for Explanation

LINE NO.	SUBSTANCE	CAS NO.
26	3-Chlorotoluene	108-41-8
27	4-Chloro-o-toluidine	95-69-2
28	3-Chloro-1,1,1-trifluoropropane	460-35-5
29	Cyanogen bromide	506-68-3
30	Cyanogen chloride	506-77-4
31	1,2-Dibromobenzene	583-53-9
32	1,3-Dibromobenzene	108-36-1
33	1,4-Dibromobenzene	106-37-6
34	3,3'-Dichlorobenzidine	91-94-1
35	cis-1,4-Dichloro-2-butene	1476-11-5
36	trans-1,4-Dichloro-2-butene	110-57-6
37	1,2-Difluoro-1,1,2,2-tetrachloroethane	76-12-0
38	1,2-Diisopropylbenzene	577-55-9
39	1,3-Diisopropylbenzene	99-62-7
40	1,4-Diisopropylbenzene	100-18-5
41	2,3-Dimethylaniline	87-59-2
42	2,4-Dimethylaniline	95-68-1
43	2,5-Dimethylaniline	95-78-3
44	2,6-Dimethylaniline	87-62-7
45	3,4-Dimethylaniline	95-64-7
46	3,5-Dimethylaniline	108-69-0
47	3,3'-Dimethylbenzidine	119-93-7
48	4,4'-Dimethylbibenzyl	538-39-6
49	4,4'-Dimethyldiphenylmethane	4957-14-6
50	alpha, alpha-Dimethyl phenethylamine	122-09-8

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TABLE 2 (Continued)

PARTIAL LIST OF SUBSTANCES REGULATED BY THE PRINCIPAL ORGANIC CONTAMINANT (POC) GROUNDWATER STANDARD OF 5 ug/L

October, 1993

Note: Refer to Section III of Introduction for Explanation

LINE NO.	SUBSTANCE	CAS NO.
77	4-Nitroaniline	100-01-6
78	2-Nitrotoluene	88-72-2
79	3-Nitrotoluene	99-08-1
80	4-Nitrotoluene	99-99-0
81	5-Nitro-o-toluidine	99-55-8
82	Pendimethalin	40487-42-1
83	Pentachlorobenzene	608-93-5
84	Pentachloroethane	76-01-7
85	1,2-Phenylenediamine	95-54-5
86	1,3-Phenylenediamine	108-45-2
87	1,4-Phenylenediamine	106-50-3
88	Phenylhydrazine	100-63-0
89	Polybrominated biphenyls (PBBs)*	59536-65-1*
90	alpha, alpha, alpha,4-Tetrachlorotoluene	5216-25-1
91	Toluene-2,4-diamine	95-80-7
92	Toluene-2,5-diamine	95-70-5
93	Toluene-2,6-diamine	823-40-5
94	2,4,6-Trichloroaniline	634-93-5
95	sym-Trinitrobenzene	99-35-4
96	2,3,4-Trinitrotoluene	602-29-9
97	2,3,6-Trinitrotoluene	18292-97-2
98	2,4,5-Trinitrotoluene	610-25-3
99	2,4,6-Trinitrotoluene	118-96-7
100	3,4,5-Trinitrotoluene	603-15-6

* POC standard applies to each congener individually.

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TABLE 3 (Continued)

PARTIAL LIST OF SUBSTANCES NOT REGULATED BY THE PRINCIPAL ORGANIC CONTAMINANT (POC) GROUNDWATER STANDARD

October, 1993

Note: Refer to Section III of Introduction for Explanation

(No standard or guidance value for groundwater is available for these substances as of the date of this document)

LINE NO.	SUBSTANCE	CAS NO.
25	1-Butanol	71-36-3
26	Cacodylic acid	75-60-5
27	Caprolactam	105-60-1
28	Captafol	2425-06-1
29	Carbazole	86-74-8
30	Carbon disulfide	75-15-0
31	Chloral	75-87-6
32	Chloroacetic acid	79-11-8
33	Chlorobenzilate	510-15-6
34	4-Chlorobenzoic acid	74-11-3
35	2-Chloroethyl vinyl ether	110-75-8
36	4-(4-Chloro-2-methylphenoxy)butyric acid	94-81-5
37	2-(4-Chloro-2-methylphenoxy)propionic acid	93-65-2
38	4-Chlorophenyl phenyl ether	7005-72-3
39	Chlorpyrifos	2921-88-2
40	Cimectacarb	95266-40-3
41	Clopyralid	1702-17-6
42	Cyanazine	21725-46-2
43	Cyclohexane	110-82-7
44	Cyclohexanol	108-93-0
45	Cyclohexanone	108-94-1
46	Cyclohexanone oxime	100-64-1
47	Cyclohexene	110-83-8
48	Cyclohexylamine	108-91-8

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TABLE 3 (Continued)

PARTIAL LIST OF SUBSTANCES NOT REGULATED BY THE PRINCIPAL ORGANIC CONTAMINANT (POC) GROUNDWATER STANDARD

October, 1993

Note: Refer to Section III of Introduction for Explanation

(No standard or guidance value for groundwater is available for these substances as of the date of this document)

LINE NO.	SUBSTANCE	CAS NO.
73	Diisopropylamine	108-18-9
74	Diisopropyl ether	108-20-3
75	Dimethoate	60-51-5
76	3,3'-Dimethoxybenzidine	119-90-4
77	Dimethylamine	124-40-3
78	4-(Dimethylamino)azobenzene	60-11-7
79	7,12-Dimethylbenz(a)anthracene	57-97-6
80	Dimethylbenzylammonium chloride	1875-92-9
81	trans-1,4-Dimethylcyclohexane	2207-04-7
82	Dimethyldioxane	25136-55-4
83	Dimethyldithiocarbamate	79-45-8
84	Dimethylethylbenzylammonium chloride	5197-80-8
85	2,5-Dimethylfuran	625-86-5
86	1,1-Dimethylhydrazine	57-14-7
87	1,2-Dimethylhydrazine	540-73-8
88	Dimethylphenylcarbinol	617-94-7
89	Dimethylterephthalate	120-61-6
90	1,4-Dioxane	123-91-1
91	Dodecanoic acid	143-07-7
92	Endosulfan I	959-98-8
93	Endosulfan II	33213-65-9
94	Endosulfan sulfate	1031-07-8

TABLE 3 (Continued)

PARTIAL LIST OF SUBSTANCES NOT REGULATED BY THE PRINCIPAL ORGANIC CONTAMINANT (POC) GROUNDWATER STANDARD

October, 1993

Note: Refer to Section III of Introduction for Explanation

(No standard or guidance value for groundwater is available for these substances as of the date of this document)

LINE NO.	SUBSTANCE	CAS NO.
118	3-Heptanol	589-82-2
119	4-Heptanol	589-55-9
120	Hexamethylene diamine	124-09-4
121	Hexanate	25056-70-6
122	n-Hexane	110-54-3
123	3-Hexanone	589-38-8
124	Hydrazine	302-01-2
125	3-Hydroxycarbofuran	16655-82-6
126	α-Hydroxy-α-methylbenzeneacetic acid	515-30-0
127	1,3-Isobenzofurandione	85-44-9
128	1(3H)-Isobenzofuranone	87-41-2
129	Isobutyl alcohol	78-83-1
130	Isodecyl diphenylphosphate	29761-21-5
131	Isopropyl alcohol	67-63-0
132	Isopropylamine	75-31-0
133	Isopropylbenzene hydroperoxide	80-15-9
134	Isosafrole	120-58-1
135	Isothiazolones	NA*
136	Linear alkylbenzenesulfonates	NA
137	Linuron	330-55-2
138	2,5-Lutidine	589-93-5
139	Maleic anhydride	108-31-6
140	Maleic hydrazide	123-33-1
141	Malononitrile	109-77-3

TABLE 3 (Continued)

PARTIAL LIST OF SUBSTANCES NOT REGULATED BY THE PRINCIPAL ORGANIC CONTAMINANT (POC) GROUNDWATER STANDARD

October, 1993

Note: Refer to Section III of Introduction for Explanation

(No standard or guidance value for groundwater is available for these substances as of the date of this document)

LINE NO.	SUBSTANCE	CAS NO.
166	2-Methylnaphthalene	91-57-6
167	Methylolmethacrylamide	923-02-4
168	4-Methyl-2-pentanone	108-10-1
169	Methylphthalate	4376-18-5
170	Methyl tert-butyl ether	1634-04-4
171	Metolachlor	51218-45-2
172	Molinate	2212-67-1
173	1,4-Naphthoquinone	130-15-4
174	1-Napthylamine	134-32-7
175	2-Napthylamine	91-59-8
176	Nitrocyclohexane	1122-60-7
177	Nitrofurantoin	67-20-9
178	Nitrofurazone	59-87-0
179	2-Nitropropane	79-46-9
180	4-Nitroquinoline-1-oxide	56-57-5
181	N-Nitrosodi-N-butylamine	924-16-3
182	N-Nitrosodiethylamine	55-18-5
183	N-Nitrosodimethylamine	62-75-9
184	N-Nitrosodipropylamine	621-64-7
185	N-Nitrosomethylethylamine	10595-95-6
186	N-Nitroso-N-methyl urea	684-93-5
187	N-Nitrosomorpholine	59-89-2
188	N-Nitrosopiperidine	100-75-4
189	N-Nitrosopyrrolidine	930-55-2

TABLE 3 (Continued)

PARTIAL LIST OF SUBSTANCES NOT REGULATED BY THE PRINCIPAL ORGANIC CONTAMINANT (POC) GROUNDWATER STANDARD

October, 1993

Note: Refer to Section III of Introduction for Explanation

(No standard or guidance value for groundwater is available for these substances as of the date of this document)

LINE NO.	SUBSTANCE	CAS NO.
214	Rhodamine WT	37299-86-8
215	Ronnel	299-84-3
216	Rotenone	83-79-4
217	Safrole	94-59-7
218	Sodium adipate, disodium salt	7486-38-6
219	Sodium diethyldithiocarbamate	148-18-5
220	Strychnine	57-24-9
221	Tetraethyl dithiopyrophosphate	3689-24-5
222	Tetraethyl lead	78-00-2
223	Tetraethyl tin	597-64-8
224	2-(Thiocyanomethylthio) benzothiazole	21564-17-0
225	Thiofanox	39196-18-4
226	Thiourea	62-56-6
227	Toluene diisocyanate	584-84-9
228	Triallate	2303-17-5
229	alpha, alpha, alpha-Trichlorotoluene	98-07-7
230	Triethylamine	121-44-8
231	o,o,o-Triethylphosphorothioate	126-68-1
232	3,3,5-Trimethylcyclohexanone	873-94-9
233	Trimethyl phosphate	512-56-1
234	Vernolate	1929-77-7
235	Vinyl acetate	108-05-4
236	Warfarin	81-81-2

* NA = Not Applicable

TABLE 5

DEFINITION FOR PRINCIPAL ORGANIC CONTAMINANT CLASSES*

(excerpted from 6 NYCRR Section 700.1)

Principal organic contaminant classes means the following classes of organic chemicals.

(1) Halogenated alkane: Compound containing carbon (C), hydrogen (H) and halogen (X) where X = fluorine (F), chlorine (Cl), bromine (Br) and/or iodine (I), having the general formula $C_nH_yX_z$, where $y + z = 2n + 2$; n, y and z are integer variables; n and z are equal to or greater than one and y is equal to or greater than zero.. Specifically excluded from this class are chloroform, bromoform, bromodichloromethane and dibromochloromethane.

(2) Halogenated ether: Compound containing carbon (C), hydrogen (H), oxygen (O) and halogen (X) (where X = F, Cl, Br and/or I) having the general formula $C_nH_yX_zO$, where $y + z = 2n + 2$; the oxygen is bonded to two carbons; n, y and z are integer variables; n is equal to or greater than two, y is equal to or greater than zero and z is equal to or greater than one.

(3) Halobenzenes and substituted halobenzenes: Derivatives of benzene which have at least one halogen atom attached to the ring and which may or may not have straight or branched chain hydrocarbon, nitrogen or oxygen substituents.

(4) Benzene and alkyl- or nitrogen-substituted benzenes: Benzene or a derivative of benzene which has either an alkyl- and/or a nitrogen-substituent.

(5) Substituted, unsaturated hydrocarbons: A straight or branched chain unsaturated hydrocarbon compound containing one of the following: halogen, aldehyde, nitrile, amide.

(6) Halogenated non-aromatic cyclic hydrocarbons: A non-aromatic cyclic compound containing a halogen.

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*Note: Determining the applicability of the POC groundwater standard to a specific substance can be a complex process that should not be undertaken using these definitions alone. Refer to Section III of the Introduction of this TOGS (page 7) for instructions.

INDEX OF TOGS 1.1.1. TABLE 1, 2 AND 3 ENTRIES BY
CHEMICAL ABSTRACTS SERVICE REGISTRY (CAS) NUMBER
October, 1993
(Continued)

CAS Number	Entry	Table
NA	Cyanide	1
NA	Dalapon	1
NA	Fluoride	1
NA	Foaming agents	1
NA	Gross alpha radiation	1
NA	Gross beta radiation	1
NA	Iron; Iron and Manganese	1;1
NA	Isothiazolones, total; Isothiazolones	1;3
NA	Lead	1
NA	Linear alkylbenzene sulfonates (LAS)	1;3
NA	Magnesium	1
NA	Manganese; Iron and Manganese	1;1
NA	Mercury	1
NA	Methylbenz(a)anthracenes	1
NA	Nickel	1
NA	Nitrate and Nitrite, total	1
NA	Nitrilotriacetic acid	1
NA	Nitrite; Nitrate and Nitrite, total	1;1
NA	Phenolic compounds (total phenols)	1
NA	Phenols, total chlorinated	1
NA	Phenols, total unchlorinated	1
NA	Phosphorus	1
NA	Picloram	1
NA	Polychlorinated biphenyls	1
NA	Principal organic contaminant	1;3
NA	Quaternary ammonium compounds	1;1
NA	Radium 226; Radium 226 and Radium 228	1
NA	Radium 226 and Radium 228	1
NA	Selenium	

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INDEX OF TOGS 1.1.1, TABLE 1, 2 AND 3 ENTRIES BY
CHEMICAL ABSTRACTS SERVICE REGISTRY (CAS) NUMBER
October, 1993.
(Continued)

CAS Number	Entry	Table
57-97-6	7, 12-Dimethylbenz(a)anthracene	3
58-55-6	Propylene glycol	3
58-55-9	Theophylline	1
58-89-9	Hexachlorocyclohexanes (Gamma Isomer)	1
59-87-0	Nitrofurazone	3
59-89-2	N-Nitrosomorpholine	3
60-11-7	4-(Dimethylamino)azobenzene	3
60-29-7	Ethyl ether	3
60-51-5	Dimethoate	3
60-57-1	Aldrin and Dieldrin; Dieldrin	1;1
62-38-4	Phenylmercuric acetate	3
62-44-2	Phenacitin	3
62-50-0	Ethyl methane sulfonate	3
62-53-3	Aniline	1
62-56-6	Thiourea	3
62-75-9	N-Nitrosodimethylamine	3
63-25-2	Carbaryl	1
64-18-6	Formic acid	3
65-85-0	Benzoic acid	3
66-27-3	Methylmethanesulfonate	3
67-20-9	Nitrofurantoin	3
67-45-8	Furazolidone	3
67-56-1	Methanol	3
67-63-0	Isopropyl alcohol	1
67-64-1	Acetone	1
67-66-3	Chloroform	2
67-72-1	Hexachloroethane	1
68-12-2	Dimethylformamide	2
70-30-4	Hexachlorophene	

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INDEX OF TOGS 1.1.1. TABLE 1 2 AND 3 ENTRIES BY
CHEMICAL ABSTRACTS SERVICE REGISTRY (CAS) NUMBER
October, 1993
(Continued)

CAS Number	Entry	Table
75-60-5	Cacodylic acid	3
75-69-4	Trichlorofluoromethane	1
75-71-8	Dichlorodifluoromethane	1
75-86-5	Acetone cyanohydrin	3
75-87-6	Chloral	3
76-01-7	Pentachloroethane	2
76-12-0	1,2-Difluoro-1,1,2,2-tetrachloroethane	2
76-13-1	Trichlorotrifluoroethanes(1,1,2-Trichloro-1,2,2-trifluoroethane)	1
76-44-8	Heptachlor & Heptachlor epoxide	1
77-47-4	Hexachlorocyclopentadiene	1
77-58-7	Dibutyltin dilaurate	3
77-73-6	Dicyclopentadiene	3
78-00-2	Tetraethyl lead	3
78-59-1	Isophorone	1
78-83-1	Isobutyl alcohol	3
78-87-5	1,2-Dichloropropane	1
78-93-3	Methyl ethyl ketone	1
78-99-9	Dichloropropanes (1,1-)	1
79-00-5	1,1,2-Trichloroethane	1
79-01-6	Trichloroethylene	1
79-06-1	Acrylamide	2
79-10-7	Acrylic acid	1
79-11-8	Chloroacetic acid	3
79-20-9	Methyl acetate	3
79-34-5	1,1,2,2-Tetrachloroethane	1
79-39-0	Methacrylamide	3
79-41-4	Methacrylic acid	1
79-45-8	Dimethyldithiocarbamate	3
79-46-9	2-Nitropropane	3

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CHEMICAL ABSTRACTS SERVICE REGISTRY (CAS) NUMBER
October, 1993
(Continued)

CAS Number	Entry	Tab
99-55-8	5-Nitro-o-toluidine	2
99-59-2	2-Methoxy-5-nitroaniline	3
99-62-7	1,3-Diisopropylbenzene	2
99-65-0	1,3-Dinitrobenzene	2
99-87-6	4-Isopropyltoluene	1
99-99-0	4-Nitrotoluene	2
100-00-5	4-Chloronitrobenzene	2
100-01-6	4-Nitroaniline	2
100-18-5	1,4-Diisopropylbenzene	2
100-41-4	Ethylbenzene	1
100-42-5	Styrene	1
100-44-7	Benzyl chloride	3
100-51-6	Benzyl alcohol	3
100-52-7	Benzaldehyde	3
100-61-8	N-Methylaniline	2
100-63-0	Phenylhydrazine	2
100-64-1	Cyclohexanone oxime	3
100-66-3	Anisole	3
100-75-4	N-Nitrosopiperidine	3
100-80-1	3-Methylstyrene	1
101-14-4	4,4'-Methylene-bis-(2-chloroaniline)	2
101-55-3	4-Bromophenylphenylether	3
101-61-1	4,4'-Methylene-bis-(N,N'-dimethyl)aniline	2
101-84-8	Phenyl ether	1
102-47-6	alpha, 3,4-Trichlorotoluene	1
103-23-1	Di(2-ethylhexyl)adipate	1
103-33-3	Azobenzene	1
103-65-1	n-Propylbenzene	1
103-82-2	Benzeneacetic acid	3

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INDEX OF TOGS 1.1.1. TABLE 1, 2 AND 3 ENTRIES BY
CHEMICAL ABSTRACTS SERVICE REGISTRY (CAS) NUMBER
October, 1993
(Continued)

CAS Number	Entry	Table
108-38-3	Xylenes (1,3- or meta)	1
108-41-8	3-Chlorotoluene	2
108-42-9	3-Chloroaniline	2
108-44-1	3-Aminotoluene	2
108-45-2	1,3-Phenylenediamine	2
108-60-1	Bis(2-chloro-1-methylethyl)ether	2
108-67-8	Trimethylbenzenes (1,3,5-)	1
108-69-0	3,5-Dimethylaniline	2
108-70-3	Trichlorobenzenes (1,3,5-)	1
108-75-8	Trimethylpyridines (2,4,6-)	1
108-86-1	Bromobenzene	1
108-88-3	Toluene	1
108-90-7	Chlorobenzene	1
108-91-8	Cyclohexylamine	3
108-93-0	Cyclohexanol	3
108-94-1	Cyclohexanone	3
108-95-2	Phenol	1
109-06-8	alpha-Picoline	3
109-69-3	1-Chlorobutane	2
109-77-3	Malononitrile	3
109-78-4	Ethylene cyanohydrin	3
109-86-4	2-Methoxyethanol	3
109-89-7	Diethylamine	3
109-99-9	Tetrahydrofuran	1
110-00-9	Furan	3
110-49-6	2-Methoxyethanol acetate	3
110-54-3	n-Hexane	3
110-57-6	trans-1,4-Dichloro-2-butene	2
110-75-8	2-Chloroethyl vinyl ether	3

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October, 1993
(Continued)

CAS Number	Entry	Table
120-82-1	Trichlorobenzenes (1,2,4-)	1
120-83-2	2,4-Dichlorophenol	1
120-92-3	Cyclopentanone	3
121-14-2	2,4-Dinitrotoluene	2
121-44-8	Triethylamine	3
121-69-7	N,N-Dimethyl aniline	1
121-73-3	3-Chloronitrobenzene	2
121-75-5	Malathion	1
121-82-4	Cyclotrimethylenetrinitramine	3
122-09-8	alpha, alpha-Dimethylphenethylamine	2
122-34-9	Simazine	1
122-39-4	Diphenylamine	2
122-42-9	Propham	1
122-66-7	Diphenylhydrazines (1,2-)	1
123-31-9	Hydroquinone	1
123-33-1	Maleic hydrazide	3
123-73-9	trans-2-Butenal	2
123-91-1	1,4-Dioxane	3
124-09-4	Hexamethylene diamine	3
124-19-6	Nonanal	3
124-40-3	Dimethylamine	3
124-48-1	Dibromochloromethane	1
126-39-6	2-Methylethyl-1,3-dioxolane	1
126-68-1	o,o,o-Triethylphosphorothioate	3
126-75-0	Demeton (-S)	1
126-98-7	Methacrylonitrile	2
126-99-8	Chloroprene	2
127-18-4	Tetrachloroethylene	1
129-00-0	Pyrene	1

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October, 1993
(Continued)

CAS Number	Entry	Table
192-97-2	Benzo(e)pyrene	3
193-39-5	Indeno (1,2,3-cd)pyrene	1
205-99-2	Benzo(b)fluoranthene	1
206-44-0	Fluoranthene	1
207-08-9	Benzo(k)fluoranthene	1
208-96-8	Acenaphthylene	3
218-01-9	Chrysene	1
271-61-4	Benzisothiazole	1
297-97-2	o,o-Diethyl-o-2-pyrazinyl phosphorothioate	3
298-00-0	Parathion & Methyl parathion	1
298-02-2	Phorate & Disulfoton	1
298-03-3	Demeton (-o)	1
298-04-4	Phorate & Disulfoton	1
299-84-3	Ronnel	3
302-01-2	Hydrazine	1;3
309-00-2	Aldrin; Aldrin & Dieldrin	1;1
314-40-9	Bromacil	1
319-84-6	Hexachlorocyclohexanes (alpha)	1
319-85-7	Hexachlorocyclohexanes (beta)	1
319-86-8	Hexachlorocyclohexanes (delta)	1
328-84-7	3,4-Dichlorobenzotrifluoride	1
330-55-2	Linuron	3
333-41-5	Diazinon	1
354-58-5	Trichlorotrifluoroethanes (1,1,1-Trichloro-2,2,2-trifluoroethane)	1
460-35-5	3-Chloro-1,1,1-trifluoropropane	2
462-08-8	Aminopyridines (3-)	1
465-73-6	Isodrin	2
479-18-5	Dyphylline	1
501-52-0	Benzenepropanoic acid	3

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CHEMICAL ABSTRACTS SERVICE REGISTRY (CAS) NUMBER
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(Continued)

CAS Number	Entry	Table
591-78-6	2-Hexanone	1
594-18-3	Dibromodichloromethane	1
594-20-7	Dichloropropanes (2,2-)	1
597-64-8	Tetraethyl tin	3
598-77-6	1,1,2-Trichloropropane	1
602-01-7	2,3-Dinitrotoluene	2
602-29-9	2,3,4-Trinitrotoluene	2
603-15-6	3,4,5-Trinitrotoluene	2
606-20-2	2,6-Dinitrotoluene	1
608-73-1	Hexachlorocyclohexanes	1
608-93-5	Pentachlorobenzene	2
610-25-3	2,4,5-Trinitrotoluene	2
610-39-9	3,4-Dinitrotoluene	2
611-15-4	2-Methylstyrene	1
613-12-7	2-Methylanthracene	3
615-54-3	1,2,4-Tribromobenzene	1
617-84-4	Diethyl formamide	3
617-94-7	Dimethylphenylcarbinol	3
618-85-9	3,5-Dinitrotoluene	2
619-15-8	2,5-Dinitrotoluene	2
620-23-5	3-Methylbenzaldehyde	3
621-64-7	N-Nitrosodipropylamine	3
622-97-9	4-Methylstyrene	2
625-86-5	2,5-Dimethylfuran	3
627-26-9	trans-2-Butenenitrile	2
627-44-1	Diethyl mercury	3
630-20-6	1,1,1,2-Tetrachloroethane	1
634-66-2	Tetrachlorobenzenes (1,2,3,4-)	1
634-90-2	Tetrachlorobenzenes (1,2,3,5-)	1

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(Continued)

CAS Number	Entry	Table
1330-20-7	Xylenes	1
[illegible]4-6	Trimethylpyridines (2,3,6-)	1
1476-11-5	cis-1,4-Dichloro-2-butene	2
1563-66-2	Carbofuran	1
1582-09-8	Trifluralin	1
1589-49-7	Propylene glycol monomethyl ether	3
1610-18-0	Prometon	1
1634-04-4	Methyl tert-butyl ether	3
1646-87-3	Aldicarb sulfoxide	1
1646-88-4	Aldicarb sulfone	1
1689-84-5	Bromoxynil	3
1702-17-6	Clopyralid	3
1807-55-2	4,4'-Methylene-bis-(N-methyl)aniline	2
1861-32-1	Dimethyl tetrachloroterephthalate	1
1861-40-1	Benefin	1
1863-63-4	Benzoic acid, ammonium salt	3
1875-92-9	Dimethylbenzylammonium chloride	3
1888-71-7	Hexachloropropene	2
1897-45-6	Chlorothalonil	2
1912-24-9	Atrazine	1
1918-00-9	Dicamba	1
1918-16-7	Propachlor	1
1929-77-7	Vernolate	3
2008-41-5	Butylate	1
2014-83-7	alpha, 2,6-Trichlorotoluene	1
2077-46-5	2,3,6-Trichlorotoluene	1
2104-96-3	Bromophos	3
2136-79-0	Tetrachloroterephthalic acid	1
2164-17-2	Fluometuron	1

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(Continued)

CAS Number	Entry	Table
6639-30-1	2,4,5-Trichlorotoluene	1
7005-72-3	4-Chlorophenyl phenyl ether	3
7359-72-0	2,3,4-Trichlorotoluene	1
7421-93-4	Endrin aldehyde	2
7486-38-6	Sodium adipate, disodium salt	3
7664-41-7	Ammonia and Ammonium	1
7783-06-4	Hydrogen sulfide	1
8001-35-2	Toxaphene	1
8018-01-7	Mancozeb	1
8065-48-3	Demeton	1;3
9003-27-4	Polybutene(1-propene, 2-methyl homopolymer)	3
10061-01-5	cis-1,3-Dichloropropene	1
10061-02-6	trans-1,3-Dichloropropene	1
10222-01-2	2,2-Dibromo-3-nitrilopropionamide & Dibromoacetonitrile	1
10595-95-6	N-Nitrosomethylethylamine	3
12002-48-1	Trichlorobenzenes	1
12122-67-7	Zineb	1
12408-10-5	Tetrachlorobenzenes	1
12427-38-2	Maneb	1
13071-79-9	Terbufos	1
13116-57-9	cis-1,2,3-Trichloropropene	1
13116-58-0	trans-1,2,3-Trichloropropene	1
13560-89-9	Dechlorane Plus	1
13590-97-1	Dodecylguanidine acetate and Dodecyguanidine hydrochloride	1
13940-94-8	alpha, alpha, 4-Trichlorotoluene	1
14484-64-1	Ferbam	1
14838-15-4	Phenylpropanolamine	2
15798-64-8	cis-2-Butenal	1
15972-60-8	Alachlor	

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INDEX OF TOSS[illegible] TABLE [illegible]
CHEMICAL ABSTRACTS SERVICE REGISTRY (CAS) NUMBER
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CAS Number	Entry	Table
27134-26-5	See 95-51-2; 106-47-8 and 108-42-9	
29091-21-2	Prodiamine	3
29385-43-1	Tolyltriazole	1
29611-84-5*	See 108-75-8 and 1462-84-6	
29761-21-5	Isodecyl diphenyl phosphate	1;3
29797-40-8	See 95-73-8; 95-75-0; 118-69-4; 19398-61-9; 25186-47-4 and 32768-54-0	
30560-19-1	Acephate	3
31600-69-8	4-(1-Methylethoxy)-1-butanol	1
32768-54-0	Dichlorotoluenes (2,3-)	1
33213-65-9	Endosulfan II	3
33820-53-0	Isopropalin	2
34014-18-1	Tebuthiuron	1
35448-14-7	Oxalic acid, benzyl ester	3
37299-86-8	Rhodamine WT	3
39196-18-4	Thiofanox	3
40487-42-1	Pendimethalin	2
51218-45-2	Metolachlor	3
51235-04-2	Hexazinone	1
53494-70-5	Endrin ketone	2
56961-86-5	2,3,5-Trichlorotoluene	1
59536-65-1	Polybrominated biphenyls (PBBs)	2
68391-01-5	Alkyl dimethyl benzyl ammonium chloride	1
95266-40-3	Cimectacarb	3

* This non-individual CAS number also refers to one or more individual substances that are not specifically listed in Tables 1 and 2. These individual substances, however, may be encompassed by a group entry in Table 1 (for example, Principal Organic Contaminant or Phenolic Compounds). Refer to IB of the Introduction for an explanation of group entries.

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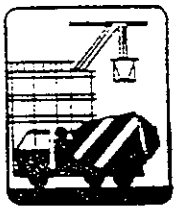
APPENDIX F

1990 ANNUAL BOOK OF ASTM STANDARDS



SECTION 4

Construction

VOLUME 04.08

Soil and Rock; Dimension Stone; Geosynthetics

Revision issued annually

16

Designation: D 1586 – 84

Standard Method for Penetration Test and Split-Barrel Sampling of Soils[1]

This standard is issued under the fixed designation D 1586, the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This method has been approved for use by agencies of the Department of Defense and for listing in the DOD Index of Specifications and Standards

1. Scope

1.1 This method describes the procedure, generally known as the Standard Penetration Test (SPT), for driving a split-barrel sampler to obtain a representative soil sample and a measure of the resistance of the soil to penetration of the sampler.

1.2 *This standard may involve hazardous materials, operations, and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of whoever uses this standard to consult and establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.* For a specific precautionary statement, see 5.4.1.

1.3 The values stated in inch-pound units are to be regarded as the standard.

2. Referenced Documents

2.1 *ASTM Standards:*

D 2487 Test Method for Classification of Soils for Engineering Purposes[2]

D 2488 Practice for Description and Identification of Soils (Visual-Manual Procedure)[2]

D 4220 Practices for Preserving and Transporting Soil Samples[2]

3. Descriptions of Terms Specific to This Standard

3.1 *anvil*—that portion of the drive-weight assembly which the hammer strikes and through which the hammer energy passes into the drill rods.

3.2 *cathead*—the rotating drum or windlass in the rope-cathead lift system around which the operator wraps a rope to lift and drop the hammer by successively tightening and loosening the rope turns around the drum.

3.3 *drill rods*—rods used to transmit downward force and torque to the drill bit while drilling a borehole.

3.4 *drive-weight assembly*—a device consisting of the hammer, hammer fall guide, the anvil, and any hammer drop system.

3.5 *hammer*—that portion of the drive-weight assembly consisting of the 140 ± 2 lb (63.5 ± 1 kg) impact weight which is successively lifted and dropped to provide the energy that accomplishes the sampling and penetration.

3.6 *hammer drop system*—that portion of the drive-weight assembly by which the operator accomplishes lifting and dropping of the hammer to produce the blow.

3.7 *hammer fall guide*—that part of the drive-weight assembly used to guide the fall of the hammer.

3.8 *N-value*—the blowcount representation of the penetration resistance of the soil. The *N*-value, reported in blows per foot, equals the sum of the number of blows required to drive the sampler over the depth interval of 6 to 18 in. (150 to 450 mm) (see 7.3).

3.9 *ΔN*—the number of blows obtained from each of the 6-in. (150-mm) intervals of sampler penetration (see 7.3).

3.10 *number of rope turns*—the total contact angle between the rope and the cathead at the beginning of the operator's rope slackening to drop the hammer, divided by 360° (see Fig. 1).

3.11 *sampling rods*—rods that connect the drive-weight assembly to the sampler. Drill rods are often used for this purpose.

3.12 *SPT*—abbreviation for Standard Penetration Test, a term by which engineers commonly refer to this method.

4. Significance and Use

4.1 This method provides a soil sample for identification purposes and for laboratory tests appropriate for soil obtained from a sampler that may produce large shear strain disturbance in the sample.

4.2 This method is used extensively in a great variety of geotechnical exploration projects. Many local correlations and widely published correlations which relate SPT blow count, or *N*-value, and the engineering behavior of earth works and foundations are available.

5. Apparatus

5.1 *Drilling Equipment*—Any drilling equipment that provides at the time of sampling a suitably clean open hole before insertion of the sampler and ensures that the penetration test is performed on undisturbed soil shall be acceptable. The following pieces of equipment have proven to be suitable for advancing a borehole in some subsurface conditions.

5.1.1 *Drag, Chopping, and Fishtail Bits*, less than 6.5 in. (162 mm) and greater than 2.2 in. (56 mm) in diameter may be used in conjuction with open-hole rotary drilling and casing-advancement drilling methods. To avoid disturbance of the underlying soil, bottom discharge bits are not permitted; only side discharge bits are permitted.

5.1.2 *Roller-Cone Bits*, less than 6.5 in. (162 mm) and greater than 2.2 in. (56 mm) in diameter may be used

[1] This method is under the jurisdiction of ASTM Committee D-18 on Soil and Rock and is the direct responsibility of Subcommittee D18.02 on Sampling and Related Field Testing for Soil Investigations.

Current edition approved Sept. 11, 1984. Published November 1984. Originally published as D 1586 – 58 T. Last previous edition D 1586 – 67 (1974).

[2] *Annual Book of ASTM Standards*, Vol 04.08.

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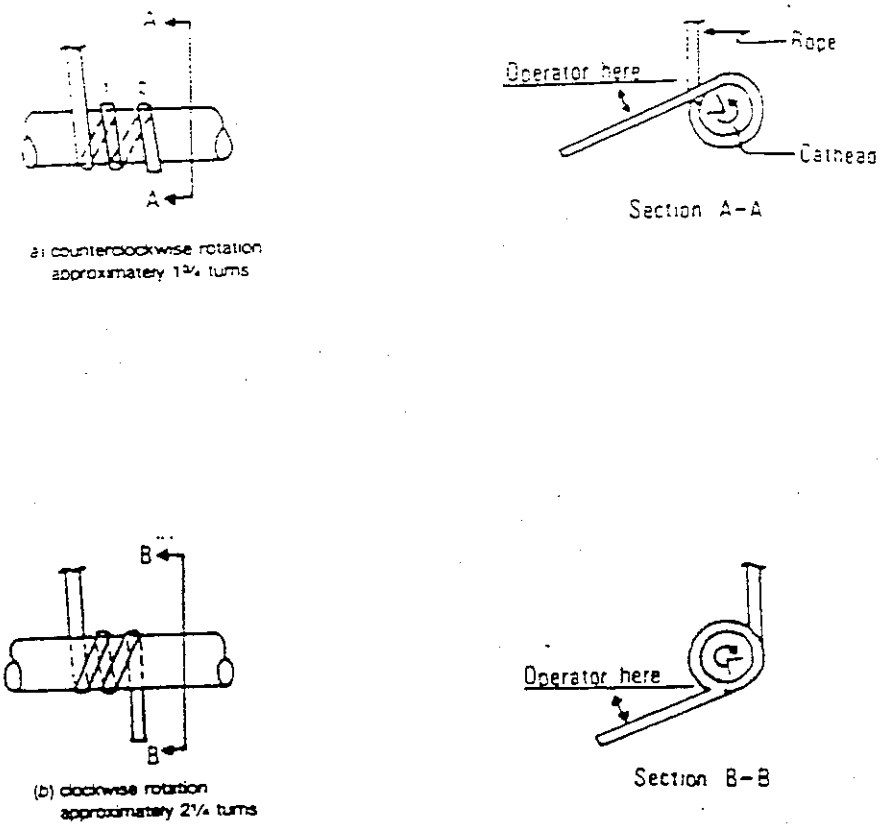


FIG. 1 Definitions of the Number of Rope Turns and the Angle for (a) Counterclockwise Rotation and (b) Clockwise Rotation of the Cathead

conjunction with open-hole rotary drilling or casing-advancement drilling methods if the drilling fluid discharge is deflected.

5.1.3 *Hollow-Stem Continuous Flight Augers*, with or without a center bit assembly, may be used to drill the boring. The inside diameter of the hollow-stem augers shall be less than 6.5 in. (162 mm) and greater than 2.2 in. (56 mm).

5.1.4 *Solid, Continuous Flight, Bucket and Hand Augers*, less than 6.5 in. (162 mm) and greater than 2.2 in. (56 mm) in diameter may be used if the soil on the side of the boring does not cave onto the sampler or sampling rods during sampling.

5.2 *Sampling Rods*—Flush-joint steel drill rods shall be used to connect the split-barrel sampler to the drive-weight assembly. The sampling rod shall have a stiffness (moment of inertia) equal to or greater than that of parallel wall "A" rod (a steel rod which has an outside diameter of 1⅝ in. (41.2 mm) and an inside diameter of 1⅛ in. (28.5 mm).

NOTE 1—Recent research and comparative testing indicates the type rod used, with stiffness ranging from "A" size rod to "N" size rod, will usually have a negligible effect on the *N*-values to depths of at least 100 ft (30 m).

5.3 *Split-Barrel Sampler*—The sampler shall be constructed with the dimensions indicated in Fig. 2. The driving shoe shall be of hardened steel and shall be replaced or repaired when it becomes dented or distorted. The use of liners to produce a constant inside diameter of 1⅜ in. (35 mm) is permitted, but shall be noted on the penetration record if used. The use of a sample retainer basket is permitted, and should also be noted on the penetration record if used.

NOTE 2—Both theory and available test data suggest that *N*-values may increase between 10 to 30 % when liners are used.

5.4 *Drive-Weight Assembly*:

5.4.1 *Hammer and Anvil*—The hammer shall weigh 140 ± 2 lb (63.5 ± 1 kg) and shall be a solid rigid metallic mass. The hammer shall strike the anvil and make steel on steel contact when it is dropped. A hammer fall guide permitting a free fall shall be used. Hammers used with the cathead and rope method shall have an unimpeded overlift capacity of at least 4 in. (100 mm). For safety reasons, the use of a hammer assembly with an internal anvil is encouraged.

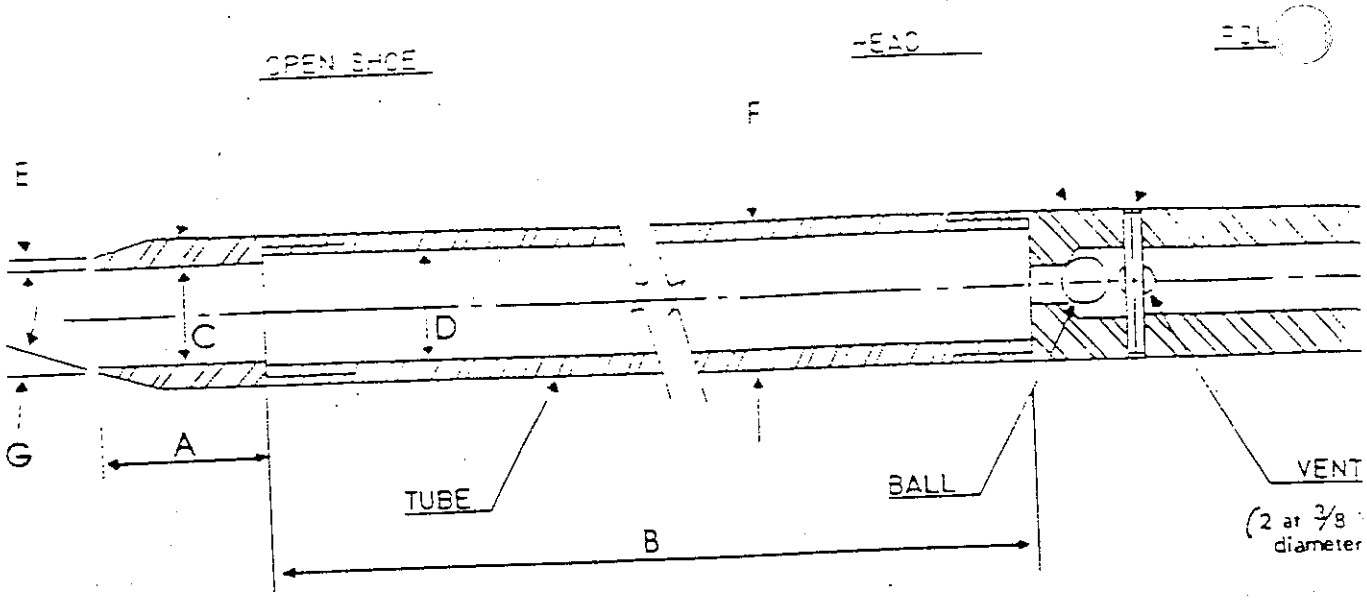
NOTE 3—It is suggested that the hammer fall guide be permanently marked to enable the operator or inspector to judge the hammer drop height.

5.4.2 *Hammer Drop System*—Rope-cathead, trip, semi-automatic, or automatic hammer drop systems may be used, providing the lifting apparatus will not cause penetration of the sampler while re-engaging and lifting the hammer.

5.5 *Accessory Equipment*—Accessories such as labels, sample containers, data sheets, and groundwater level measuring devices shall be provided in accordance with the requirements of the project and other ASTM standards.

6. Drilling Procedure

6.1 The boring shall be advanced incrementally to permit



A = 1.0 to 2.0 in. (25 to 50 mm)
B = 18.0 to 30.0 in. (0.457 to 0.762 m)
C = 1.375 ± 0.005 in. (34.93 ± 0.13 mm)
D = 1.50 ± 0.05 − 0.00 in. (38.1 ± 1.3 − 0.0 mm)
E = 0.10 ± 0.02 in. (2.54 ± 0.25 mm)
F = 2.00 ± 0.05 − 0.00 in. (50.8 ± 1.3 − 0.0 mm)
G = 16.0° to 23.0°

The 1½ in. (38 mm) inside diameter split barrel may be used with a 16-gage wall thickness split liner. The penetrating end of the drive shoe may be slightly rounded. Metal or plastic retainers may be used to retain soil samples.

FIG. 2 Split-Barrel Sampler

intermittent or continuous sampling. Test intervals and locations are normally stipulated by the project engineer or geologist. Typically, the intervals selected are 5 ft (1.5 mm) or less in homogeneous strata with test and sampling locations at every change of strata.

6.2 Any drilling procedure that provides a suitably clean and stable hole before insertion of the sampler and assures that the penetration test is performed on essentially undisturbed soil shall be acceptable. Each of the following procedures have proven to be acceptable for some subsurface conditions. The subsurface conditions anticipated should be considered when selecting the drilling method to be used.

6.2.1 Open-hole rotary drilling method.

6.2.2 Continuous flight hollow-stem auger method.

6.2.3 Wash boring method.

6.2.4 Continuous flight solid auger method.

6.3 Several drilling methods produce unacceptable borings. The process of jetting through an open tube sampler and then sampling when the desired depth is reached shall not be permitted. The continuous flight solid auger method shall not be used for advancing the boring below a water table or below the upper confining bed of a confined non-cohesive stratum that is under artesian pressure. Casing may not be advanced below the sampling elevation prior to sampling. Advancing a boring with bottom discharge bits is not permissible. It is not permissible to advance the boring for subsequent insertion of the sampler solely by means of previous sampling with the SPT sampler.

6.4 The drilling fluid level within the boring or hollow-stem augers shall be maintained at or above the in situ groundwater level at all times during drilling, removal of rods, and sampling.

7. Sampling and Testing Procedure

7.1 After the boring has been advanced to the des sampling elevation and excessive cuttings have been moved, prepare for the test with the following sequenc operations.

7.1.1 Attach the split-barrel sampler to the sampling and lower into the borehole. Do not allow the sample drop onto the soil to be sampled.

7.1.2 Position the hammer above and attach the any the top of the sampling rods. This may be done befor sampling rods and sampler are lowered into the boreho

7.1.3 Rest the dead weight of the sampler, rods, anvil drive weight on the bottom of the boring and apply a se blow. If excessive cuttings are encountered at the botto the boring, remove the sampler and sampling rods fror boring and remove the cuttings.

7.1.4 Mark the drill rods in three successive 6-in. (0.1 increments so that the advance of the sampler unde impact of the hammer can be easily observed for each (0.15-m) increment.

7.2 Drive the sampler with blows from the 140-lb (kg) hammer and count the number of blows applied in 6-in. (0.15-m) increment until one of the following occ

7.2.1 A total of 50 blows have been applied durin one of the three 6-in. (0.15-m) increments desc n

7.2.2 A total of 100 blows have been applied

7.2.3 There is no observed advance of the sampler (the application of 10 successive blows of the hammer.

7.3.4 The sampler is advanced the complete 18 in. (0.45 m) without the limiting blow counts occurring as described in 7.2.1, 7.2.2, or 7.2.3.

Record the number of blows required to effect each 6 in. (0.15 m) of penetration or fraction thereof. The first 6 in. is considered to be a seating drive. The sum of the number of blows required for the second and third 6 in. of penetration is termed the "standard penetration resistance," or the "*N*-value." If the sampler is driven less than 18 in. (0.45 m), as permitted in 7.2.1, 7.2.2, or 7.2.3, the number of blows per each complete 6-in. (0.15-m) increment and per each partial increment shall be recorded on the boring log. For partial increments, the depth of penetration shall be reported to the nearest 1 in. (25 mm), in addition to the number of blows. If the sampler advances below the bottom of the boring under the static weight of the drill rods or the weight of the drill rods plus the static weight of the hammer, this information should be noted on the boring log.

7.4 The raising and dropping of the 140-lb (63.5-kg) hammer shall be accomplished using either of the following two methods:

7.4.1 By using a trip, automatic, or semi-automatic hammer drop system which lifts the 140-lb (63.5-kg) hammer and allows it to drop 30 ± 1.0 in. (0.76 m ± 25 mm) unimpeded.

7.4.2 By using a cathead to pull a rope attached to the hammer. When the cathead and rope method is used the system and operation shall conform to the following:

7.4.2.1 The cathead shall be essentially free of rust, oil, or grease and have a diameter in the range of 6 to 10 in. (150 to mm).

7.4.2.2 The cathead should be operated at a minimum speed of rotation of 100 RPM, or the approximate speed of rotation shall be reported on the boring log.

7.4.2.3 No more than 2¼ rope turns on the cathead may be used during the performance of the penetration test, as shown in Fig. 1.

NOTE 4—The operator should generally use either 1¾ or 2¼ rope turns, depending upon whether or not the rope comes off the top (1¾ turns) or the bottom (2¼ turns) of the cathead. It is generally known and accepted that 2¾ or more rope turns considerably impedes the fall of the hammer and should not be used to perform the test. The cathead rope should be maintained in a relatively dry, clean, and unfrayed condition.

7.4.2.4 For each hammer blow, a 30-in. (0.76-m) lift and drop shall be employed by the operator. The operation of pulling and throwing the rope shall be performed rhythmically without holding the rope at the top of the stroke.

7.5 Bring the sampler to the surface and open. Record the percent recovery or the length of sample recovered. Describe the soil samples recovered as to composition, color, stratification, and condition, then place one or more representative portions of the sample into sealable moisture-proof containers (jars) without ramming or distorting any apparent stratification. Seal each container to prevent evaporation of soil moisture. Affix labels to the containers bearing job designation, boring number, sample depth and [illegible] count per 6-in. (0.15-m) increment. Protect the samples against extreme temperature changes. If there is a soil change within the sampler, make a jar for each stratum and note its location in the sampler barrel.

8. Report

8.1 Drilling information shall be recorded in the field and shall include the following:

8.1.1 Name and location of job,

8.1.2 Names of crew,

8.1.3 Type and make of drilling machine,

8.1.4 Weather conditions,

8.1.5 Date and time of start and finish of boring,

8.1.6 Boring number and location (station and coordinates, if available and applicable),

8.1.7 Surface elevation, if available,

8.1.8 Method of advancing and cleaning the boring,

8.1.9 Method of keeping boring open,

8.1.10 Depth of water surface and drilling depth at the time of a noted loss of drilling fluid, and time and date when reading or notation was made,

8.1.11 Location of strata changes,

8.1.12 Size of casing, depth of cased portion of boring,

8.1.13 Equipment and method of driving sampler,

8.1.14 Type sampler and length and inside diameter of barrel (note use of liners),

8.1.15 Size, type, and section length of the sampling rods, and

8.1.16 Remarks.

8.2 Data obtained for each sample shall be recorded in the field and shall include the following:

8.2.1 Sample depth and, if utilized, the sample number,

8.2.2 Description of soil,

8.2.3 Strata changes within sample,

8.2.4 Sampler penetration and recovery lengths, and

8.2.5 Number of blows per 6-in. (0.15-m) or partial increment.

9. Precision and Bias

9.1 Variations in *N*-values of 100 % or more have been observed when using different standard penetration test apparatus and drillers for adjacent borings in the same soil formation. Current opinion, based on field experience, indicates that when using the same apparatus and driller, *N*-values in the same soil can be reproduced with a coefficient of variation of about 10 %.

9.2 The use of faulty equipment, such as an extremely massive or damaged anvil, a rusty cathead, a low speed cathead, an old, oily rope, or massive or poorly lubricated rope sheaves can significantly contribute to differences in *N*-values obtained between operator-drill rig systems.

9.3 The variability in *N*-values produced by different drill rigs and operators may be reduced by measuring that part of the hammer energy delivered into the drill rods from the sampler and adjusting *N* on the basis of comparative energies. A method for energy measurement and *N*-value adjustment is currently under development.

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APPENDIX G

Cutlery

By HOWARD D. WHITMORE

Cutlery played a big part in the economy of Little Valley for many years. The Cattaraugus Cutlery Company was founded in 1876 by J.B.F. Champlin. This was the first cutlery shop and the leading industry in this town for many years. Cattaraugus Cutlery Company was the mother of the cutlery industry of Western New York.

Before J.B.F. Champlin founded the company he ran a jobbing business and sold imports mostly from England and Germany, the source of most cutlery at that time. That was the reason for so many English and German Families locating in this village. There was a great deal of rivalry between these two factions for many years in the each thought they were the best craftsmen.

Cattaraugus Cutlery records show that in 1876 there were three Case Brothers as directors of the company--J.D. Case, A.J. Case, and W.R. Case. These Cases were all brother-in-laws of J.B.F. Champlin. Their names were not in the books for long and later the Case Brothers Cutlery was formed and a building erected on Fair Oak Street. This was a three-story wood building and they started manufacturing pocket knives of the tested XX brand. Around 1915, fire destroyed this building. However, the brick office building still stands as the Bauman residence.

Later W.R. Case formed the company of W.R. Case & Son, which is located in Bradford, Pa. and is one of the largest pocket knife manufacturing plants in the United States. They also started a plant in Olean which is now owned by the Aluminum Company of America. They manufacture a line of kitchen cutlery.

The W.W. Wilson Cutlery Company was formed in the 1890's and they built a brick building on the north side of the Erie Railroad tracks. The building still stands and is the center of the Cattaraugus Cutlery complex of buildings. Only butcher knives were manufactured here. Around 1900 this company was sold to the Cattaraugus Cutlery Company who started building on the west side, as well as a forge shop in the rear. Up to this time, the Cattaraugus Cutlery Company plant was a three story wood building on Mill Street, located where Cutler Avenue is now. This plant was built with the thought that it could be run on water power. A large reservoir was built on the hill above Eagle Street which was to fill nights in order that water could be used during the day time for power. This was not a success. The reservoir was no more than a farm pond and did not hold water.

In 1907 the buildings were completed and the operation was moved from Mill Street to the location across he railroad tracks.

In 1880 J.B.F. Champlin built the opera house on the square. The offices were in that building and all goods were shipped from there.

George W. Korn from Chicago came to Little Valley and built a brick building on the east side [illegible] cutlery in the 1890's and formed the Korn Ra Manufacturing Company who make a complete line straight razors for Cattaraugus Cutlery Company and a for Sears, Roebuck Company of Chicago. This building s stands and is owned and used as a paint shop by t Cattaraugus County Highway Department.

In 1920's the pocket knife business was good a W.R. Case & Son and the Cattaraugus Cutlery Compa manufactured a line of hunting knives. These did not fit t well with the manufacture of pocket knives so they form a new company for the manufacture of hunting knives or Presidents of the two companies were Tine Champlin a Russell Case who were cousins--therefore the na "Kinfolks" originated.

Kinfolks later was sold to Dean Case. He start with the manufacture of razors along with hunting knives a some kitchen cutlery. He imported several razor craftsm from Geneva, N.Y. Paul Ilner was a tool and die maker a Max Krug was a skilled razor man. Max continued on Little Valley with razors and shears. He built a forge pl on Mill Street and finished his work at his residence a barn on Fair Oak Street. He made a line of barber suppl and shears for many years. This is also a business of t past.

Wallace Brown, a member of the Champlin a Case families, started the Ka-Bar Manufacturing Compa in Olean for the manufacture of pocket and hunting kniv His brother, Emerson Brown, also formed the Americ Home Company who made compressed hones for t straight razor trade.

The Burrell Cutlery Company of Ellicottville is a an offspring of the Champlin and Cases. At this plant th manufacture kitchen cutlery. The company was formed Harold Burrell but is now run by his son, Dean. Dea mother, Addie Case Burrell, is still active in the compa and holds an office.

In late years, everyone knows about John a Adolph Stoll's homemade knives. They bought parts a assembled and finished them, selling in this area.

George Sherman started a paper box factory Rock City Street. This was for small boxes for poc knives. This plant folded around the turn of the cent and Mr. Sherman went to work for the Cattaraugus Cutl Company for many, many years.

Another cutlery plant that not too many know ab was one started at the end of Bucktooth Street, now kno as Fourth Street, and on the same site as Harold Kuhanec barn. This was of short duration and they only made par knives. The plant was operated by Hugh Champlin nephew of J.B.F. Champlin.

Before the Cattaraugus Cutlery Company moved the hill, all the Wilson Butcher Knife plant machinery w moved to Franklinville and the Ontario Knife Company w formed by the Barretts. The Wilson line of butcher kni are still manufactured here.

APPENDIX H

1.3.1

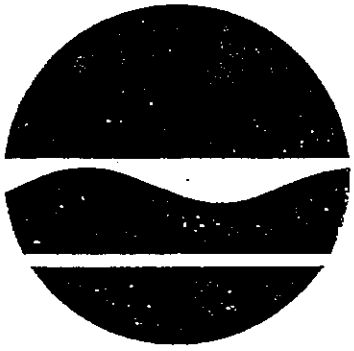
Received 11/06/94

Immediate Investigation Work Assignment
Work Assignment # D002925-06

Triangle at Little Valley

(Routes 242 & 353)
(Former Envirotech Drum Site)

Town of Little Valley, Cattaraugus County



Prepared by:

New York Department of Environmental Conservation
Division of Hazardous Waste Remediation
Region 9

Langdon Marsh	Michael J. O'Toole,Jr., P.E.	John J. Spagnoli
Commissioner	Director	Regional Director

November 1994

TRIANGLE AT LITTLE VALLEY
ROUTES 353 & 242
LITTLE VALLEY(T), CATTARAUGUS COUNTY

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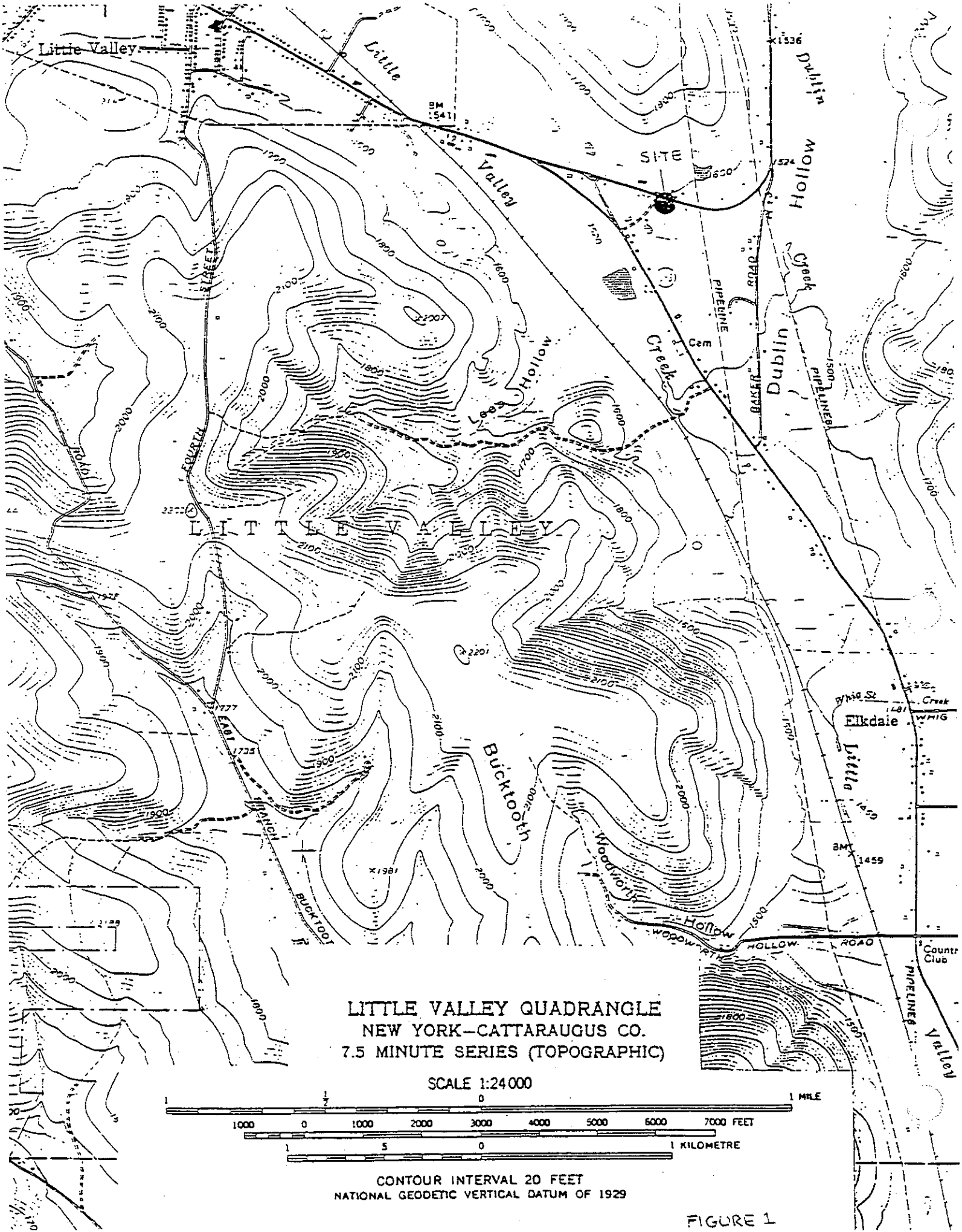
1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

During the past several years the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) have been investigating trichloroethene (TCE) contamination of groundwater in the Little Valley Area. There are several potential sources for this contamination including the project site. This investigation will serve to answer whether the former Envirotech Drum Storage (Route 242) site is acting as a source contributor to the identified trichloroethene contamination. As part of an Immediate Investigation Work Assignment (IIWA), Camp Dresser & McKee was contracted to provide field services necessary to accomplish this task. The work included the installation of soil borings and groundwater monitoring probes using the Geoprobe® method. Based on the field conditions encountered, samples were be collected for soil gas, soil and groundwater at each location. Analysis of the samples was conducted in the field by Tetra-K Testing.

1.2 SITE HISTORY

Trichloroethene contamination has been identified in the ground water over a widespread area in the vicinity of the Village of Little Valley. This area ranges from the Village of Little Valley in the north (1.8 miles northwest of the Route 242 site) to just north of the City of Salamanca (4.8 miles south-southeast of the Route 242 site). In 1992, the Department's Division of Water and the Division of Hazardous Waste Remediation conducted an investigation in the area of the Village of Little Valley. This investigation concentrated it's effort on the Village to assess the possible contamination from several industrial and municipal facilities such as the: Village of Little Valley's Ninth Street Landfill, the King Windows Plant, Bush Industries, and the Cattaraugus Department of Public Works (former Corn Cutlery Plant). A discussion of this study and the conclusions of that investigation can be found in the report entitled, **Geotechnical**



LITTLE VALLEY QUADRANGLE
NEW YORK—CATTARAUGUS CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETRE

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

FIGURE 1

Investigation. Little Valley, Towns of Little Valley and Salamanca, Cattaraugus Co., New York, dated May 1994 that was prepared by the NYSDEC. A summary of the conclusions of the report are as follows:

1. Results of the analyses of samples from the public water supply wells for the Village of Little Valley show no evidence of contamination.

2. Results of the analyses of groundwater downgradient of the former landfill on Ninth Street Landfill show no presence of TCE.

3. The analyses of groundwater on the Bush Industries Inc. property showed TCE and dichloroethene (DCE) to be present at between 27 ug/l and 186 ug/l. The NYS groundwater drinking water limitation for TCE is 5 ug/l. No TCE or DCE was detected in groundwater upgradient of the facility. Groundwater approximately 400 feet downgradient of Bush showed only a trace of TCE (1.4 ug/l).

4. No TCE was detected in groundwater at the King Windows or Cattaraugus Department of Public Works facilities.

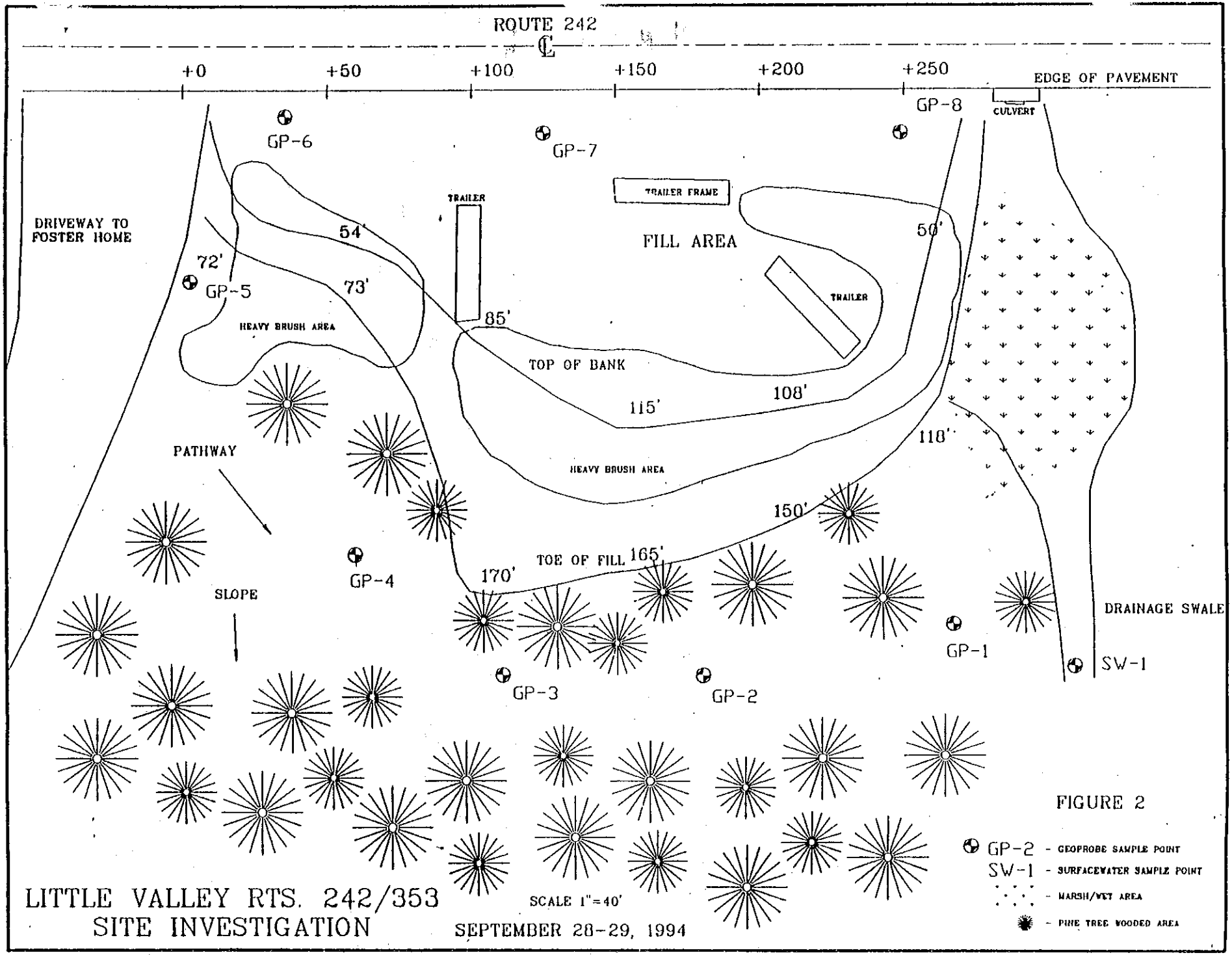
The recommendations of this report was that an additional subsurface investigation should be undertaken at the former Envirotech site to determine the possible extent of site contamination and contribution to downvalley receptors. This recommendation was based on information that contained in Department files concerning an parcel of land on Route 242 near the intersection of Route 353, southeast of the Village of Little Valley. The report did note that groundwater contamination was found upgradient of this property as well as several other suspected sources.

During the above noted investigation a review of Department files had indicated that in the early 1980's several reports of abandoned and leaking drums in Cattaraugus County were investigated by the Department (memo: R. Wozniak

to File, dated December 18, 1990). The results of the investigation found three sites located within Cattaraugus County. Although these sites are not located in the immediate vicinity of the Route 242 Triangle site and the Village of Little Valley, the materials from these locations were moved to this area to be temporarily stored until they could be properly disposed of. The area where these drums of waste were stored became known as the Envirotech Drum Storage Area.

The former Envirotech Drum Storage area refers to a parcel of land along the southeastern margin of the intersection of State Route 242 and an unimproved roadway leading to the residence of Mr. Orval Foster in the Town of Little Valley, New York that was used by Mr. Leonard Kroll to temporarily store drums of various waste solvents between 1979 and 1981 (Figure 1). The parcel of land involved is about one acre in size and relatively flat with steep slopes on the eastern and southern sides that lead down to undeveloped land (Figure 2). The former drum storage area was raised to the level of Route 242, above the undeveloped land, by the introduction of various "clean" fill materials. The fill material was reported to originally consisted primarily of demolition debris from the razing of the Cattaraugus County building in the 1960's. This site is currently vacant.

Drums of solvent wastes were brought to this location from three other temporary drum storage areas used by Mr. Kroll in Cattaraugus County under the supervision of the NYSDEC. The drums were staged at this location prior to removal to another Kroll operated facility in the Town of Tonawanda, New York. The total number of drums stored and handled during the period of operation at the Route 242 site is not known. Existing records indicate that up to 310 drums were stored at this location in late 1980/early 1981, prior to their removal to a Town of Tonawanda facility. Department records do not indicate the specific compounds or chemicals contained in the drums, but do report that the materials consisted of "solvents". Solvents, typically used for degreasing and metals preparation are trichloroethene and trichloroethane. The physical condition,


ROUTE 242
℄
+0
+50
+100
+150
+200
+250
EDGE OF PAVEMENT
CULVERT
GP-6
GP-7
GP-8
TRAILER
TRAILER FRAME
DRIVEWAY TO FOSTER HOME
54'
72'
GP-5
73'
HEAVY BRUSH AREA
85'
FILL AREA
50'
TRAILER
TOP OF BANK
115'
108'
118'
PATHWAY
HEAVY BRUSH AREA
150'
TOE OF FILL
165'
170'
GP-4
SLOPE
DRAINAGE SWALE
GP-1
SW-1
GP-3
GP-2
FIGURE 2
GP-2 - GEOPROBE SAMPLE POINT
SW-1 - SURFACEWATER SAMPLE POINT
- MARSH/WET AREA
- PINE TREE WOODED AREA
LITTLE VALLEY RTS. 242/353
SITE INVESTIGATION
SCALE 1"=40'
SEPTEMBER 28-29, 1994

maintenance, and handling of these drums over the time that they were staged at the project site is not directly known. Incidental spills or leaks were not documented, but may have occurred without notice or report. Existing records do state that a drum at the Route 242 site was found to be ruptured and was placed on its side to prevent it from leaking, but do not indicate if there was a spill associated with that particular drum rupture. In another incident, holes were identified in the sides of two drums and a statement was recorded indicating that the drums were not leaking at the time of discovery, however, there is not record indicating whether the drums had leaked prior to discovery or not.

The site remained vacant, after the drums were removed, and had been used for the disposal of miscellaneous debris over the years such as soil, stone, scrap metal, yard waste and motor. A inspection of the property in 1991 by the Department's Division of Water (memo: L. Clare to P. Buechi dated May 28, 1991) noted several drums of waste oils located on or behind the fill area. The owner of the property, Mr. Lonnie Crosby was contacted by the Division of Spills Management (letter: P. Buechi to L. Crosby, dated May 31, 1991) and the drums were subsequently removed and the contents property disposed of. It was reported that the materials consisted of waste oils. No solvents or other volatile chlorinated organic compounds were detected in the waste oils.

Therefore, due to the questions associated with the storage of potential wastes and the known contamination of groundwater underlying this area, further study to determine if this site was contributing to the area wide environmental problems, was needed.

2.0 SUMMARY OF FIELD WORK

On September 28 & 29, 1994, CDM completed the field portion of the IIWA for the Route 242 Site. Eight exploratory groundwater monitoring probes were advanced through overburden at the site. The probes used for the

investigation were Geoprobe® groundwater probes. Each probe location was assigned a name from GP-01 to GP-08. The locations of the eight Geoprobe® boring locations are shown in Figure 2. Locations were determined in the field by staff from NYSDEC and CDM and were based on the topography of the site, accessibility of the equipment, and relationship to the fill area. The weather during the investigation was generally wet, with period light rain and overcast conditions. Daily temperatures ranged from the low 40's to a high of 55 degrees F.

During the work at the site, the following people were present: Gregory Sutton, P.E. (NYSDEC), David Szymanski (NYSDEC), Buvana Ramaswany (CDM), Keith Gambino (Direct Environmental), Glenn Suarez (Direct Environmental), and Timothy Knollmeyer (Tetra-K).

A total of eight locations were chosen based on the field conditions encountered. At each of the eight locations, soil was sampled continuously at four foot intervals until the water table was encountered. A soil sample was collected at the water table by NYSDEC and provided to Tetra-K for analysis. An attempt was made to go at least two to four feet into the water table so as to obtain a groundwater sample. All soil and groundwater samples were collected in 40 ml VOC vials. Sufficient groundwater was only encountered in probe locations GP-01, GP-05, GP-07 and GP-08. Prior to collecting the sample, each probe was purged until dry using a peristaltic pump. After the probe was allowed to recharge, a groundwater sample was then collected using a thief consisting of a tube with a ball valve on the end. At GP-01, GP-03, GP-04, GP-06 and GP-08 a second Geoprobe® boring was advanced to three feet to obtain a soil gas sample which was taken by Tetra-K. The total depth of each boring ranged from eight to twenty feet. At locations GP-03, GP-04 and GP-06, the water table was not encountered due to refusal by the Geoprobe®. At GP-03 and GP-04, five attempts were made to reach the desired depth.

TABLE 1
Triangle at Little Valley
Little Valley(T), Cattaraugus Co.
Volatile Organic Compounds (VOCs) Analytical Results
Groundwater - (ug/l)/ppb

Parameter	Detection Limit	Sample Locations			
		GP-1W	GP-5W	GP-7W	GP-8W
Vinyl Choride	1.0	ND	ND	ND	ND
1,1-Dichloroethene	1.0	ND	ND	ND	ND
Methylene Chloride	2.0	ND	ND	ND	ND
t-1,2-Dichoroethene	1.0	ND	ND	ND	ND
1,1-Dichloroethane	1.0	ND	ND	ND	ND
c-1,2-Dichloroethane	1.0	ND	ND	ND	ND
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND
Carbon Tetrachloride	1.0	ND	ND	ND	ND
Trichloroethene	1.0	ND	ND	ND	ND
Tetrachloroethene	1.0	ND	ND	ND	ND

ND - Not Detected

TABLE 2
Triangle at Little Valley
Little Valley(T), Cattaraugus Co.
Volatile Organic Compounds (VOCs) Analytical Results
Soil Gas Vapor - (mg/cu.m)

Parameter	Detection Limit	Sample Locations				
		GP-1-SG	GP-3-SG	GP-4-SG	GP-6-SG	GP-8-SG
Vinyl Choride	0.040	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.020	ND	ND	ND	ND	ND
Methylene Chloride	0.020	ND	ND	ND	ND	ND
t-1,2-Dichoroethene	0.020	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.020	ND	ND	ND	ND	ND
c-1,2-Dichloroethane	0.020	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.020	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.020	ND	ND	ND	ND	ND
Trichloroethene	0.020	ND	ND	ND	ND	ND
Tetrachloroethene	0.020	ND	ND	ND	ND	ND

ND - Not Detected

TABLE 3
Triangle at Little Valley
Little Valley(T), Cattaraugus Co.
Volatile Organic Compounds (VOCs) Analytical Results
Soil - (ug/kg)/ppm

Parameter	Detection Limit	Sample Locations					
		GP-1S	GP-2S	GP-5-S1	GP-5-S2	GP-7S	GP-8S
Vinyl Choride	1.0	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1.0	ND	ND	ND	ND	ND	ND
Methylene Chloride	2.0	ND	ND	ND	ND	ND	ND
t-1,2-Dichoroethene	1.0	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	1.0	ND	ND	ND	ND	ND	ND
c-1,2-Dichloroethane	1.0	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1.0	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	1.0	ND	ND	ND	ND	ND	ND
Trichloroethene	1.0	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.0	ND	ND	ND	ND	ND	ND

ND - Not Detected

TABLE 4
Triangle at Little Valley
Little Valley(T), Cattaraugus Co.
Volatile Organic Compounds (VOCs) Analytical Results
Surfacewater - (ug/l)/ppb

Parameter	Detection Limit	Sample Location
		SW-1
Vinyl Choride	1.0	ND
1,1-Dichloroethene	1.0	ND
Methylene Chloride	2.0	ND
t-1,2-Dichoroethene	1.0	ND
1,1-Dichloroethane	1.0	ND
c-1,2-Dichloroethane	1.0	ND
1,1,1-Trichloroethane	1.0	ND
Carbon Tetrachloride	1.0	ND
Trichloroethene	1.0	ND
Tetrachloroethene	1.0	ND

ND - Not Detected

The Geoprobe® apparatus consisted of a 4 foot long steel outer casing with a disposal inner liner tube. For the collection of soil samples, this inner liner was removed from the probe during each sampling interval. Upon removal the liner was split open and the tube was scanned with a Organic Volatile Monitor (OVM) and the results recorded in the field records found in Appendix 3.0. Soil samples were collected at Geoprobe® locations GP-01, GP-02, GP-05, GP-07, and GP-08. Samples were not collected at the remaining locations because 1) groundwater was not encountered, 2) OVM readings did not indicate contamination and/or 3) shallow refusal was encountered.

A summary of the results of the analysis for the Groundwater, Soil Gas Vapor, Soil and Surfacewater is provided in Table 1 through Table 4, respectively. Tetra-K analyzed all samples for vinyl chloride, 1,1-dichloroethene, methylene chloride, t-1,2-dichloroethene, 1,1-dichloroethane, c-1,2-dichloroethane, 1,1,1-trichloroethane, carbon tetrachloride, trichloroethene, and tetrachloroethane. The discussion of the analytical procedures is provided in Appendix 5.0. The results of the analysis did not detect any of the above VOCs in any samples.

3.0 CONCLUSIONS/RECOMMENDATIONS

Based on the results of the investigation of September 28-29, 1994, the following observations can be made regarding the (Route 242) Triangle at Little Valley site:

1. No TCE or other volatile chlorinated organic compound contamination was detected in the overburden groundwater, surface water, soil vapor or soil at the site.

2. The fill material originally consisted primarily of demolition debris from the razing of the Cattaraugus County building in the 1960's. Disposal of miscellaneous types of waste such as soil, stone, scrap metal, yard waste

and motor oil continues to occur.

3. There was no evidence of drums on the site.

4. No further action is required at the site.

TABLE OF CONTENTS

GEOPROBE BOREHOLE LOGS

CAMP DRESSER & McKEE

CDM

Ten Cambridge Center
Cambridge, Massachusetts 02142

BOREHOLE LOG

GP-01

Client: NYSDEC

Project Name: Little Valley site

Project Location: Little Valley, NY

Project Number: 0897-024-RT

Drilling Contractor: Direct Environmental

Surface Elevation (ft.): NA

Drilling Method/Rig: Geoprobe

Total Depth (ft.): 17

Drillers: Keith Gambino and Glenn Suarez

Depth to Initial Water Level (ft. BGS):

Drilling Date: Start 9-28-94 End 9-28-94

Abandonment Method: Grouted to Surface

Borehole Coordinates:

Field Screening Instrument: OVM

N NA E NA

Logged By: B. Ramaswamy field; E. Henderson office

Sample Type	Sample Number	Sample Recovery (Inches)	Elev / Depth (ft.)	Field Instru. Reading (ppm)	Blows per 6 Inches	Graphic Log	Stratum Designation	Material Description
			0				SP/OL	0-0.75' Moist, dark brown, medium-fine SAND, little silt, organics
							ML	0.75'-2.5' Moist, light brown-orange SILT, little medium-fine sand
GP	GP-01-01	48/48		0			GP	2.5'-4' Dry, grey-brown, medium-fine SAND and GRAVEL, trace silt
				9				4'-6' Moist-dry, grey-brown, medium-fine SAND and GRAVEL, some silt (till)
GP	GP-01-02	48/48	-5.0 / 5	0				
								8'-11.8' Same as above
GP	GP-01-03	48/48	-10.0 / 10	0				
								11.8'-12' Wet, grey-brown, medium-fine SAND and GRAVEL, some silt
								12'-18' Same as above
GP	GP-01-04	48/30	-15.0 / 15	0				
								18'-17' Same as above
GP	GP-01-05	12/12		0				
								Bottom of Exploration at 17.0 feet

EXPLANATION OF ABBREVIATIONS

DRILLING METHODS:
HSA - Hollow Stem Auger
SSA - Solid Stem Auger
HA - Hand Auger
AR - Air Rotary
DTR - Dual Tube Rotary
FR - Foam Rotary
MR - Mud Rotary
RC - Reverse Circulation
CT - Cable Tool
JET - Jetting
D - Driving
DTC - Drill Through Casing

SAMPLING TYPES:
AS - Auger/Grab Sample
CS - California Sampler
BX - 1.6" Rock Core
NX - 2.1" Rock Core
GP - Geoprobe
HP - Hydro Punch
SS - Split Spoon
ST - Shelby Tube
WS - Wash Sample

OTHER:
AGS - Above Ground Surface

REMARKS

Stratum Designation is Unified Soil Classification System of dominant soils
(Sample hand surged from depth of 15')
Conductivity 11.2 uS/cm*
Temperature 53.3 degrees F*
pH 7.09
Turbidity - Out of Range
GP-1-W: 3 water samples
GP-1-S: 2 soil samples (14')
GP-1-SG: 2 soil gas samples (3')
Continuous monitoring of LEL: "no hits"
*Data Suspect

Reviewed by: R.W. Heeley **Date:** 10/18/94

CAMP DRESSER & McKEE
CDM
Ten Cambridge Center
Cambridge, Massachusetts 02142

BOREHOLE LOG
GP-02

Client: NYSDEC
Project Name: Little Valley site
Project Location: Little Valley, NY
Project Number: 0897-024-RT

Drilling Contractor: Direct Environmental
Surface Elevation (ft.): NA
Drilling Method/Rig: Geoprobe
Total Depth (ft.): 18
Drillers: Keith Gambino and Glenn Suarez
Depth to Initial Water Level (ft. BGS): 13
Drilling Date: Start 9-28-94 End 9-28-94
Abandonment Method: Grouted to Surface
Borehole Coordinates:
Field Screening Instrument: OVM
N NA E NA
Logged By: B. Ramaswamy field; E. Henderson office

Sample Type	Sample Number	Sample Recovery (inches)	Elev. Depth (ft.)	Field Instru. Reading (ppm)	Blows per 6 Inches	Graphic Log	Stratum Designation	Material Description
			-20.0 / 0					
GP	GP-02-01	48/48		0			SP/OL	0-0.75' TOPSOIL-moist, dark brown, medium-fine SAND, little gravel, silt, organics
							ML	0.75'-2.5' Moist-dry, light brown-orange SILT, little fine-medium sand, trace gravel
							SM	2.5'-4' Moist-dry, light brown, medium-fine SAND, some silt, gravel
GP	GP-02-02	48/48	-25.0 / 5	0				4'-8' Moist-dry, grey-brown, medium-fine SAND and SILT, some gravel
GP	GP-02-03	48/48	-30.0 / 10	0				8'-12' Same as above
GP	GP-02-04	24/0		0				Refusal at 12'. Relocated Geoprobe by 1' to continue boring. 12'-14' No recovery (wet till in tip of cone)
	GP-02-05	24/8	-35.0 / 15	0				14'-18' Moist-wet, grey-brown, medium-fine SAND and SILT, little-some gravel
								Bottom of Exploration at 18.0 feet

EXPLANATION OF ABBREVIATIONS

DRILLING METHODS:
HSA - Hollow Stem Auger
SSA - Solid Stem Auger
HA - Hand Auger
AR - Air Rotary
DTR - Dual Tube Rotary
FR - Foam Rotary
MR - Mud Rotary
RC - Reverse Circulation
CT - Cable Tool
JET - Jetting
D - Driving
DTC - Drill Through Casing

SAMPLING TYPES:
AS - Auger/Grab Sample
CS - California Sampler
BX - 1.65" Rock Core
NX - 2.1" Rock Core
GP - Geoprobe
HP - Hydro Punch
SS - Split Spoon
ST - Shelby Tube
WS - Wash Sample

OTHER:
AGS - Above Ground Surface

REMARKS

Stratum Designation is Unified Soil Classification System of dominant soils.
Refusal at 12'. Mover over 1' and switched to a "larger" 1 1/4" diameter casing.
Water sample not taken.
GP-2-S: 2 soil samples (14')
Soil gas samples not taken
Continuous monitoring of LEL: "no hits"

Reviewed by: R.W. Heeley **Date:** 10/18/94

CAMP DRESSER & McKEE
CDM
Ten Cambridge Center
Cambridge, Massachusetts 02142

BOREHOLE LOG
GP-03

Client: NYSDEC
Project Name: Little Valley site
Project Location: Little Valley, NY
Project Number: 0897-024-RT

Drilling Contractor: Direct Environmental
Surface Elevation (ft.): NA
Drilling Method/Rig: Geoprobe
Total Depth (ft.): 12
Drillers: Keith Gambino and Glenn Suarez
Depth to Initial Water Level (ft. BGS):
Drilling Date: Start 9-28-94 End 9-28-94
Abandonment Method: Grouted to Surface
Borehole Coordinates:
Field Screening Instrument: OVM
N NA E NA
Logged By: B. Ramaswamy field; E. Henderson office

Sample Type	Sample Number	Sample Recovery (Inches)	Elev. Depth (ft.)	Field Instru. Reading (ppm)	Blows per 6 Inches	Graphic Log	Stratum Designation	Material Description
			-40.0 0					
GP	GP-03-01	48/40		0			OL	0-0.75' TOPSOIL
							SP	0.75'-2.5' Moist-dry, light brown/orange, fine-mdium SAND, some silt trace gravel
								2.5'-4' Moist-dry, brown, medium-fine SAND, some silt, some gravel, trace clay
GP	GP-03-02	48/38	-45.0 5	0			SM	4'-8' Dry-moist, grey-brown, medium-fine SAND and SILT, some gravel, trace clay
								8'-12' Same as above
GP	GP-03-03	48/24	-50.0 10	0				
			-55.0 15					Refusal at 12'. Bottom of Exploration at 12.0 feet

EXPLANATION OF ABBREVIATIONS

DRILLING METHODS:
HSA - Hollow Stem Auger
SSA - Solid Stem Auger
HA - Hand Auger
AR - Air Rotary
DTR - Dual Tube Rotary
FR - Foam Rotary
MR - Mud Rotary
RC - Reverse Circulation
CT - Cable Tool
JET - Jetting
D - Driving
DTC - Drill Through Casing

SAMPLING TYPES:
AS - Auger/Grab Sample
CS - California Sampler
EX - 1.5" Rock Core
HX - 2.1" Rock Core
GP - Geoprobe
HP - Hydro Punch
SS - Split Spoon
ST - Shelby Tube
WS - Wash Sample
OTHER:
AGS - Above Ground Surface

REMARKS

Stratum Designation is Unified Soil Classification System of dominant soils
Refusal at 12'. Four additional attempts each met with refusal.
Water sample not taken.
Soil sample not taken.
GP-03-SG: 2 soil gas samples (3')
Continuous monitoring of LEL: "no hits"

Reviewed by: R.W. Heeley **Date:** 10/18/94

CAMP DRESSER & McKEE
CDM
Ten Cambridge Center
Cambridge, Massachusetts 02142

BOREHOLE LOG
GP-04

Client: NYSDEC
Project Name: Little Valley site
Project Location: Little Valley, NY
Project Number: 0897-024-RT

Drilling Contractor: Direct Environmental
Surface Elevation (ft.): NA
Drilling Method/Rig: Geoprobe
Total Depth (ft.): 11
Drillers: Keith Gambino and Glenn Suarez
Depth to Initial Water Level (ft. BGS):
Drilling Date: Start 9-28-94 End 9-28-94
Abandonment Method: Grouted to Surface
Borehole Coordinates:
Field Screening Instrument: OVM
N NA E NA
Logged By: B. Ramaswamy field; E. Henderson office

Sample Type	Sample Number	Sample Recovery (inches)	Elev. Depth (ft.)	Field Instru. Reading (ppm)	Blows per 6 Inches	Graphic Log	Stratum Designation	Material Description
GP	GP-04-01	48/48	0	5.0			OL	0-0.5' TOPSOIL
							SP	0.5'-1.0' Dry, light brown, medium-fine SAND, some silt, little gravel
							SM	1'-4' Dry, light brown, medium-fine SAND and SILT, some gravel
GP	GP-04-02	48/48	-5.0 5	0				4'-8' Moist-dry, grey-brown, medium-fine SAND and SILT, some gravel, trace-no clay
GP	GP-04-03	38/30	-10.0 10	0				8'-11' Moist-dry, brown-olive, medium-fine SAND and SILT, some gravel, trace clay
			-15.0 15					Refusal at 11 feet. Bottom of Exploration at 11.0 feet

EXPLANATION OF ABBREVIATIONS

DRILLING METHODS:
HSA - Hollow Stem Auger
SSA - Solid Stem Auger
HA - Hand Auger
AR - Air Rotary
DTR - Dual Tube Rotary
FR - Foam Rotary
MR - Mud Rotary
RC - Reverse Circulation
CT - Cable Tool
JET - Jetting
D - Driving
DTC - Drill Through Casing

SAMPLING TYPES:
AS - Auger/Grab Sample
CS - California Sampler
BX - 1.6" Rock Core
NX - 2.1" Rock Core
GP - Geoprobe
HP - Hydro Punch
SS - Split Spoon
ST - Shelby Tube
WS - Wash Sample
OTHER:
AGS - Above Ground Surface

REMARKS

Stratum Designation is Unified Soil Classification System of dominant soils
Refusal at 5' on first three attempts. Refusal at 11' on fourth attempt. Refusal at 5.5' on fifth attemot.
Water samples not taken
Soil samples not taken.
GP-4-SG: 2 soil gas samples (3')
Continuous monitoring of LEL: "no hits"

Reviewed by: R.W. Heeley **Date:** 10/18/94

CAMP DRESSER & McKEE

CDM

Ten Cambridge Center
Cambridge, Massachusetts 02142

BOREHOLE LOG

GP-05

Client: NYSDEC

Project Name: Little Valley site

Project Location: Little Valley, NY

Project Number: 0897-024-RT

Drilling Contractor: Direct Environmental

Surface Elevation (ft.): NA

Drilling Method/Rig: Geoprobe

Total Depth (ft.): 20

Drillers: Keith Gambino and Glenn Suarez

Depth to Initial Water Level (ft. BGS): 12

Drilling Date: Start 9-28-94 End 9-28-94

Abandonment Method: Grouted to Surface

Borehole Coordinates:

Field Screening Instrument: OVM

N NA E NA

Logged By: B. Ramaswamy field; E. Henderson office

Sample Type	Sample Number	Sample Recovery (inches)	Elev. Depth (ft.)	Field Instru. Reading (ppm)	Blows per 6 Inches	Graphic Log	Stratum Designation	Material Description
			-80.0 0				OL	0-0.75' TOPSOIL
							ML	0.75'-2.0' Moist-dry, orange-brown, SILT, little fine sand, trace gravel
GP	GP-05-01	48/48		0			SM	2.0'-4' Dry-moist, brown, fine-medium SAND, some silt, some gravel
								4'-5' Same as above
GP	GP-05-02	48/48	-85.0 5	0				5'-5.25' Wet, chocolate brown, medium-fine SAND, some-little silt and gravel 5.25'-8' Moist-dry, brown, fine-medium SAND, some silt, some gravel
								8'-12' Same as above
GP	GP-05-03	48/48	-90.0 10	0				
								12'-14' Wet, brown, medium-fine SAND, some silt, some gravel
GP	GP-05-04	48/30	-95.0 15	0				14'-18' Moist-wet olive-brown, medium-fine SAND and SILT, some gravel
							ML	18'-20' Moist-wet, olive-brown SILT, some fine sand, little gravel, clay
GP	GP-05-05	48/48		0				
								Bottom of Exploration at 20.0 feet.

EXPLANATION OF ABBREVIATIONS

DRILLING METHODS:
HSA - Hollow Stem Auger
SSA - Solid Stem Auger
HA - Hand Auger
AR - Air Rotary
DTR - Dual Tube Rotary
FR - Foam Rotary
MR - Mud Rotary
RC - Reverse Circulation
CT - Cable Tool
JET - Jetting
D - Driving
DTC - Drill Through Casing

SAMPLING TYPES:
AS - Auger/Grab Sample
CS - California Sampler
BX - 1.5" Rock Core
NX - 2.1" Rock Core
GP - Geoprobe
HP - Hydro Punch
SS - Split Spoon
ST - Shelby Tube
WS - Wash Sample

OTHER:
AGS - Above Ground Surface

REMARKS

Stratum Designation is Unified Soil Classification System of dominant soils
Conductivity 10.9 uS/cm*
Temperature 63.3 degrees F*
pH 7.03
Turbidity 450 NTU
GP-5-W: 3 water samples
GP-5-S1: 1 soil sample (5')
GP-5-S2: 2 soil samples (12')
Soil gas sample not taken.
Continuous monitoring of LEL: "no hits"
*Data Suspect

Reviewed by: R.W. Heeley **Date:** 10/18/94

CAMP DRESSER & McKEE

CDM

Ten Cambridge Center
Cambridge, Massachusetts 02142

BOREHOLE LOG
GP-06

Client: NYSDEC

Project Name: Little Valley site

Project Location: Little Valley, NY

Project Number: 0897-024-RT

Drilling Contractor: Direct Environmental

Surface Elevation (ft.): NA

Drilling Method/Rig: Geoprobe

Total Depth (ft.): 8

Drillers: Keith Gambino and Glenn Suarez

Depth to Initial Water Level (ft. BGS):

Drilling Date: Start 9-29-94 **End** 9-29-94

Abandonment Method: Grouted to Surface

Borehole Coordinates:

Field Screening Instrument: OVM

N NA E NA

Logged By: B. Ramaswamy field; E. Henderson office

Sample Type	Sample Number	Sample Recovery (inches)	Elev. Depth (ft.)	Field Instru. Reading (ppm)	Blows per 6 Inches	Graphic Log	Stratum Designation	Material Description
			-100.0 0					
GP	GP-06-01	48/48		0			GP	0-2.5 ' Dry, brown/yellow, medium-fine SAND and GRAVEL (till)
							ML	2.5'-4.0' Dry-moist, light brown, SILT, some medium-fine sand, gravel trace clay
								4'-8' Same as above
GP	GP-06-02	48/48	-105.0 5	0				
			-110.0 10					Bottom of Exploration at 8.0 feet
			-115.0 15					

EXPLANATION OF ABBREVIATIONS

DRILLING METHODS:
HSA - Hollow Stem Auger
SSA - Solid Stem Auger
HA - Hand Auger
AR - Air Rotary
DTR - Dual Tube Rotary
FR - Foam Rotary
MR - Mud Rotary
RC - Reverse Circulation
CT - Cable Tool
JET - Jetting
D - Driving
DTC - Drill Through Casing

SAMPLING TYPES:
AS - Auger/Grab Sample
CS - California Sampler
BX - 1.5" Rock Core
NX - 2.1" Rock Core
GP - Geoprobe
HP - Hydro Punch
SS - Split Spoon
ST - Shelby Tube
WS - Wash Sample

OTHER:
AGS - Above Ground Surface

REMARKS

Stratum Designation is Unified Soil Classification System of dominant soils
Stopped due to heavy rain.
Water sample not taken
Soil sample not taken
GP-5-SG: soil gas sample (3')
Continuous monitoring of LEL: "no hits"

Reviewed by: R.W. Heeley **Date:** 10/18/94

CAMP DRESSER & McKEE

CDM

Ten Cambridge Center
Cambridge, Massachusetts 02142

BOREHOLE LOG

GP-07

Client: NYSDEC

Project Name: Little Valley site

Project Location: Little Valley, NY

Project Number: 0897-024-RT

Drilling Contractor: Direct Environmental

Surface Elevation (ft.): NA

Drilling Method/Rig: Geoprobe

Total Depth (ft.): 15

Drillers: Keith Gambino and Glenn Suarez

Depth to Initial Water Level (ft. BGS): 12

Drilling Date: Start 9-29-94 End 9-29-94

Abandonment Method: Grouted to Surface

Borehole Coordinates:

Field Screening Instrument: OVM

N NA E NA

Logged By: B. Ramaswamy field; E. Henderson office

Sample Type	Sample Number	Sample Recovery (inches)	Elev. Depth (ft.)	Field Instru. Reading (ppm)	Blows per 6 Inches	Graphic Log	Stratum Designation	Material Description
			-120.0 0					
GP	GP-07-01	48/42		0			OL	0-0.75' TOPSOIL
							GP	0.75'-1.5' Moist-dry, dark brown, medium-fine SAND and GRAVEL
								1.5'-2' BRICK-red
							SP	2'-4' Moist-dry, brown/light brown/dark brown, medium-fine SAND some silt, some gravel
GP	GP-07-02	48/48	-125.0 5	0			ML	4'-8' Moist, yellow-brown SILT, some gravel, little medium-fine SAND, little clay
								8'-9' Same as above
GP	GP-07-03	48/48	-130.0 10	0				9'-12' Moist-wet, brown SILT, some gravel, little medium-fine sand, trace clay
GP	GP-07-04	36/20		0				12'-15' Moist-wet, brown SILT, some gravel, little medium-fine sand, trace clay
			-135.0 15					Refusal at 15 feet. Bottom of Exploration at 15.0 feet

EXPLANATION OF ABBREVIATIONS

DRILLING METHODS:
HSA - Hollow Stem Auger
SSA - Solid Stem Auger
HA - Hand Auger
AR - Air Rotary
DTR - Dual Tube Rotary
FR - Foam Rotary
MR - Mud Rotary
RC - Reverse Circulation
CT - Cable Tool
JET - Jetting
D - Driving
DTC - Drill Through Casing

SAMPLING TYPES:
AS - Auger/Grab Sample
CS - California Sampler
RX - 1.5" Rock Core
NX - 2.1" Rock Core
GP - Geoprobe
HP - Hydro Punch
SS - Split Spoon
ST - Shelby Tube
WS - Wash Sample

OTHER:
AGS - Above Ground Surface

REMARKS

Stratum Designation is Unified Soil Classification System of dominant soils.
Refusal at 11'. Second attempt recorded. Refusal at 15' on second attempt.
No water available for water parameters
GP-7-W: 2 water samples
GP-7-S: 2 soil samples (12'-13')
Soil gas sample not taken.
Continuous monitoring of LEL: "no hits"

Reviewed by: R.W. Heeley **Date:** 10/18/94

CAMP DRESSER & McKEE
CDM
Ten Cambridge Center
Cambridge, Massachusetts 02142

BOREHOLE LOG
GP-08

Client: NYSDEC
Project Name: Little Valley site
Project Location: Little Valley, NY
Project Number: 0897-024-RT

Drilling Contractor: Direct Environmental
Surface Elevation (ft.): NA
Drilling Method/Rig: Geoprobe
Total Depth (ft.): 11
Drillers: Keith Gambino and Glenn Suarez
Depth to Initial Water Level (ft. BGS):
Drilling Date: Start 9-29-94 End 9-29-94
Abandonment Method: Grouted to Surface
Borehole Coordinates:
Field Screening Instrument: OVM
N NA E NA
Logged By: B. Ramaswamy field; E. Henderson office

Sample Type	Sample Number	Sample Recovery (Inches)	Elev. Depth (ft.)	Field Instru. Reading (ppm)	Blows per 6 Inches	Graphic Log	Stratum Designation	Material Description
			-140.0 / 0					
GP	GP-08-01	48/24		0			OL	0-2.7' TOPSOIL
							ML	2.7'-4.0' Moist, orange-brown SILT, some medium-fine sand, little gravel
								4'-8' Same as above
GP	GP-08-02	48/36	-145.0 / 5	0				8'-8' Moist, brown-grey SILT, some medium-fine sand, little-some gravel, trace clay
								8'-10.5' Wet-moist, brown SILT, some fine-medium sand, little- some gravel
GP	GP-08-03	38/28	-150.0 / 10	0			SM	10.5'-10.7' Wet, brown, fine-medium SAND, little silt, gravel
							ML	10.7'-11' Wet-moist, brown SILT, some fine-medium sand, little- some gravel
								Bottom of Exploration at 11.0 feet
			-155.0 / 15					

EXPLANATION OF ABBREVIATIONS

DRILLING METHODS:
HSA - Hollow Stem Auger
SSA - Solid Stem Auger
HA - Hand Auger
AR - Air Rotary
DTR - Dual Tube Rotary
FR - Foam Rotary
MR - Mud Rotary
RC - Reverse Circulation
CT - Cable Tool
JET - Jetting
D - Driving
DTC - Drill Through Casing

SAMPLING TYPES:
AS - Auger/Grab Sample
CS - California Sampler
BX - 1.5" Rock Core
NX - 2.1" Rock Core
GP - Geoprobe
HP - Hydro Punch
SS - Split Spoon
ST - Shelby Tube
WS - Wash Sample

OTHER:
AGS - Above Ground Surface

REMARKS

Stratum Designation is Unified Soil Classification System of dominant soils.
Conductivity 10.5 uS/cm*
Temperature 60.4 degrees F*
pH 6.98
Turbidity 320 NTU
GP-8-W: 3 water samples
GP-8-S: 2 soil samples (10.5'-11')
GP-8-SG: soil gas sample (3')
Refusal at 11'.
Continuous monitoring of LEL: "no hits"
*Data Suspect

Reviewed by: R.W. Heeley **Date:** 10/18/94

PHOTOGRAPHIC DOCUMENTATION

APPENDIX G

WETLAND DELINEATION AND FUNCTION/ VALUE ASSESSMENT DATA FORMS

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetlands Delineation Manual)

Project Site: Little Valley Superfund Site, Cattaraugus Cutlery area Applicant/Owner: EPA Investigator: R. Delahunty, K. Semenick	Date: 05/03/01 County: Cattaraugus State: NY
Do Normal Circumstances exist on the site? [Yes] No Is the site significantly disturbed (Atypical Situation)? Yes [No] Is the area a potential Problem Area? Yes [No] (If needed, explain on reverse.) Area of fill – Scrap metal, concrete	Community ID: Wetland Transect ID: W-01 Plot ID: SS-1

VEGETATION

Plant Community Classification: PSS/PF01 wetland
Percent Canopy Cover: Tree: 50% Shrub: 100% Herb: 50% Vine: 0%

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Salix nigra*	T	FACW+	9.		
2. *S. nigra*	S	FACW+	10.		
3. *Cornus amomum*	S	FACW	11.		
4. *Symplocarpus foetidus*	H	OBL	12.		
5. *Onoclea sensibilis*	H	FACW	13.		
6. *Sanguinaria canadensis*	H	NI	14.		
7. *Alliaria petiolata*	H	FACU-	15.		
8			16.		

Percent of dominant Species that are OBL, FACW, or FAC (excluding FAC-): 71%

Remarks: Wetland vegetation present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
_x_ No Recorded Data Available

Field Observations:

Depth of Surface Water (in.): N/A

Depth to Free Standing Water in Pit (in.): > 18"

Depth to Saturated Soil (in.): N/A

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated
___ Water Marks
___ Drift lines
___ Sediment Deposits
_x_ Drainage Patterns In Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 inches
_x_ Water-Stained Leaves
___ Local Soil survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: Wetland hydrology present

Date: 05/03/01
Community ID: Wetland 01
Plot ID: SS-1

SOILS

Map Unit Name
(Series and Phase): Holderton Silt Loam

Drainage Class: Somewhat poorly drained

Taxonomy (SubGroup): Not provided in soil survey

Field Observations
Confirm Mapped Type? Yes [No]

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottles Abundance/Size/ Contrast	Texture, Concretions, Structure, etc.
0-4	O	10YR 3/2	None	N/A	Organic material
4-9	A	10YR 3/2	None	N/A	Fill material
10-18	B	10YR 5/2	5YR 4/4	Many/fine/prominent	Fill material

Hydro Soil Indicators

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
_x_ Reducing Conditions
_x_ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content, Surface Layer in Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks: Disturbed area but evidence of reducing conditions. Wetland soil present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No
Wetlands Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

Is this Sample Station Point Within a Wetland? [Yes] No

Remarks

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetlands Delineation Manual)

Project Site: Little Valley Superfund Site, Cattaraugus Cutlery area Applicant/Owner: EPA Investigator: R. Delahunty, K. Semenick	Date: 05/03/01 County: Cattaraugus State: NY
Do Normal Circumstances exist on the site? [Yes] No Is the site significantly disturbed (Atypical Situation)? Yes [No] Is the area a potential Problem Area? Yes [No] (If needed, explain on reverse.) Sample station obtained from just off-site	Community ID: Upland Transect ID: Plot ID: SS-2

VEGETATION

Plant Community Classification: Transition area between upland forest and upland scrub shrub
Percent Canopy Cover: Tree: 50% Shrub: 100% Herb: 50% Vine: 0%

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Prunus avium*	T	UPL	9.		
2. *Populus tremuloides*	T	UPL	10.		
3. *Prunus avium*	S	UPL	11.		
4. *Lonicera tatarica*	S	FACU*	12.		
5. *Alliaria petiolata*	H	FACU-	13.		
6. *Galium* sp.	H	-	14.		
7.			15.		
8			16.		

Percent of dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0%

Remarks: Upland vegetation present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water (in.): N/A

Depth to Free Standing Water in Pit (in.): N/A

Depth to Saturated Soil (in.): N/A

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated
- ___ Water Marks
- ___ Drift lines
- ___ Sediment Deposits
- ___ Drainage Patterns In Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 inches
- ___ Water-Stained Leaves
- ___ Local Soil survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Upland hydrology present

Date: 05/03/01
Community ID: Upland
Plot ID: SS-2

SOILS

Map Unit Name
(Series and Phase): Holderton silt loam

Drainage Class: Somewhat poorly drained

Taxonomy (SubGroup): Not provided in soil survey

Field Observations
Confirm Mapped Type? [Yes] No

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottles Abundance/Size/ Contrast	Texture, Concretions, Structure, etc.
0-12	A	10YR 4/3	None	N/A	Silt loam
12-18	B	10YR 6/3	5YR 4/6	Few/medium/prominent	Silt loam with iron staining

Hydro Soil Indicators

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content, Surface Layer in Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks: Upland soil present

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No]
Wetlands Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

Is this Sample Station Point Within a Wetland? Yes [No]

Remarks

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetlands Delineation Manual)

Project Site: Little Valley Superfund Site, Bush Industries area Applicant/Owner: EPA Investigator: R. Delahunty, K. Semenick	Date: 05/04/01 County: Cattaraugus State: NY
Do Normal Circumstances exist on the site? [Yes] No Is the site significantly disturbed (Atypical Situation)? Yes [No] Is the area a potential Problem Area? Yes [No] (If needed, explain on reverse.)	Community ID: Wetland Transect ID: W-02 Plot ID: SS-3

VEGETATION

Plant Community Classification: PEM/PSS wetland
Percent Canopy Cover: Tree: 25% Shrub: 50% Herb: 80% Vine: 0%

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Salix nigra*	T	FACW+	9.		
2. *S. nigra*	S	FACW+	10.		
3. *Onoclea sensibilis*	H	FACW	11.		
4. *Acorus calamus*	H	OBL	12.		
5. *Juncus effusus*	H	FACW+	13.		
6. *Mentha arvensis*	H	FACW	14.		
7. *Lemna* sp.	H	OBL	15.		
8 *Pilea pumila*	H	FACW	16.		

Percent of dominant Species that are OBL, FACW, or FAC (excluding FAC-): 100%

Remarks: Wetland vegetation present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
_x__ No Recorded Data Available

Field Observations:

Depth of Surface Water (in.): up to 8" in places

Depth to Free Standing Water in Pit (in.): 1"

Depth to Saturated Soil (in.): 0"

Wetland Hydrology Indicators:
Primary Indicators:
_x_ Inundated
_x_ Saturated
___ Water Marks
_x_ Drift lines
___ Sediment Deposits
_x_ Drainage Patterns In Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 inches
___ Water-Stained Leaves
___ Local Soil survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: Wetland hydrology present

Date: 05/04/01
Community ID: Wetland 02
Plot ID: SS-3

SOILS

Map Unit Name
(Series and Phase): Chenango gravelly silt loam

Taxonomy (SubGroup): Not provided in soil survey

Drainage Class: Permeability is moderate to moderately rapid in the subsoil and rapid in the substratum

Field Observations
Confirm Mapped Type? Yes [No]

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottles Abundance/Size/ Contrast	Texture, Concretions, Structure, etc.
0-10"	A	10YR 5/1	10YR 5/6	Common, medium, prominent	Silt with sand

Hydro Soil Indicators

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
_x_ Reducing Conditions
_x_ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content, Surface Layer in Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks: Refusal of Auger at 10 inches. Obtained sample shows evidence of reducing conditions. Wetland soil present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No
Wetlands Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

Is this Sample Station Point Within a Wetland? [Yes] No

Remarks

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetlands Delineation Manual)

Project Site: Little Valley Superfund Site, Bush Industries area Applicant/Owner: Investigator: R. Delahunty, K. Semenick	Date: 05/04/01 County: Cattaraugus State: NY
Do Normal Circumstances exist on the site? [Yes] No Is the site significantly disturbed (Atypical Situation)? Yes [No] Is the area a potential Problem Area? Yes [No] (If needed, explain on reverse.)	Community ID: Upland Transect ID: Plot ID: SS-4

VEGETATION

Plant Community Classification: mix of early-successional field and woodland
Percent Canopy Cover: Tree: 50% Shrub: 25% Herb: 100% Vine: 0%

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Crataegus* sp.	T	UPL	9.		
2. *Rubus* sp.	S	-	10.		
3. *Erythronium americanum*	H	UPL	11.		
4. *Galium aparine*	H	FACU	12.		
5. *Alliaria petiolata*	H	FACU-	13.		
6. *Agrimonia gryposepala*	H	FACU	14.		
7. *Solidago* sp.	H	-	15.		
8.			16.		

Percent of dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0%

Remarks: Upland vegetation present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
___ No Recorded Data Available

Field Observations:

Depth of Surface Water (in.): N/A

Depth to Free Standing Water in Pit (in.): N/A

Depth to Saturated Soil (in.): N/A

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated
___ Water Marks
___ Drift lines
___ Sediment Deposits
___ Drainage Patterns In Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 inches
___ Water-Stained Leaves
___ Local Soil survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: Upland hydrology present

Date: 05/04/01
Community ID: SS-4
Plot ID: Upland

SOILS

Map Unit Name
(Series and Phase): Chenango gravelly silt loam

Taxonomy (SubGroup): Not provided in soil survey

Drainage Class: Permeability is moderate to moderately rapid in the subsoil and rapid in the substratum
Field Observations
Confirm Mapped Type? Yes [No]

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottles Abundance/Size/ Contrast	Texture, Concretions, Structure, etc.
0-12"	A	10YR 4/3	None	N/A	Silt loam

Hydro Soil Indicators

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content, Surface Layer in Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

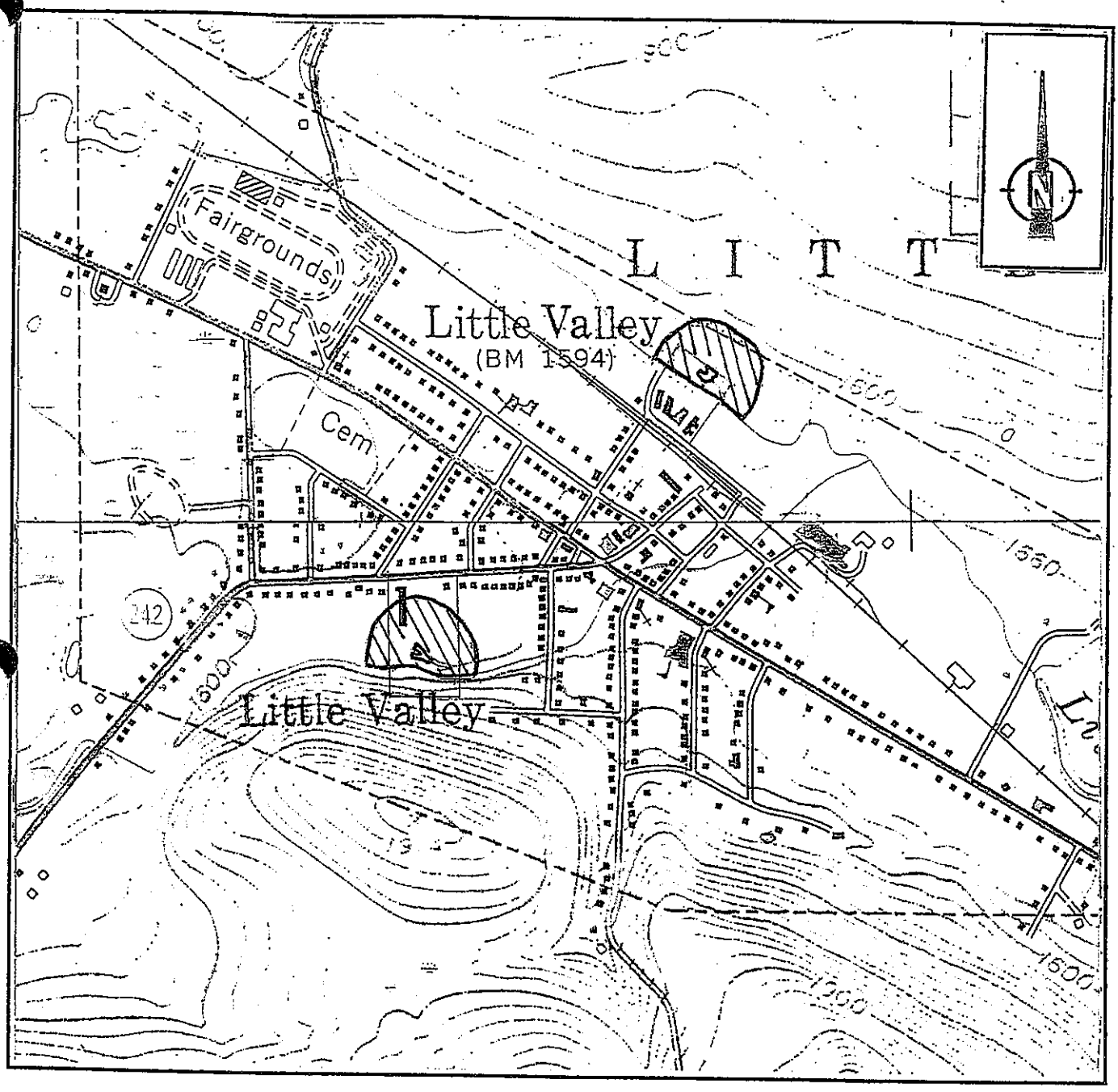
Remarks: Refusal at 12 inches. Upland soil present

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No]
Wetlands Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

Is this Sample Station Point Within a Wetland? Yes [No]

Remarks



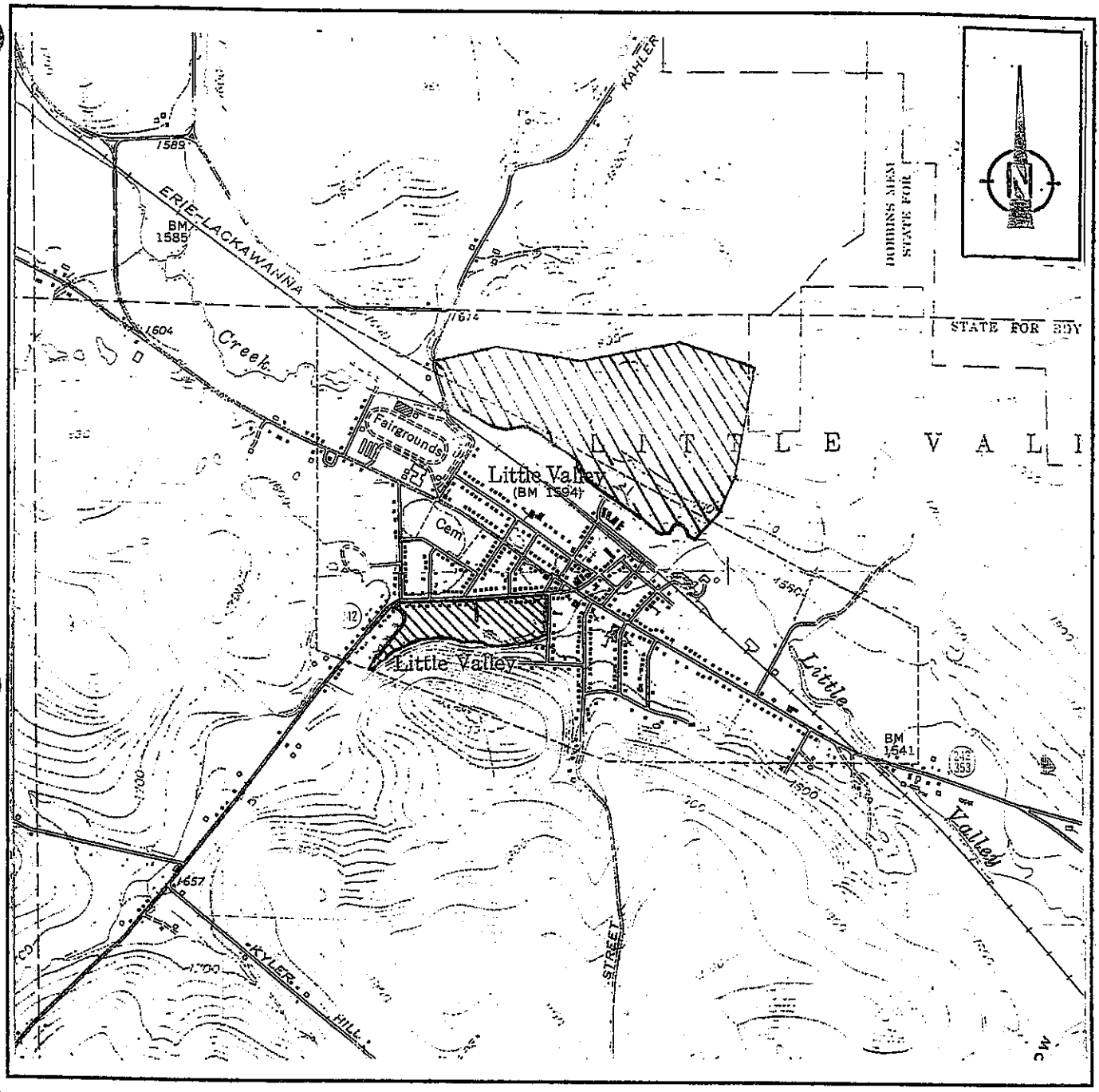
SOURCE: US Geological Survey 7.5-minute topographic map quadrangles for Cattaraugus, N.Y. (1963, photoinspected 1976) and Little Valley, N.Y. (1962 (photorevised 1979).

LITTLE VALLEY SUPERFUND SITE

Little Valley
Cattaraugus County, New York

FIGURE G-1
ASSESSMENT AREA AND INPUT ZONE

FOSTER WHEELER ENVIRONMENTAL CORPORATION



SOURCE: US Geological Survey 7.5-minute topographic map quadrangles for Cattaraugus, N.Y. (1963, photoinspected 1976) and Little Valley, N.Y. (1962 (photorevised 1979).

SCALE: 1:24000

LITTLE VALLEY SUPERFUND SITE
Little Valley Cattaraugus County, New York
FIGURE G-2 WATERSHED MAP
FOSTER WHEELER ENVIRONMENTAL CORPORATION

WET FORM A: SITE DOCUMENTATION - Page 1 of 2

PART 1: Background Information

Evaluation Site: Bush Industries Property

Date: June 8, 2001

Site Location (i.e., Quad, Section, Range, and Township or Latitude and Longitude):

Little Valley, N.Y. Quad: 42° 14' 51" latitude and 78° 48' 08" longitude

Evaluator(s): Mr. Joseph Fischl and Mr. Richard Delahunty

Has the evaluator(s) taken a training course in Version 2.0 of WET? Yes

Agencies/Experts Contacted: Cattaraugus County Soil and Water Conservation District; U.S. Fish and Wildlife Service; and the New York State Department of Environmental Conservation

Circle the assessment levels to be completed? SS-1 SS-2 E/O-1&2 E/O-3 HS

The wetland being evaluated is: freshwater nontidal freshwater tidal nonfreshwater tidal

Indicate the month(s) that are representative of typical wet, dry, and average conditions for the region/locality. If average annual condition will be used only, give rationale. Indicate if precipitation for the previous 12 months has been above, below, or near normal. Answer these questions only if wetland is nontidal.

Wet month(s): Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Dry month(s): Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Average month(s): Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Precipitation status (past year): average drier than average wetter than average

The evaluation is for: existing conditions past conditions future conditions

If past or future conditions are being evaluated explain nature and sources of information/data used to establish past or predict future conditions.)

N/A

Will alternative methods of evaluation be used for any of the functions or values of this wetland site? If yes, describe these evaluation method(s).

N/A

PART 2: Site Map and Features of Area Being Evaluated

Attach a sketch of the vicinity around the area being evaluated, or a suitable map (i.e., photocopy of topgraphic map) that shows the following features along with any additional features deemed suitable:

- Boundaries of the Assessment Area, Impact Area, and Input Zone, and the location of service areas.
- Watershed boundaries of AA.
- Extent of surface water in the AA during the wet and dry seasons.
- Open water (channels and pools) within and adjacent to the AA.
- Normal direction of channel or tidal flow
- Normal direction of wind-driven waves or current.
- Scale of distance and north compass direction.

Explain the procedures used to identify or delineate the Assessment Area, Impact Area, and Input Zone, Service Areas, and the watersheds of these areas if they differed from the guidelines outlined in Section 2.7.

_____

_____

PART 3: Determine the Size of the Following Evaluation Areas

Assessment Area (AA) = 0.09 acres

Impact Area (IA) = N/A acres (N/A if not applicable)

Watershed of AA = 25 acres/0.04 miles^2 (acres x 0.0016 = miles)

Wetlands in AA = 0.09 acres (AA acreage minus deepwater)

Wetlands in the watershed of closest service area = 136.91 acres

Wetlands and deepwater in the watershed of closest service area = 94.75 acres

PART 4: Location and Nature of Service Areas

Township of Little Valley

_____

_____

_____

_____

PART 5: Define Locality and Region

Locality: County

Region: State

****

Summary of Evaluation Results for "BUSH"

****

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	H	*
Floodflow Alteration	L	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	M	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and "*"'s identify conditions where functions and values are not evaluated.

WET Answer Dataset for "BUSH"

s1 - n
s2 - n
s3 - n
s4 - n
s5 - n
s6 - n
s7 - n
s8 - n
s9 - n
s10 - u
s11 - n
s12 - n
s13 - n
s14 - n
s15 - n
s16 - n
s17 - n
s18 - n
s19 - n
s20 - n
s21 - n
s22 - n
s23 - n
s24 - n
s25 - n
s26 - n
s27 - n
s28 - n
s29 - n
s30 - n
s31 - n
1.1 - n
1.2 - n
1.3 - y
2.1.1 - y
2.1.2 - n
2.1.3 - n
2.2.1 - y
2.2.2 - y
3.1 - y
3.2 - y
3.3 - n
4.1 - n
4.2A - y
4.2B - n
4.2C - n
4.2D - n
5.1.1 - y
5.1.2 - n
5.2 - y
blank - u
6.1 - n
6.2 - y
7 - y
8.1 - n
8.2 - y
8.3 - n
8.4 - y
9.1 - n
9.2 - n
9.3 - n
10A - n
10B - y
10C - n
10D - n
10E - n
10F - n
11(x) - n
11(w) - n
11(d) - n
12A(x) - n
12A(w) - n
12A(d) - n
12Aa(x) - n
12Aa(w) - n
12Aa(d) - n
12Ab(x) - n
12Ab(w) - n
12Ab(d) - n
12Ac(x) - n
12Ac(w) - n
12Ac(d) - n
12Ad(x) - n
12Ad(w) - n
12Ad(d) - n
12Ae(x) - n
12Ae(w) - n
12Ae(d) - n
12B(x) - y
12B(w) - y
12B(d) - y
12Ba(x) - n
12Ba(w) - n
12Ba(d) - n
12Bb(x) - n
12Bb(w) - n
12Bb(d) - n
12Bc(x) - n
12Bc(w) - n
12Bc(d) - n
12Bd(x) - n
12Bd(w) - n
12Bd(d) - n
12Be(x) - n
12Be(w) - n
12Be(d) - n
12C(x) - y
12C(w) - y
12C(d) - y
12Ca(x) - n
12Ca(w) - n
12Ca(d) - n
12Cb(x) - y
12Cb(w) - y
12Cb(d) - y
12Cc(x) - n
12Cc(w) - n
12Cc(d) - n
12Cd(x) - n
12Cd(w) - n
12Cd(d) - n
12D(x) - n
12D(w) - n
12D(d) - n
12Da(x) - n
12Da(w) - n
12Da(d) - n
12Db(x) - n
12Db(w) - n
12Db(d) - n
12E(x) - n
12E(w) - n
12E(d) - n
13A(x) - y
13A(w) - y
13A(d) - y
13Aa(x) - n
13Aa(w) - n
13Aa(d) - n
13Ab(x) - n
13Ab(w) - n
13Ab(d) - n
13Ac(x) - n
13Ac(w) - n
13Ac(d) - n
13Ad(x) - n
13Ad(w) - n
13Ad(d) - n
13Ae(x) - y
13Ae(w) - y
13Ae(d) - y
13B(x) - y
13B(w) - y
13B(d) - y
13Ba(x) - n
13Ba(w) - n
13Ba(d) - n
13Bb(x) - n
13Bb(w) - n
13Bb(d) - n
13Bc(x) - n
13Bc(w) - n
13Bc(d) - n
13Bd(x) - n
13Bd(w) - n
13Bd(d) - n
13Be(x) - y
13Be(w) - y
13Be(d) - y
13C(x) - y
13C(w) - y
13C(d) - y
13Ca(x) - n
13Ca(w) - n
13Ca(d) - n
13Cb(x) - y
13Cb(w) - y
13Cb(d) - y
13Cc(x) - n
13Cc(w) - n
13Cc(d) - n
13Cd(x) - n
13Cd(w) -
13Cd(d) -
13D(x) - y
13D(w) - y
13D(d) - y
13Da(x) - y
13Da(w) - y
13Da(d) - y
13Db(x) - n
13Db(w) - n
13Db(d) - n
13E(x) - n
13E(w) - n
13E(d) - n
14.1(x) - n
14.1(w) - n
14.1(d) - n
14.2(x) - n
14.2(w) - n
14.2(d) - n
15.1A - n
15.1B - y
15.1C - n
15.2 - n
16A(x) - y
16A(w)

WET Answer Dataset for "BUSH"

16A(d) - y
16B(x) - n
16B(w) - n
16B(d) - n
16C(x) - n
16C(w) - n
16C(d) - n
17 - n
18 - n
19.1A - y
19.1B - n
19.2 - n
19.3 - n
20.1 - n
20.2 - y
21A - n
21B - n
21C - n
21D - y
21E - n
22.1.1 - y
22.1.2 - n
22.2 - n
22.3 - n
23 - y
24.1 - n
24.2 - i
24.3 - n
24.4 - n
24.5 - n
25.1 - n
25.2A - i
25.2B - i
25.3 - n
26.1 - n
26.2 - i
26.3 - i
27.1 - n
27.2 - i
27.3 - i
28 - n
29.1 - n
29.2 - y
30(x) - n
30(w) - n
30(d) - n
31.1(x) - n
31.1(w) - n
31.1(d) - n
31.2(x) - y
31.2(w) - y
31.2(d) - y
31.3(x) - y
31.3(w) - y
31.3(d) - y
31.4(x) - i
31.4(w) - i
31.4(d) - i
31.5(x) - y
31.5(w) - y
31.5(d) - y
31.6A(x) - n
31.6A(w) - n
31.6A(d) - n
31.6B(x) - y
31.6B(w) - y
31.6B(d) - y
31.6C(x) - n
31.6C(w) - n
31.6C(d) - n
31.6D(x) - n
31.6D(w) - n
31.6D(d) - n
31.6E(x) - n
31.6E(w) - n
31.6E(d) - n
32A - n
32B - y
32C - n
32D - n
32E - n
32F - n
32G - n
32H - n
32I - n
32J - n
32K - n
33A - n
33B - y
33C - n
33D - n
33E - n
33F - n
33G - n
33H - n
33I - n
33J - n
33K - n
34.1 - n
34.2 - n
34.3.1 - n
34.3.2 - i
35.1 - n
35.2 - n
36.1.1(x) - y
36.1.1(w) - y
36.1.1(d) - y
36.1.2(x) - n
36.1.2(w) - n
36.1.2(d) - n
36.2.1(x) - y
36.2.1(w) - y
36.2.1(d) - y
36.2.2(x) - y
36.2.2(w) - y
36.2.2(d) - y
36.2.3(x) - n
36.2.3(w) - n
36.2.3(d) - n
37 - n
38.1 - y
38.2 - n
38.3 - n
38.4 - n
38.5 - n
38.6 - n
38.7 - y
38.8 - i
39 - y
40.1 - y
40.2 - n
41.1 - i
41.2 - i
42.1.1(x) - y
42.1.1(w) - y
42.1.1(d) - y
42.1.2(x) - n
42.1.2(w) - n
42.1.2(d) - n
42.1.3(x) - n
42.1.3(w) - n
42.1.3(d) - n
42.2.1(x) - n
42.2.1(w) - n
42.2.1(d) - n
42.2.2(x) - y
42.2.2(w) - n
42.2.2(d) - y
42.2.3(x) - n
42.2.3(w) - y
42.2.3(d) - n
43A(x) - n
43A(w) - n
43A(d) - y
43B(x) - n
43B(w) - n
43B(d) - n
43C(x) - n
43C(w) - n
43C(d) - n
43D(x) - y
43D(w) - n
43D(d) - n
43E(x) - n
43E(w) - y
43E(d) - n
43F(x) - n
43F(w) - n
43F(d) - n
43G(x) - n
43G(w) - n
43G(d) - n
43H(x) - n
43H(w) - n
43H(d) - n
43I(x) - n
43I(w) - n
43I(d) - n
44A(x) - n
44A(w) - n
44A(d) - n
44B(x) - n
44B(w) - n
44B(d) - y
44C(x) - y
44C(w) - n
44C(d) - n
44D(x) - n
44D(w) - n
44D(d) - n
44E(x) - n
44E(w) - y
44E(d) - n
44F(x) - n
44F(w) - n
44F(d) - n
44G(x) - n
44G(w) - n
44G(d) - n
44H(x) - n
44H(w) - n
44H(d) - n
44I(x) - n
44I(w) - n
44I(d) - n
45A - y
45B - n
45C - n

WET Answer Dataset for "BUSH"

45D - n
45E - n
45F - n
45G - n
46A(x) - n
46A(w) - n
46A(d) - n
46B(x) - y
46B(w) - y
46B(d) - y
46C(x) - n
46C(w) - n
46C(d) - n
47A - y
47B - n
47C - n
48A(x) - y
48A(w) - y
48A(d) - y
48B(x) - n
48B(w) - n
48B(d) - n
48C(x) - n
48C(w) - n
48C(d) - n
48D(x) - n
48D(w) - n
48D(d) - n
48E(x) - n
48E(w) - n
48E(d) - n
48F(x) - n
48F(w) - n
48F(d) - n
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49.1.1(w) - n
49.1.1(d) - n
49.1.2(x) - n
49.1.2(w) - n
49.1.2(d) - n
49.2(x) - y
49.2(w) - y
49.2(d) - y
49.3(x) - n
49.3(w) - n
49.3(d) - n
50(x) - y
50(w) - y
50(d) - y
51.1 - u
51.2 - u
52.1 - u
52.2 - u
53.1 - u
53.2 - u
54(x) - u
54(w) - u
54(d) - u
55.1 - u
55.2 - u
55.3 - u
55.4 - u
56.1 - u
56.2 - u
57.1 - u
57.2 - u
58 - u
59.1 - u
59.2 - u
60 - u
61 - u
62 - u
63.1 - u
63.2 - u
64 - u
CR - 1
1 - y
2 - n
3 - n
4 - n

WET FORM A: SITE DOCUMENTATION - Page 1 of 2

PART 1: Background Information

Evaluation Site: Cattaraugus Cutlery Property

Date: June 8, 2001

Site Location (i.e., [Quad], Section, Range, and Township or [Latitude and Longitude]):

Cattaraugus, N.Y. Quad; 42° 15' 09" latitude and 78° 47' 46"

Evaluator(s): Mr. Joseph Fischl and Mr. Richard Delahunty

Has the evaluator(s) taken a training course in Version 2.0 of WET? Yes

Agencies/Experts Contacted: Cattaraugus County Soil and Water Conservation District; U.S. Fish and Wildlife Service; and the New York State Department of Environmental Conservation

Circle the assessment levels to be completed? [SS-1] [SS-2] [E/O-1&2] E/O-3 HS

The wetland being evaluated is: [freshwater nontidal] freshwater tidal nonfreshwater tidal

Indicate the month(s) that are representative of typical wet, dry, and average conditions for the region/locality. If average annual condition will be used only, give rationale. Indicate if precipitation for the previous 12 months has been above, below, or near normal. Answer these questions only if wetland is nontidal.

Wet month(s): Jan Feb Mar Apr May [Jun] Jul [Aug Sep] Oct [Nov Dec]

Dry month(s): [Jan Feb Mar Apr] May Jun Jul Aug Sep Oct Nov Dec

Average month(s): Jan Feb Mar Apr [May] Jun [Jul] Aug Sep [Oct] Nov Dec

Precipitation status (past year): [average] drier than average wetter than average

The evaluation is for: [existing conditions] past conditions future conditions

If past or future conditions are being evaluated explain nature and sources of information/data used to establish past or predict future conditions.)

N/A

Will alternative methods of evaluation be used for any of the functions or values of this wetland site? If yes, describe these evaluation method(s).

N/A

PART 2: Site Map and Features of Area Being Evaluated

Attach a sketch of the vicinity around the area being evaluated, or a suitable map (i.e., photocopy of topgraphic map) that shows the following features along with any additional features deemed suitable:

- Boundaries of the Assessment Area, Impact Area, and Input Zone, and the location of service areas.
- Watershed boundaries of AA.
- Extent of surface water in the AA during the wet and dry seasons.
- Open water (channels and pools) within and adjacent to the AA.
- Normal direction of channel or tidal flow
- Normal direction of wind-driven waves or current.
- Scale of distance and north compass direction.

Explain the procedures used to identify or delineate the Assessment Area, Impact Area, and Input Zone, Service Areas, and the watersheds of these areas if they differed from the guidelines outlined in Section 2.7.

PART 3: Determine the Size of the Following Evaluation Areas

Assessment Area (AA) = 0.03 acres

Impact Area (IA) = N/A acres (N/A if not applicable)

Watershed of AA = 130 acres/ 0.208 miles^2 (acres x 0.0016 = miles)

Wetlands in AA = 0.03 acres (AA acreage minus deepwater)

Wetlands in the watershed of closest service area = 86.75 acres

Wetlands and deepwater in the watershed of closest service area = 127.91 acres

PART 4: Location and Nature of Service Areas

Township of Little Valley

PART 5: Define Locality and Region

Locality: County

Region: State

****

Summary of Evaluation Results for "CATTARAU"

****

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	H	*
Floodflow Alteration	L	M	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	M	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and "*"'s identify conditions where functions and values are not evaluated.

WET Answer Dataset for "CATTARAU"

s1 - n
s2 - n
s3 - n
s4 - n
s5 - n
s6 - n
s7 - n
s8 - n
s9 - n
s10 - u
s11 - n
s12 - n
s13 - n
s14 - n
s15 - n
s16 - n
s17 - n
s18 - n
s19 - n
s20 - n
s21 - n
s22 - n
s23 - n
s24 - n
s25 - n
s26 - n
s27 - n
s28 - n
s29 - n
s30 - n
s31 - n
1.1 - n
1.2 - n
1.3 - y
2.1.1 - y
2.1.2 - n
2.1.3 - n
2.2.1 - i
2.2.2 - i
3.1 - y
3.2 - y
3.3 - n
4.1 - n
4.2A - y
4.2B - n
4.2C - n
4.2D - n
5.1.1 - y
5.1.2 - n
5.2 - n
blank - u
6.1 - n
6.2 - y
7 - y
8.1 - n
8.2 - y
8.3 - n
8.4 - y
9.1 - n
9.2 - n
9.3 - n
10A - n
10B - y
10C - n
10D - n
10E - n
10F - n
11(x) - n
11(w) - n
11(d) - n
12A(x) - n
12A(w) - n
12A(d) - n
12Aa(x) - n
12Aa(w) - n
12Aa(d) - n
12Ab(x) - n
12Ab(w) - n
12Ab(d) - n
12Ac(x) - n
12Ac(w) - n
12Ac(d) - n
12Ad(x) - n
12Ad(w) - n
12Ad(d) - n
12Ae(x) - n
12Ae(w) - n
12Ae(d) - n
12B(x) - y
12B(w) - y
12B(d) - y
12Ba(x) - n
12Ba(w) - n
12Ba(d) - n
12Bb(x) - n
12Bb(w) - n
12Bb(d) - n
12Bc(x) - n
12Bc(w) - n
12Bc(d) - n
12Bd(x) - n
12Bd(w) - n
12Bd(d) - n
12Be(x) - y
12Be(w) - y
12Be(d) - y
12C(x) - n
12C(w) - n
12C(d) - n
12Ca(x) - n
12Ca(w) - n
12Ca(d) - n
12Cb(x) - n
12Cb(w) - n
12Cb(d) - n
12Cc(x) - n
12Cc(w) - n
12Cc(d) - n
12Cd(x) - n
12Cd(w) - n
12Cd(d) - n
12D(x) - n
12D(w) - n
12D(d) - n
12Da(x) - n
12Da(w) - n
12Da(d) - n
12Db(x) - n
12Db(w) - n
12Db(d) - n
12E(x) - n
12E(w) - n
12E(d) - n
13A(x) - y
13A(w) - y
13A(d) - y
13Aa(x) - n
13Aa(w) - n
13Aa(d) - n
13Ab(x) - n
13Ab(w) - n
13Ab(d) - n
13Ac(x) - n
13Ac(w) - n
13Ac(d) - n
13Ad(x) - n
13Ad(w) - n
13Ad(d) - n
13Ae(x) - y
13Ae(w) - y
13Ae(d) - y
13B(x) - n
13B(w) - y
13B(d) - y
13Ba(x) - n
13Ba(w) - n
13Ba(d) -
13Bb(x) -
13Bb(w) - n
13Bb(d) - n
13Bc(x) - n
13Bc(w) - n
13Bc(d) - n
13Bd(x) - n
13Bd(w) - n
13Bd(d) - n
13Be(x) - y
13Be(w) - y
13Be(d) - y
13C(x) - n
13C(w) - n
13C(d) - n
13Ca(x) - n
13Ca(w) - n
13Ca(d) - n
13Cb(x) - n
13Cb(w) - n
13Cb(d) - n
13Cc(x) - n
13Cc(w) - n
13Cc(d) - n
13Cd(x) -
13Cd(w) -
13Cd(d) -
13D(x) - y
13D(w) - y
13D(d) - y
13Da(x) - y
13Da(w) - y
13Da(d) - y
13Db(x) - n
13Db(w) - n
13Db(d) - n
13E(x) - n
13E(w) - n
13E(d) - n
14.1(x) - n
14.1(w) - n
14.1(d) - n
14.2(x) - n
14.2(w) - n
14.2(d) - n
15.1A - y
15.1B - n
15.1C - n
15.2 - n
16A(x) - y
16A(w) -

WET Answer Dataset for "CATTARAU"

16A(d) - y
16B(x) - n
16B(w) - n
16B(d) - n
16C(x) - n
16C(w) - n
16C(d) - n
17 - n
18 - n
19.1A - i
19.1B - n
19.2 - n
19.3 - n
20.1 - n
20.2 - n
21A - y
21B - n
21C - n
21D - y
21E - n
22.1.1 - y
22.1.2 - i
22.2 - n
22.3 - n
23 - y
24.1 - n
24.2 - i
24.3 - n
24.4 - n
24.5 - n
25.1 - n
25.2A - i
25.2B - i
25.3 - n
26.1 - n
26.2 - i
26.3 - i
27.1 - n
27.2 - i
27.3 - i
28 - n
29.1 - y
29.2 - y
30(x) - n
30(w) - n
30(d) - n
31.1(x) - y
31.1(w) - y
31.1(d) - y
31.2(x) - n
31.2(w) - n
31.2(d) - n
31.3(x) - n
31.3(w) - n
31.3(d) - n
31.4(x) - i
31.4(w) - i
31.4(d) - i
31.5(x) - n
31.5(w) - n
31.5(d) - n
31.6A(x) - y
31.6A(w) - y
31.6A(d) - y
31.6B(x) - n
31.6B(w) - n
31.6B(d) - n
31.6C(x) - n
31.6C(w) - n
31.6C(d) - n
31.6D(x) - n
31.6D(w) - n
31.6D(d) - n
31.6E(x) - n
31.6E(w) - n
31.6E(d) - n
32A - n
32B - n
32C - n
32D - n
32E - n
32F - n
32G - y
32H - n
32I - n
32J - n
32K - n
33A - n
33B - n
33C - n
33D - n
33E - n
33F - n
33G - y
33H - n
33I - n
33J - n
33K - n
34.1 - n
34.2 - n
34.3.1 - n
34.3.2 - i
35.1 - n
35.2 - n
36.1.1(x) - n
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36.1.1(d) - n
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36.1.2(d) - n
36.2.1(x) - n
36.2.1(w) - n
36.2.1(d) - n
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36.2.2(w) - n
36.2.2(d) - n
36.2.3(x) - n
36.2.3(w) - n
36.2.3(d) - n
37 - n
38.1 - n
38.2 - n
38.3 - n
38.4 - n
38.5 - n
38.6 - n
38.7 - y
38.8 - n
39 - y
40.1 - y
40.2 - n
41.1 - i
41.2 - i
42.1.1(x) - y
42.1.1(w) - y
42.1.1(d) - y
42.1.2(x) - n
42.1.2(w) - n
42.1.2(d) - n
42.1.3(x) - n
42.1.3(w) - n
42.1.3(d) - n
42.2.1(x) - n
42.2.1(w) - n
42.2.1(d) - n
42.2.2(x) - y
42.2.2(w) - n
42.2.2(d) - y
42.2.3(x) - n
42.2.3(w) - y
42.2.3(d) - n
43A(x) - y
43A(w) - n
43A(d) - y
43B(x) - n
43B(w) - y
43B(d) - n
43C(x) - n
43C(w) - n
43C(d) - n
43D(x) - n
43D(w) - n
43D(d) - n
43E(x) - n
43E(w) - n
43E(d) - n
43F(x) - n
43F(w) - n
43F(d) - n
43G(x) - n
43G(w) - n
43G(d) - n
43H(x) - n
43H(w) - n
43H(d) - n
43I(x) - n
43I(w) - n
43I(d) - n
44A(x) - n
44A(w) - n
44A(d) - n
44B(x) - n
44B(w) - n
44B(d) - y
44C(x) - y
44C(w) - n
44C(d) - n
44D(x) - n
44D(w) - n
44D(d) - n
44E(x) - n
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44F(d) - n
44G(x) - n
44G(w) - n
44G(d) - n
44H(x) - n
44H(w) - n
44H(d) - n
44I(x) - n
44I(w) - n
44I(d) - n
45A - y
45B - n
45C - n

WET Answer Dataset for "CATTARAU"

45D - n
45E - n
45F - n
45G - n
46A(x) - n
46A(w) - n
46A(d) - n
46B(x) - n
46B(w) - n
46B(d) - n
46C(x) - n
46C(w) - n
46C(d) - n
47A - y
47B - n
47C - n
48A(x) - y
48A(w) - y
48A(d) - y
48B(x) - n
48B(w) - n
48B(d) - n
48C(x) - n
48C(w) - n
48C(d) - n
48D(x) - n
48D(w) - n
48D(d) - n
48E(x) - n
48E(w) - n
48E(d) - n
48F(x) - n
48F(w) - n
48F(d) - n
49.1.1(x) - n
49.1.1(w) - n
49.1.1(d) - n
49.1.2(x) - n
49.1.2(w) - n
49.1.2(d) - n
49.2(x) - n
49.2(w) - n
49.2(d) - n
49.3(x) - n
49.3(w) - n
49.3(d) - n
50(x) - n
50(w) - n
50(d) - n
51.1 - u
51.2 - u
52.1 - u
52.2 - u
53.1 - u
53.2 - u
54(x) - u
54(w) - u
54(d) - u
55.1 - u
55.2 - u
55.3 - u
55.4 - u
56.1 - u
56.2 - u
57.1 - u
57.2 - u
58 - u
59.1 - u
59.2 - u
60 - u
61 - u
62 - u
63.1 - u
63.2 - u
64 - u
CR - 1
1 - y
2 - n
3 - n
4 - n

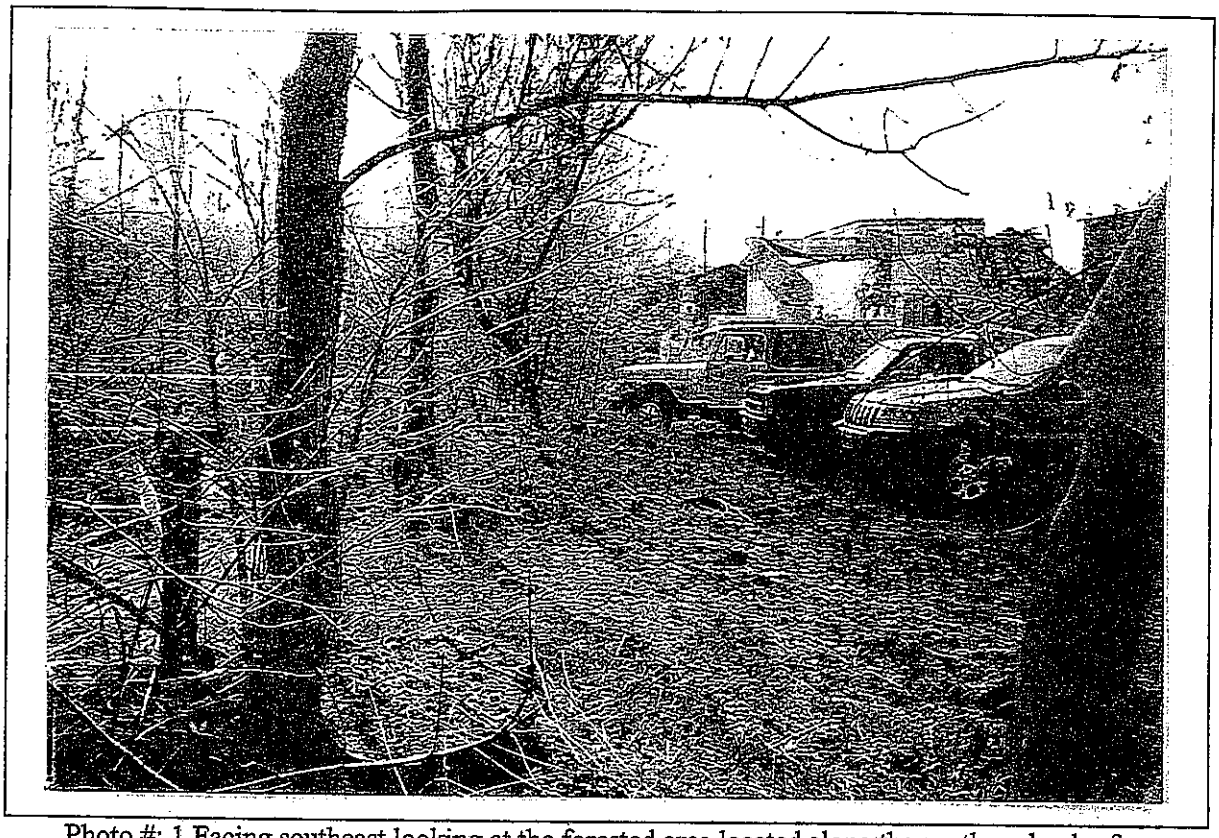


Photo #: 1 Facing southeast looking at the forested area located along the southern bank of Little Valley Creek at the Cattaraugus Cutlery property.

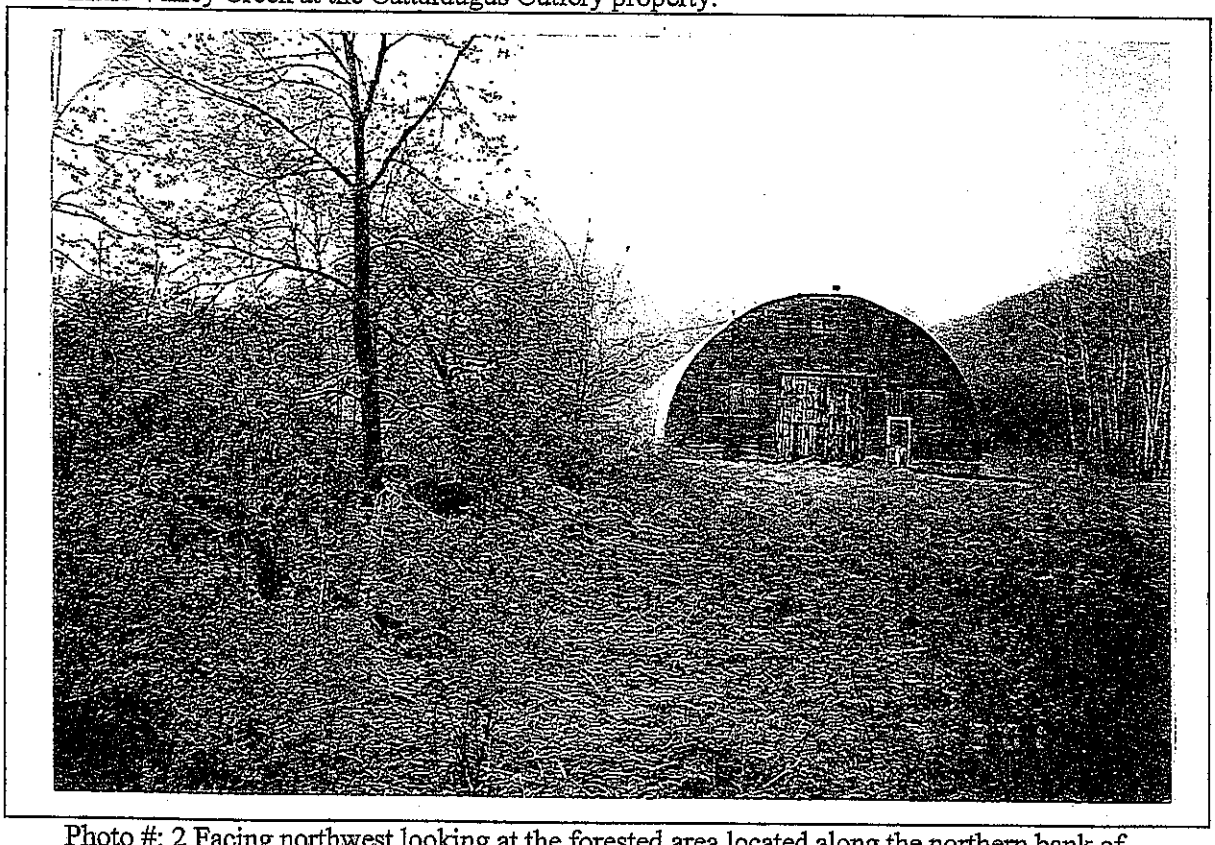


Photo #: 2 Facing northwest looking at the forested area located along the northern bank of Little Valley Creek at the Cattaraugus Cutlery property.

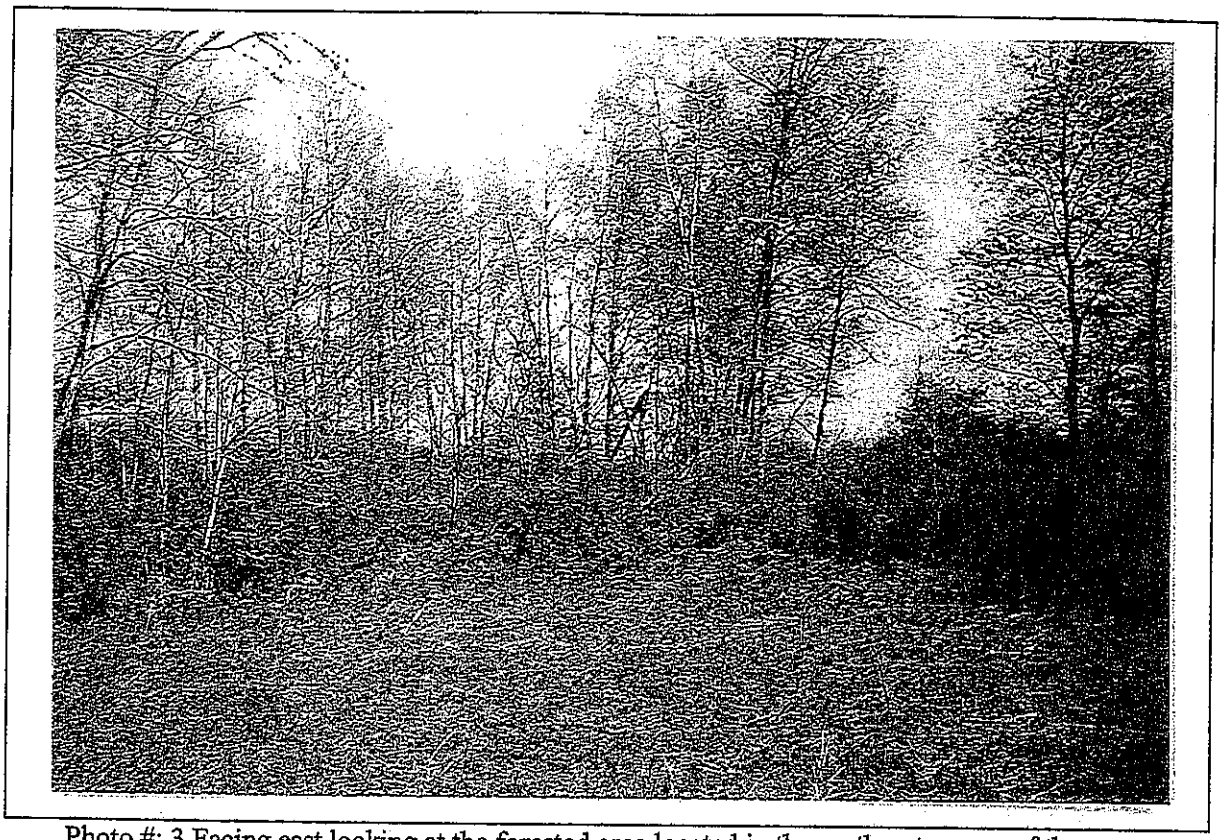


Photo #: 3 Facing east looking at the forested area located in the northeast corner of the Cattaraugus Cutlery property.

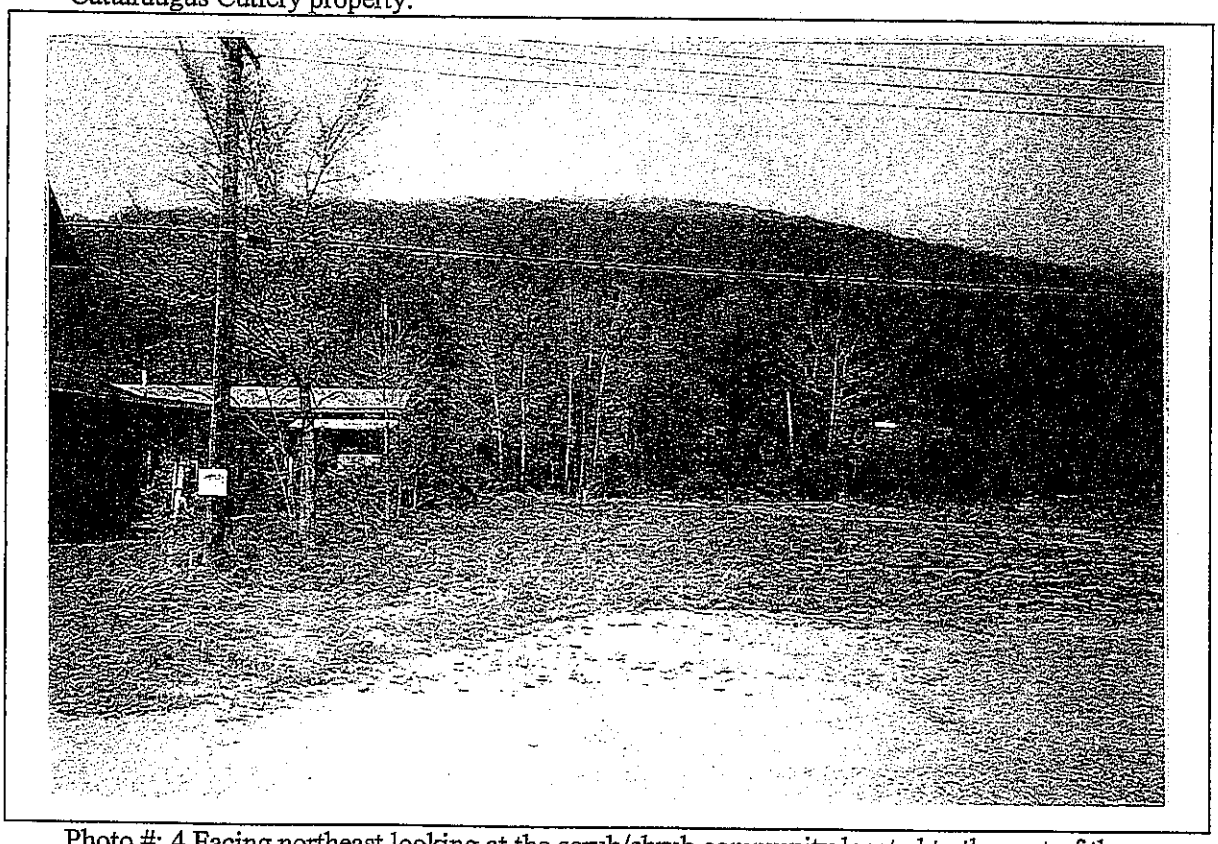


Photo #: 4 Facing northeast looking at the scrub/shrub community located to the east of the buildings at the Cattaraugus Cutlery property.

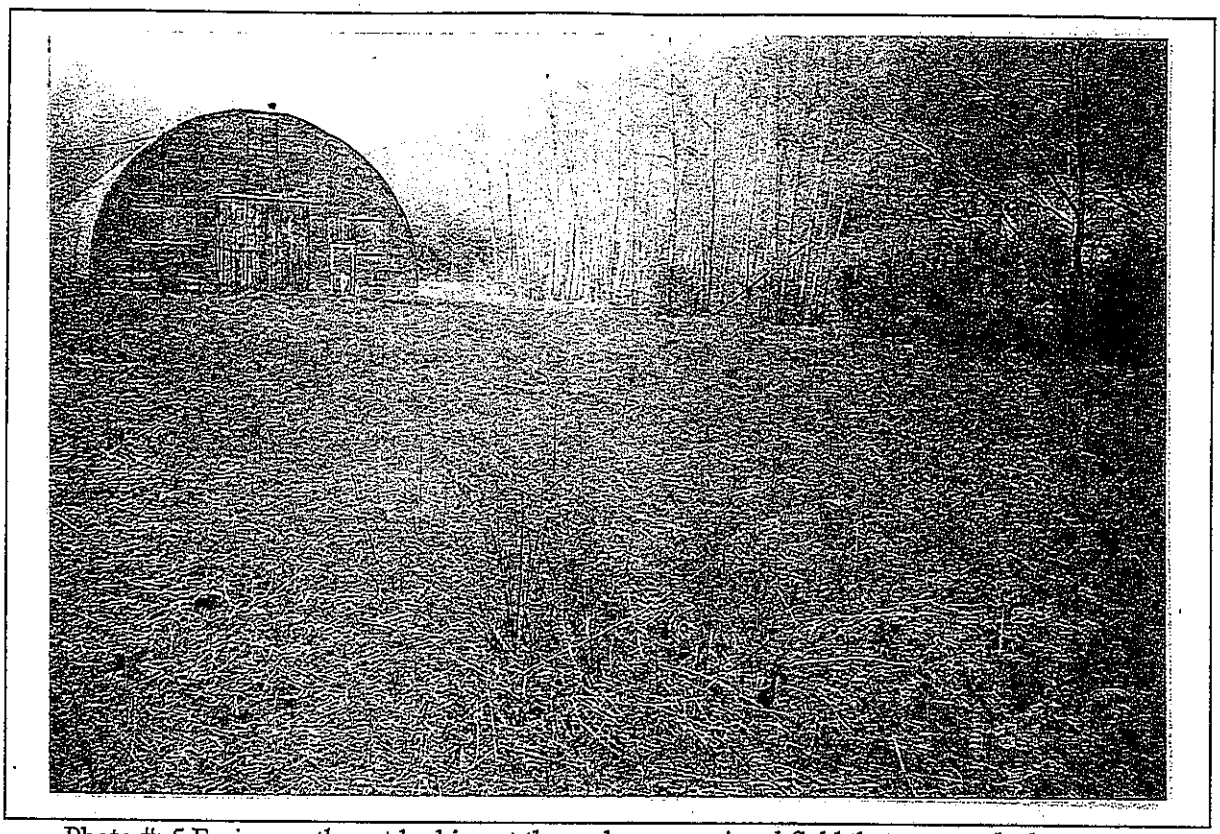


Photo #: 5 Facing northwest looking at the early-successional field that surrounds the Quonset hut at the Cattaraugus Cutlery property.

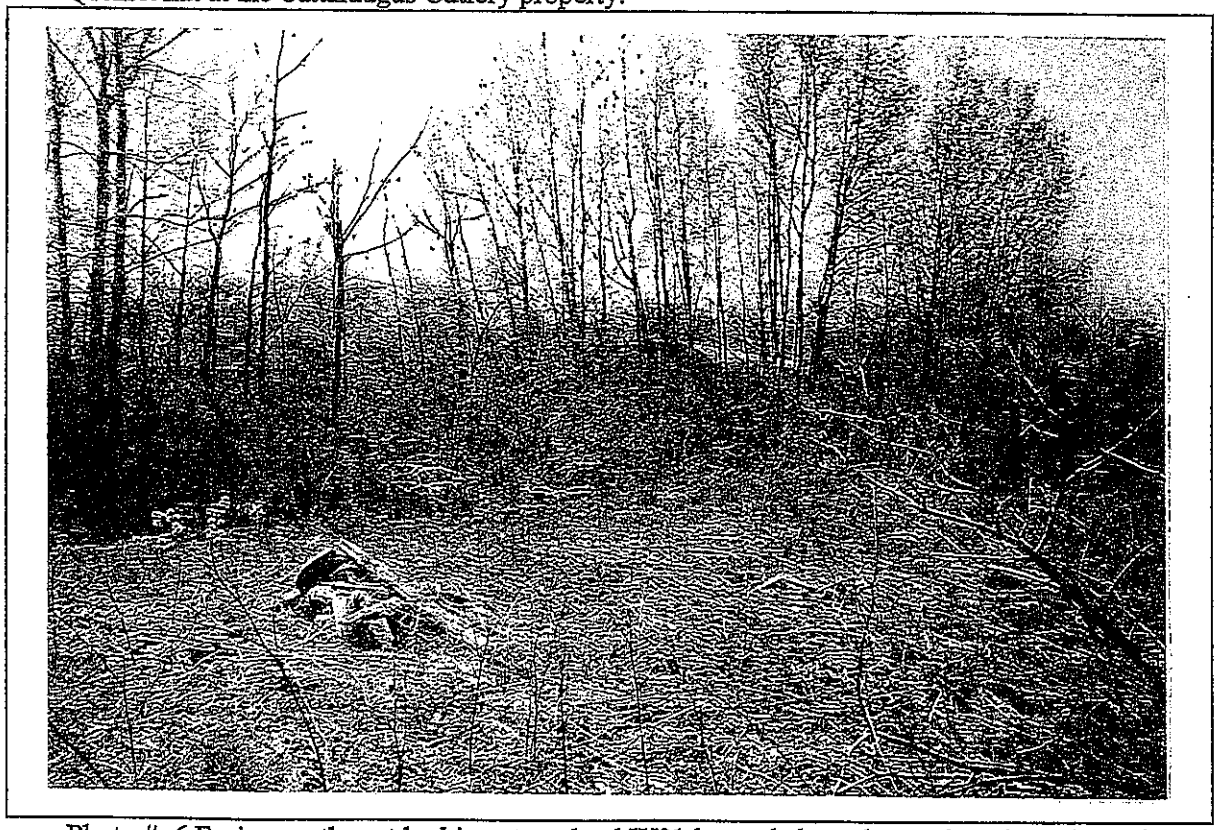


Photo #: 6 Facing southwest looking at wetland W01 located along the northern boundary of the Cattaraugus Cutlery property.

Photo #: 7 Facing northeast looking at beaver chew marks on the trees located along the southern side of Little Valley Creek at the Cattaraugus Cutlery property.

Photo #: 8 Facing northeast looking at woodpecker holes in the trees located along the southern side of Little Valley Creek at the Cattaraugus Cutlery property.

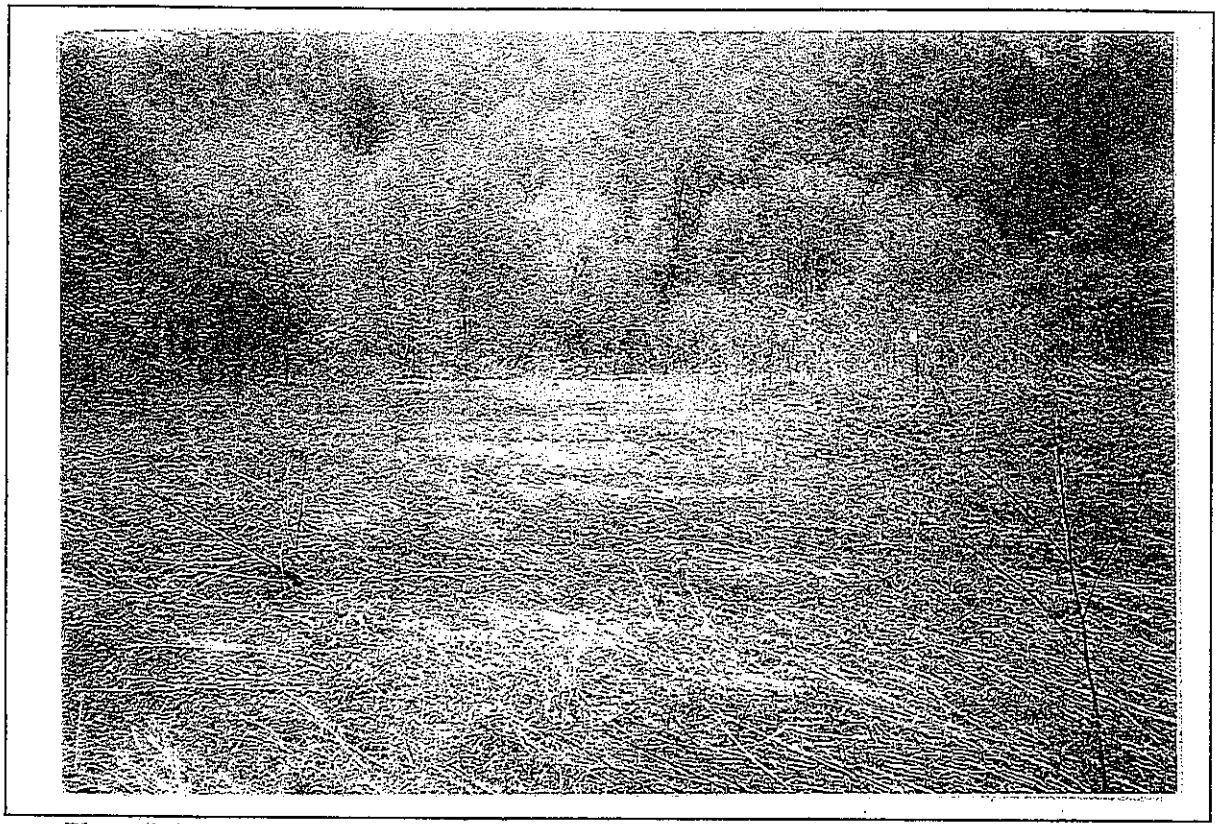


Photo #: 9 Facing south looking at the early-successional field located to the east of the Bush Industries buildings.

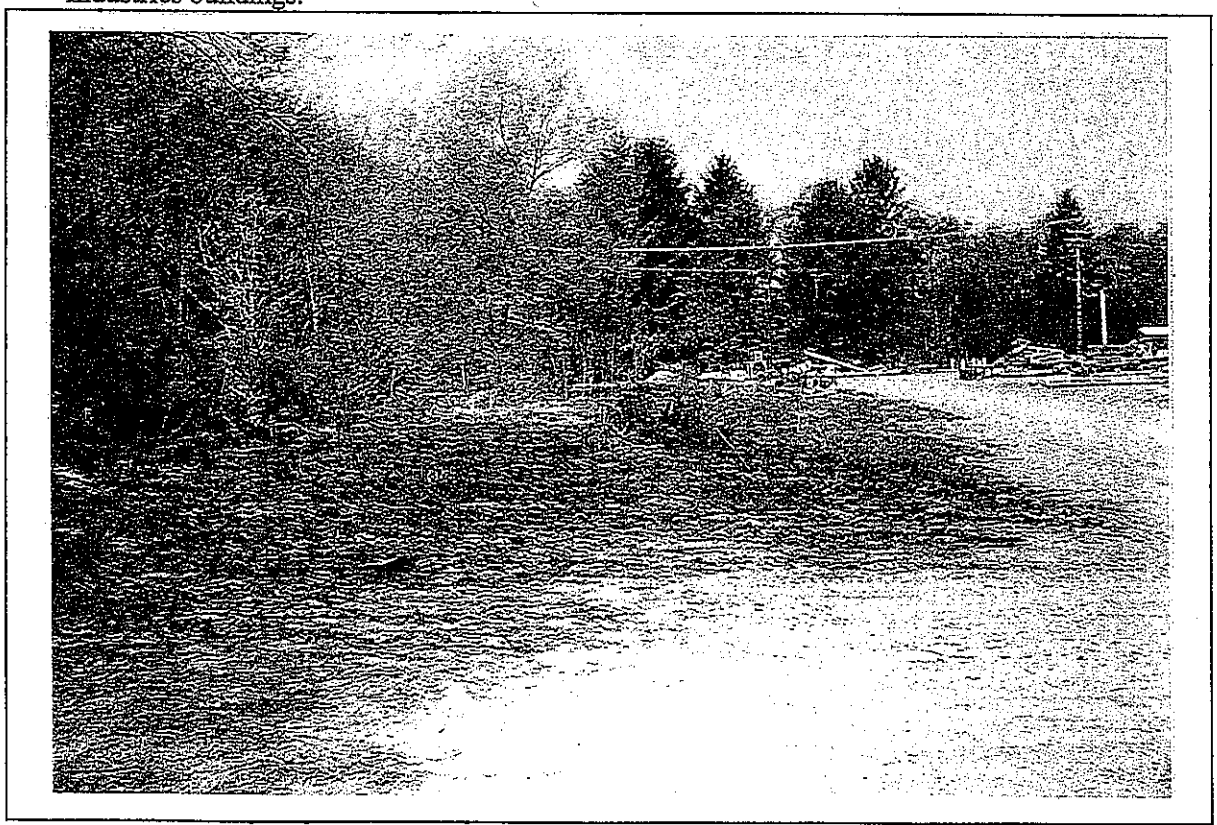


Photo #: 10 Facing west looking at the early-successional field located to the south of the Bush Industries buildings and the forested area along the northern bank of the tributary to the Little Valley Creek.

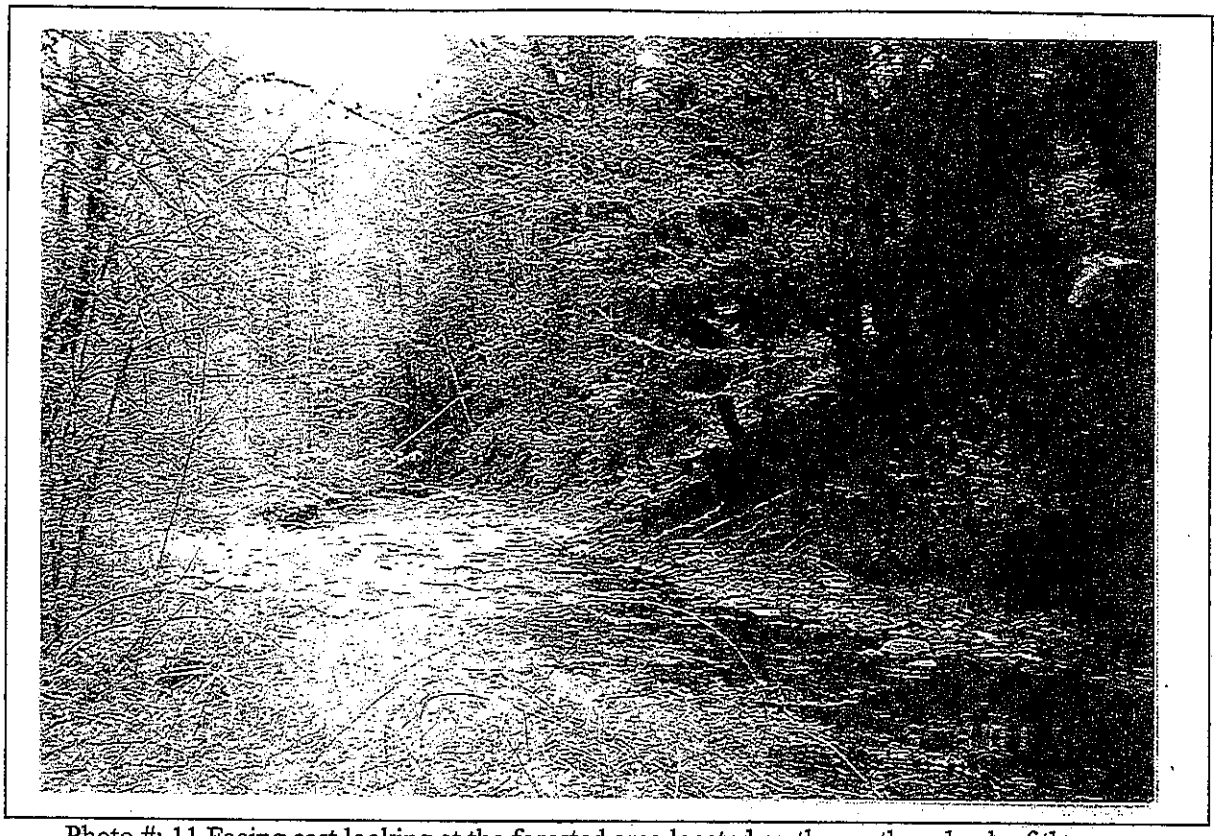


Photo #: 11 Facing east looking at the forested area located on the southern bank of the tributary to the Little Valley Creek at the Bush Industries property.

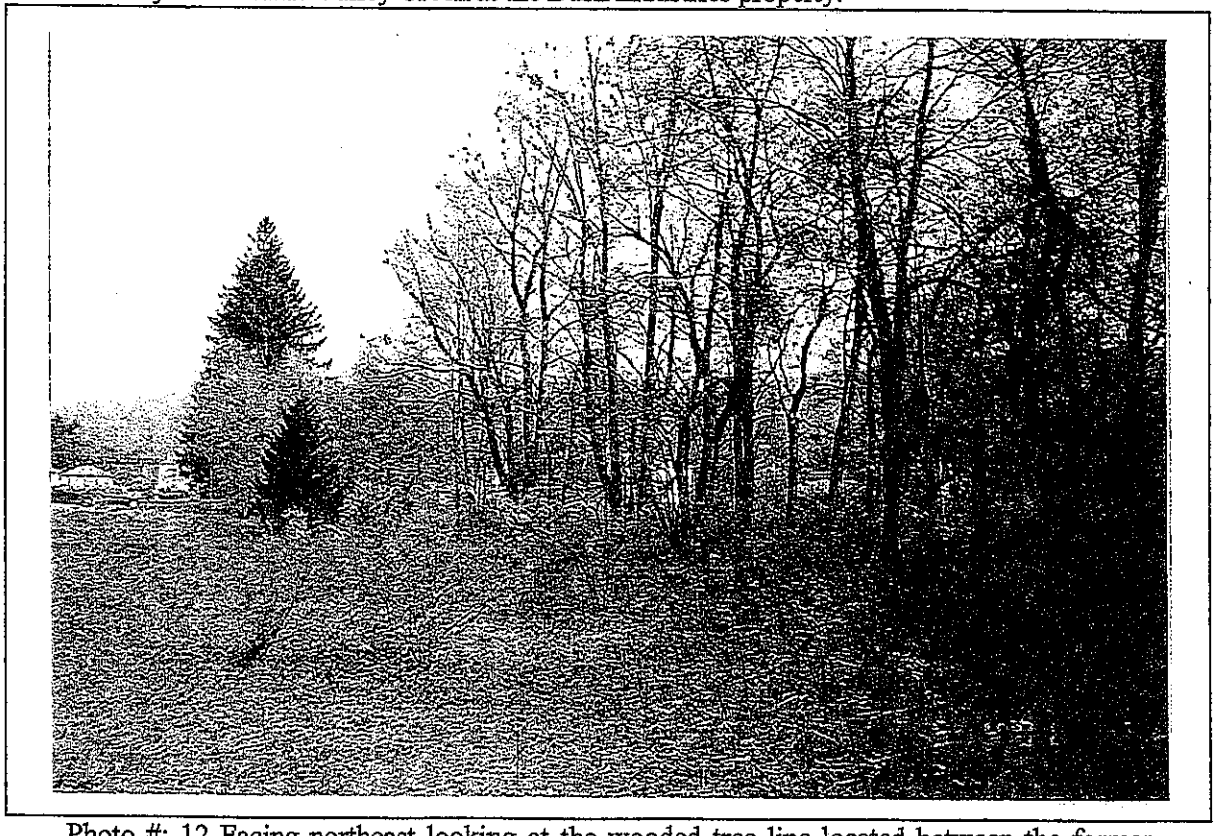


Photo #: 12 Facing northeast looking at the wooded tree line located between the former residential property and the remaining Bush Industries property.

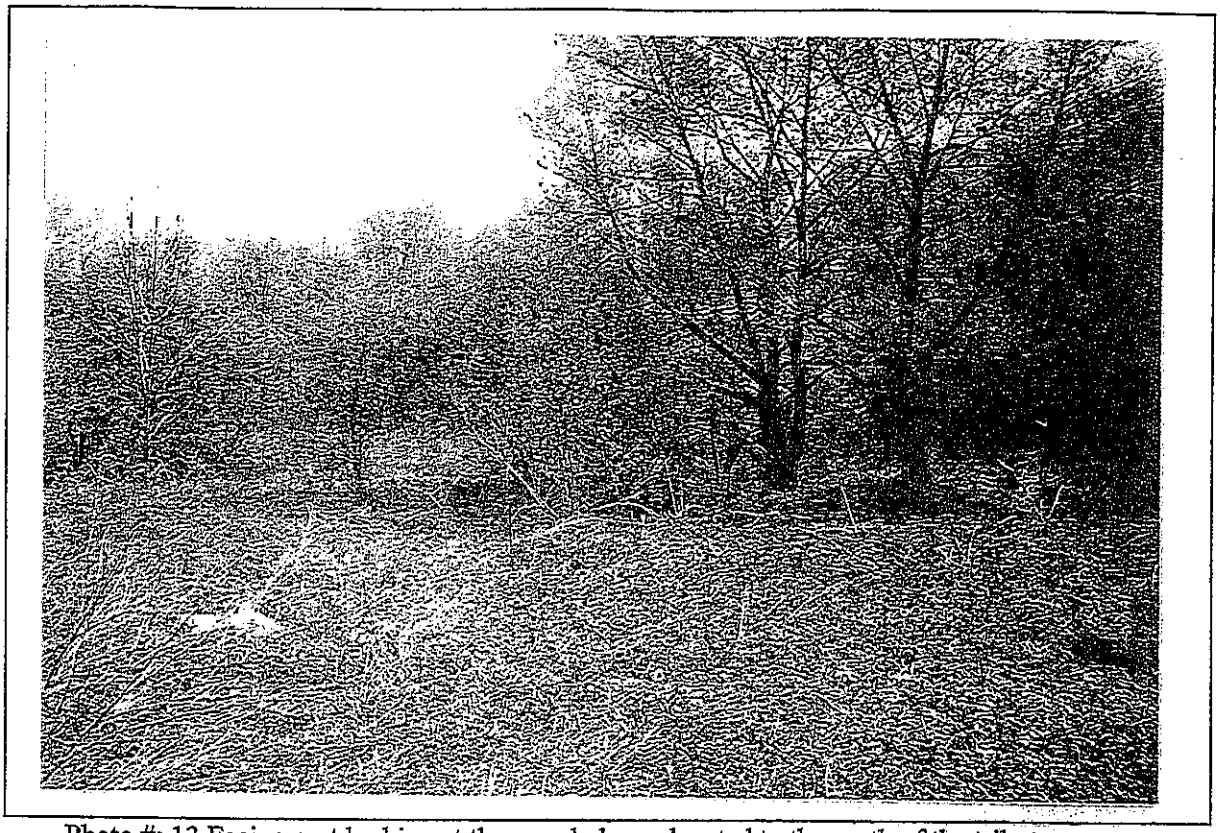


Photo #: 13 Facing east looking at the wooded area located to the north of the tributary to Little Valley Creek and to the west of the former residential property at the Bush Industries property.

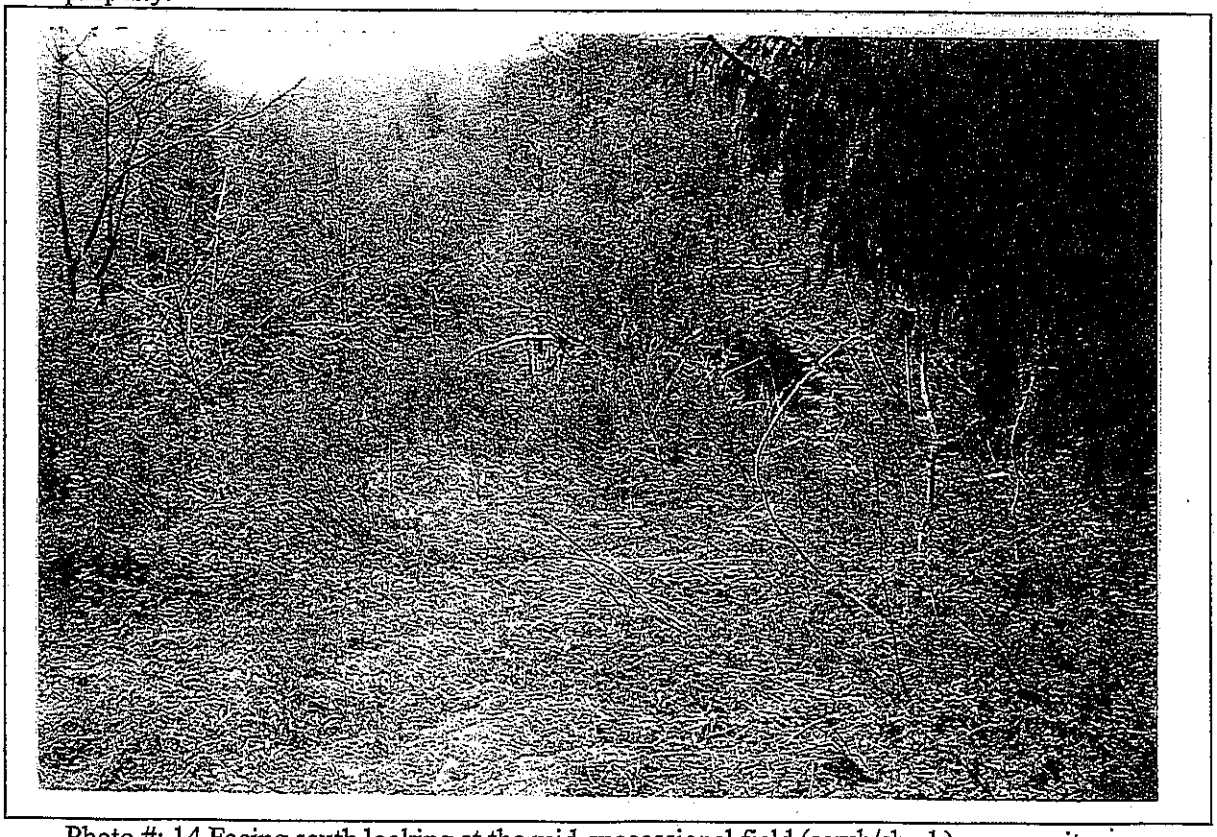


Photo #: 14 Facing south looking at the mid-successional field (scrub/shrub) community located on the former residential property.

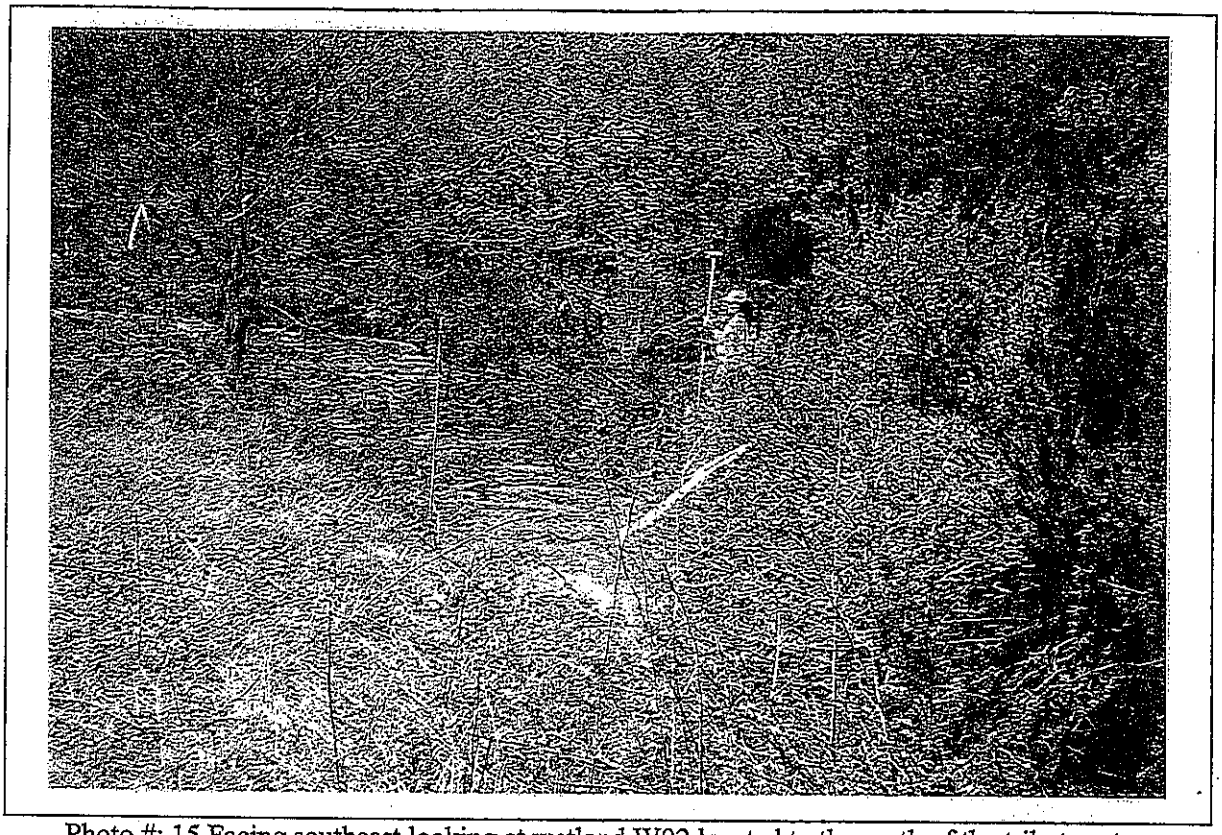


Photo #: 15 Facing southeast looking at wetland W02 located to the north of the tributary to Little Valley Creek and to the west of the former residential property at the Bush Industries property.

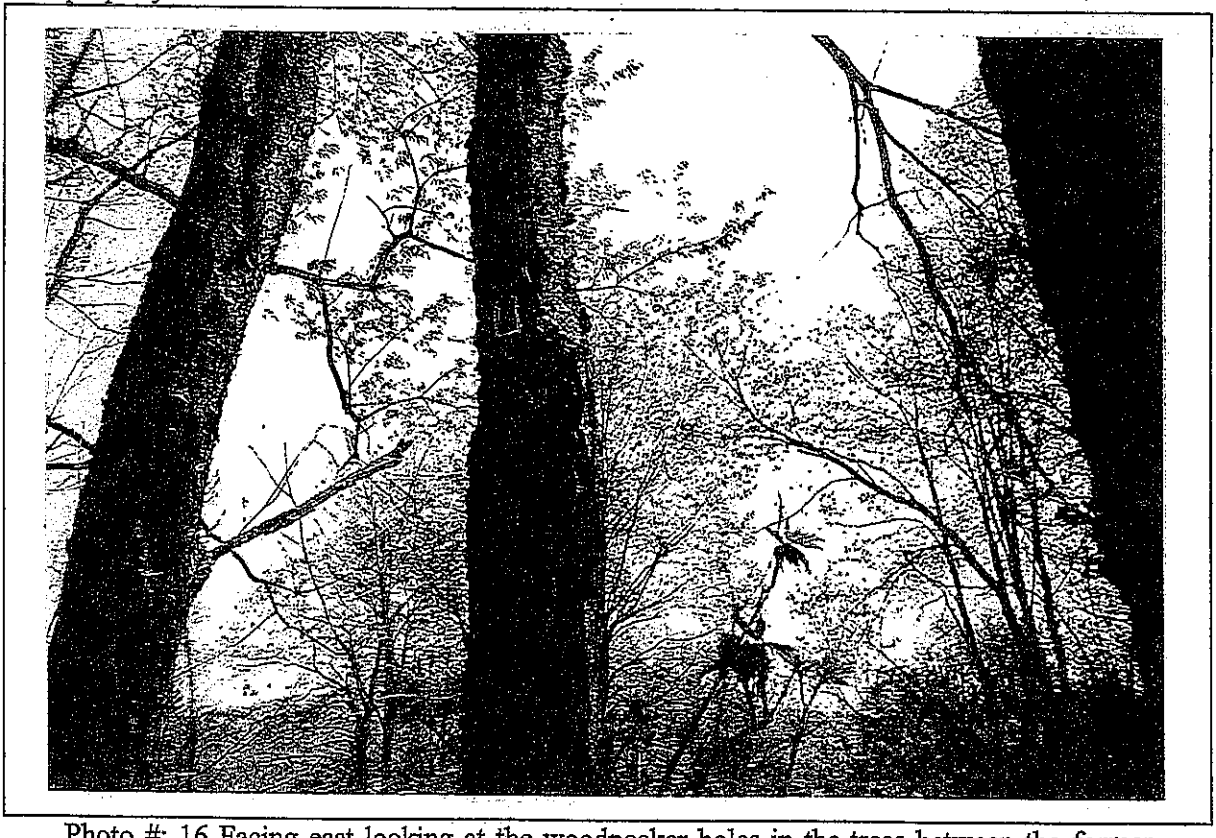


Photo #: 16 Facing east looking at the woodpecker holes in the trees between the former residential property and the remaining Bush Industries property.

APPENDIX H

LITTLE VALLEY CREEK SEEPAGE INVESTIGATION

United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Water Resources Division
30 Brown Road
Ithaca, NY 14850
607-266-0217

January 31, 2003

Mr. Joel Singerman
Central New York Remediation Section
U. S. Environmental Protection Agency
Region 2
290 Broadway
New York, New York 10007-1866

Re: Little Valley Creek Seepage Investigation

Dear Mr. Singerman:

Enclosed are the data from the Little Valley Creek seepage investigation conducted by the U. S. Geological Survey, at the request of the U. S. Environmental Protection Agency, as part of the remedial work at the Little Valley Superfund site in Cattaraugus County, New York. Streamflow in Little Valley Creek and tributary streams Dublin Creek and Whig Street Creek was measured on September 25, 2002. The data collected is summarized in the enclosed table. Also enclosed is a map showing the data collection locations, a hydrograph showing the daily mean discharges for the month of September 2002 at the nearby continuous record stream gaging station on the Allegheny River at Salamanca, NY, precipitation records for the month of September 2002 from sites in Little Valley and Salamanca, and digital photographs of the data collection sites showing flow conditions on the day the measurements were made.

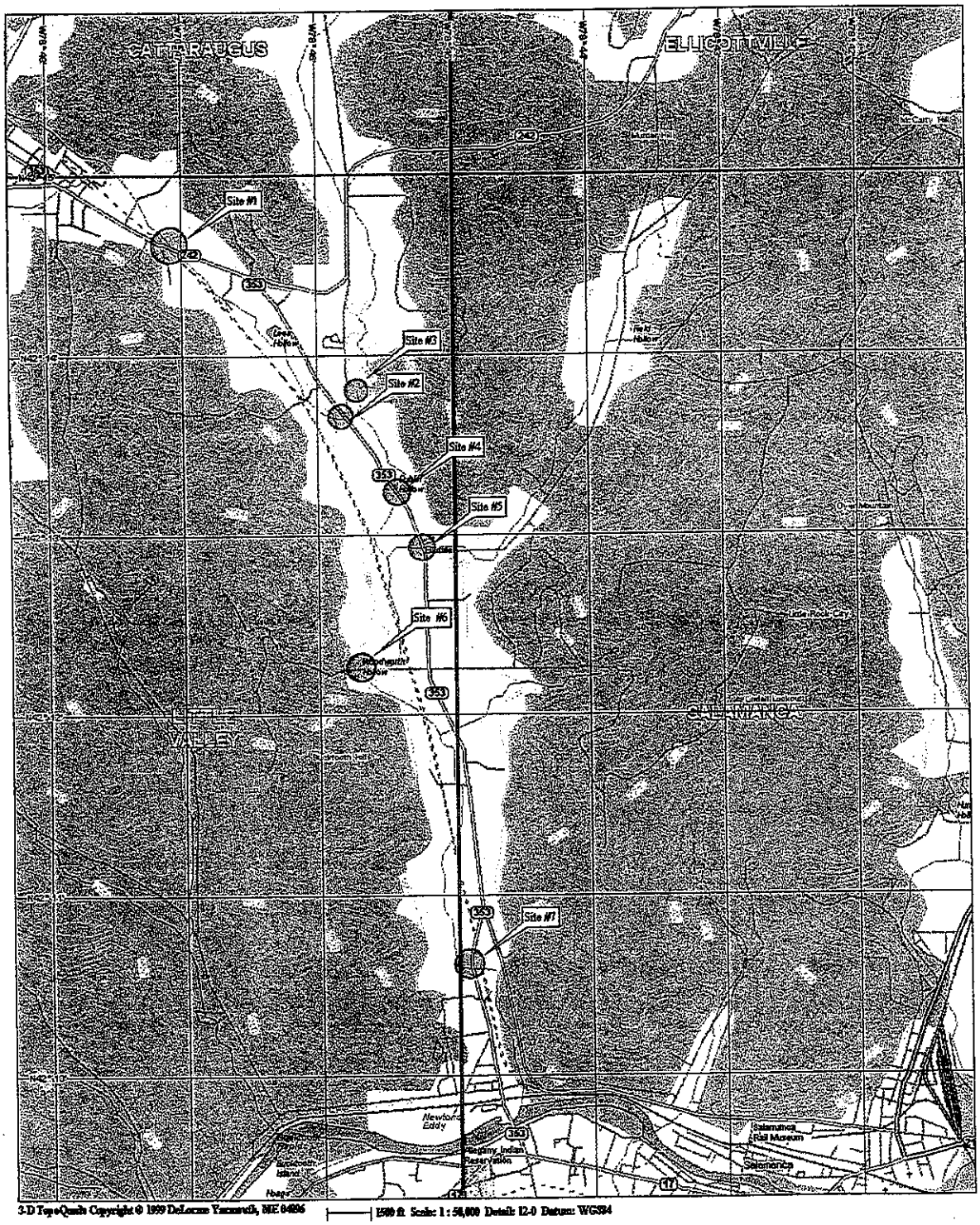
Should you have any questions about this information, please do not hesitate to contact me at 607-266-0217 ext. 3021 or jfhornle@usgs.gov.

Regards,

John F. Hornlein
Chief, Hydrologic Data Section

2/11 → cc: L Niles
T Fowler
A Logue (hyi)
G Jamieson

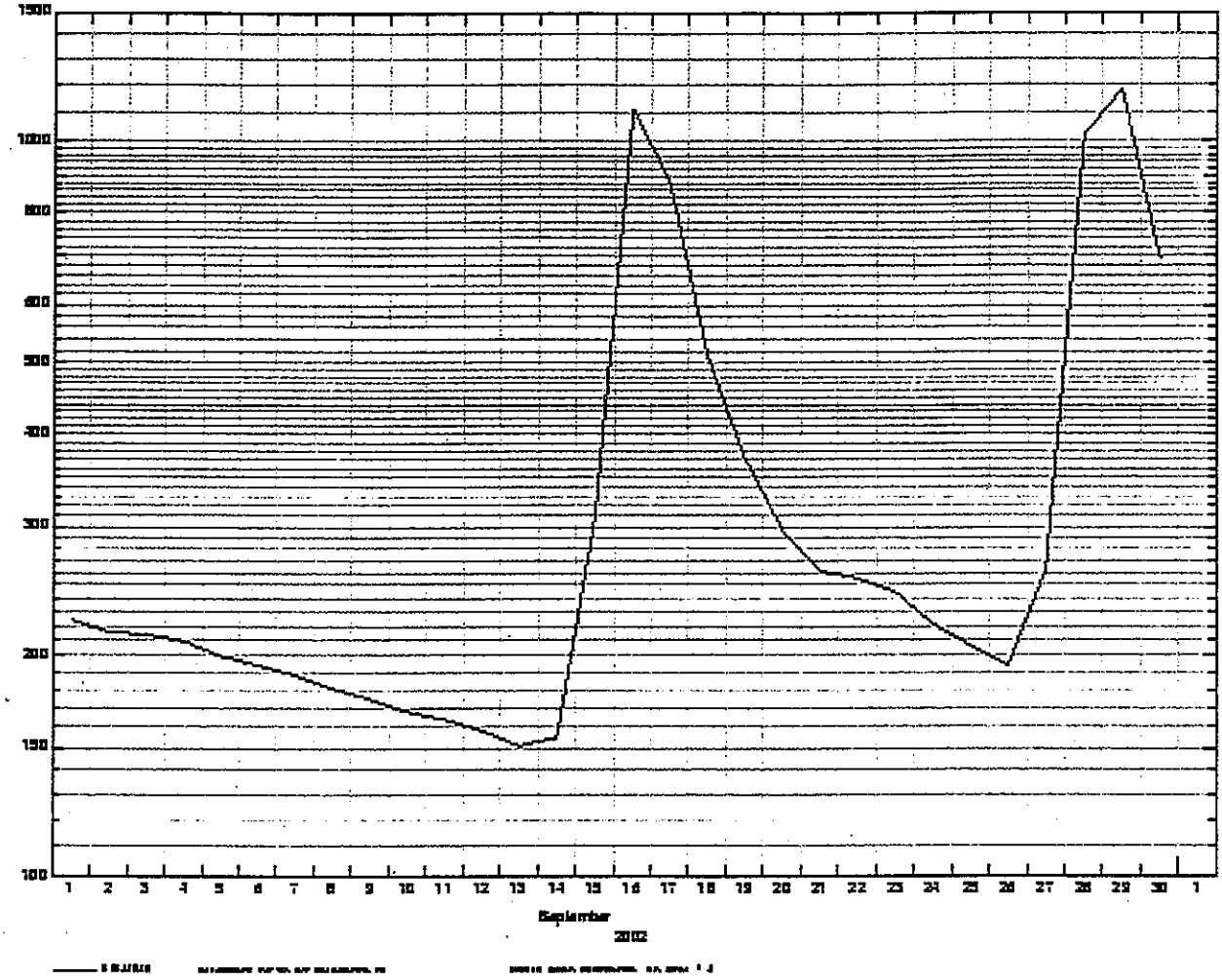
Little Valley Creek Seepage Investigation



Little Valley Creek Seepage Investigation
September 25, 2002

Site No.	Distance Upstream from Mouth (miles)	Site ID	Site Name	Location	Drainage Area (sq. mi.)	Discharge (cfs)	Gain or Loss (cfs)
1	7.7	03011027	Little Valley Creek near Little Valley, NY	Lat 42°14'35", long 78°47'03", Cattaraugus County, Hydrologic Unit 05010001, 100 ft upstream from bridge on State Highway 353.	18.4	0.61	---
2	5.9	03011028	Little Valley Creek at Baker Rd. near Elkdale, NY	Lat 42°13'39", long 78°45'48", Cattaraugus County, Hydrologic Unit 05010001, at bridge on State Highway 353 at Baker Rd., and 0.1 mi upstream from confluence with Dublin Creek.	20.9	0.0	-0.61
3	5.8	03011029	Dublin Creek near Elkdale, NY	Lat 42°13'43", long 78°45'41", Cattaraugus County, Hydrologic Unit 05010001, 30 ft upstream from confluence with Little Valley Creek.	10.5	1.25	+1.25
4	5.1	03011030	Little Valley Creek at Elkdale, NY	Lat 42°13'13", long 78°45'25", Cattaraugus County, Hydrologic Unit 05010001, 70 ft upstream from bridge on State Highway 353, and 0.4 mi upstream from confluence with Whig Street Creek.	32.0	0.46	-0.79
5	4.7	03011031	Whig Street Creek at Elkdale, NY	Lat 42°12'56", long 78°45'15", Cattaraugus County, Hydrologic Unit 05010001, at bridge on State Highway 353, and 0.2 mi upstream from confluence with Little Valley Creek.	6.04	0.62	+0.62
6	3.7	03011033	Little Valley Creek near Elkdale, NY	Lat 42°12'15", long 78°45'44", Cattaraugus County, Hydrologic Unit 05010001, at bridge on Hollow Road.	39.4	0.0	-1.08
7	1.0	03011035	Little Valley Creek at Salamanca, NY	Lat 42°10'34", long 78°44'55", Cattaraugus County, Hydrologic Unit 05010001, 80 ft upstream from bridge on State Highway 353.	44.6	1.83	+1.83

Allegheny River at Salamanca, NY
Hydrograph of Daily Mean Discharges for September 2002



Little Valley Precipitation and Temperature Data

Station: LITTLE VALLEY State: NY ID: 304808
Station period of record: 05/01/1948 - 01/28/2003

Month: September 2002

Day	Max Temp	Min Temp	Avg Temp	Departure from Normal	HDD	CDD	GDD	Precipitation
1	77	49	63	1	2	0	13	0.00
2	78	53	66	4	0	1	16	0.00
3	79	60	70	8	0	5	20	0.03
4	84	53	69	7	0	4	19	0.33
5	73	52	63	2	2	0	13	0.00
6	70	44	57	-4	8	0	7	0.00
7	83	44	64	3	1	0	14	0.00
8	86	54	70	10	0	5	20	0.00
9	85	50	68	8	0	3	18	0.00
10	87	50	69	9	0	4	19	0.00
11	84	54	69	10	0	4	19	0.02
12	70	38	54	-5	11	0	4	0.00
13	69	38	54	-5	11	0	4	0.00
14	76	40	58	-0	7	0	8	0.00
15	71	59	65	7	0	0	15	0.67
16	73	60	67	9	0	2	17	2.77
17	69	51	60	3	5	0	10	0.00
18	77	43	60	3	5	0	10	0.00
19	76	59	68	11	0	3	18	0.00
20	83	67	75	19	0	10	25	0.00
21	83	52	68	12	0	3	18	0.00
22	72	42	57	2	8	0	7	0.22
23	73	42	58	3	7	0	8	0.00
24	63	38	51	-4	14	0	1	0.00
25	69	37	53	-1	12	0	3	0.00
26	67	38	53	-1	12	0	3	0.00
27	62	46	54	1	11	0	4	0.07
28	61	54	58	4	7	0	8	1.78
29	63	39	51	-2	14	0	1	0.00
30	69	39	54	2	11	0	4	0.00

Notes:
HDD: Heating Degree Days, Base 65
CDD: Cooling Degree Days, Base 65
GDD: Growing Degree Days, Base 50

Salamanca Precipitation and Temperature Data

Station: SALAMANCA 2 State: NYID: 307400
Station period of record: 05/01/1991 - 01/28/2003

Month: September 2002

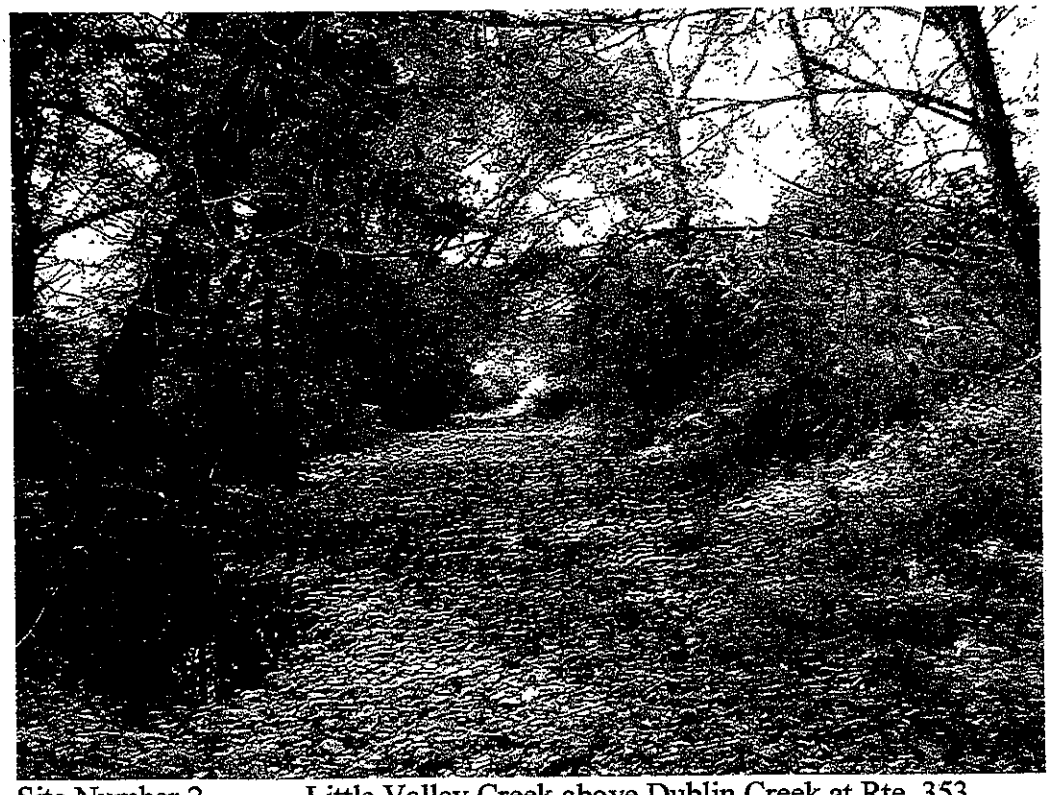
Day	Max Temp	Min Temp	Avg Temp	Departure from Normal	HDD	CDD	GDD	Precipitation
1	83	44	64	***	1	0	14	0.00
2	78	47	63	***	2	0	13	0.00
3	83	51	67	***	0	2	17	0.03
4	88	48	68	***	0	3	18	0.27
5	78	48	63	***	2	0	13	0.00
6	75	42	59	***	6	0	9	0.00
7	82	43	63	***	2	0	13	0.00
8	81	45	63	***	2	0	13	0.00
9	91	46	69	***	0	4	19	0.00
10	94	47	71	***	0	6	21	0.00
11	88	48	68	***	0	3	18	0.02
12	68	33	51	***	14	0	1	0.03
13	74	34	54	***	11	0	4	0.00
14	81	37	59	***	6	0	9	0.00
15	75	55	65	***	0	0	15	1.40
16	77	53	65	***	0	0	15	0.71
17	74	47	61	***	4	0	11	Tr
18	77	45	61	***	4	0	11	0.00
19	82	45	64	***	1	0	14	0.00
20	81	58	70	***	0	5	20	Tr
21	86	57	72	***	0	7	22	0.00
22	78	49	64	***	1	0	14	0.00
23	77	37	57	***	8	0	7	0.05
24	68	33	51	***	14	0	1	0.00
25	74	35	55	***	10	0	5	0.00
26	71	37	54	***	11	0	4	0.00
27	67	41	54	***	11	0	4	0.25
28	65	48	57	***	8	0	7	1.31
29	69	37	53	***	12	0	3	0.00
30	74	39	57	***	8	0	7	0.00

Flags:
*** = missing data

Notes:
HDD: Heating Degree Days, Base 65
CDD: Cooling Degree Days, Base 65
GDD: Growing Degree Days, Base 50

Little Valley Creek Seepage Investigation

Site Number 1. 03011025 Little Valley Creek near Little Valley

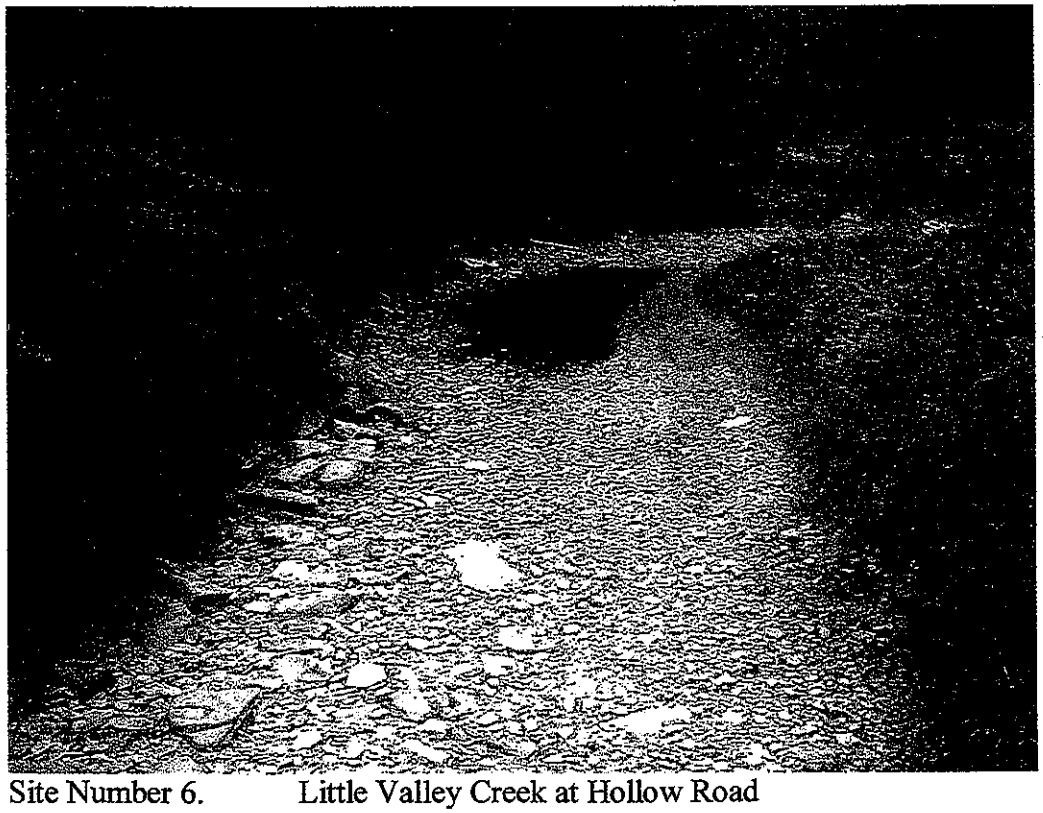


Site Number 2. Little Valley Creek above Dublin Creek at Rte. 353

Site Number 3. Dublin Creek flowing into Little Valley Creek

Site Number 4. Little Valley Creek above Whig Street Creek at Rte. 353

Site Number 5. Whig Street Creek at Rte. 353



Site Number 6. Little Valley Creek at Hollow Road

Little Valley Creek Seepage Investigation

Site Number 7. Little Valley Creek at Salamanca

APPENDIX I

ProUCL OUTPUT FILES

From File							
Summary Statistics for	Methyl chloride (Total)			Summary Statistics for	ln(Methyl chloride (Total))		
Number of Samples	17			Minimum	-1.38629		
Minimum	0.25			Maximum	2.484907		
Maximum	12			Mean	-0.68429		
Mean	1.253529412			Standard Deviation	1.099275		
Median	0.25			Variance	1.208406		
Standard Deviation	2.831280499						
Variance	8.016149265			Shapiro-Wilk Test Statisitic	0.705166		
Coefficient of Variation	2.258647043			Shapiro-Wilk 5% Critical Value	0.892		
Skewness	3.840929915			Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
97.5 % UCL (Assuming Normal Data)							
Student's-t	2.709239384			Estimates Assuming Lognormal Distribution			
				MLE Mean	0.923036		
97.5 % UCL (Adjusted for Skewness)				MLE Standard Deviation	1.414429		
Adjusted-CLT	3.525140957			MLE Coefficient of Variation	1.532366		
Modified-t	2.815854579			MLE Skewness	8.195313		
				MLE Median	0.504448		
97.5 % Non-parametric UCL				MLE 80% Quantile	1.277107		
CLT	2.599409994			MLE 90% Quantile	2.071512		
Jackknife	2.709239384			MLE 95% Quantile	3.077194		
Standard Bootstrap	2.568903015			MLE 99% Quantile	6.505347		
Bootstrap-t	10.91769835						
Chebyshev (Mean, Std)	5.541884515			MVU Estimate of Median	0.4868		
				MVU Estimate of Mean	0.876032		
				MVU Estimate of Std. Dev.	1.130587		
				MVU Estimate of SE of Mean	0.261323		
				UCL Assuming Lognormal Distribution			
				Confidence Level not supported for H-Statistic			
				Chebyshev 97.5 % (MVUE)	2.507991		
				99% Chebyshev (MVUE) UCL	3.476159		

From File							
Summary Statistics for	Trichloroethylene (Total)			Summary Statistics for	ln(Trichloroethylene (Total))		
Number of Samples	15			Minimum	-1.38629		
Minimum	0.25			Maximum	2.917771		
Maximum	18.5			Mean	-0.96646		
Mean	1.512			Standard Deviation	1.103305		
Median	0.25			Variance	1.217281		
Standard Deviation	4.700424						
Variance	22.09399			Shapiro-Wilk Test Statisitic	0.434582		
Coefficient of Variation	3.108746			Shapiro-Wilk 5% Critical Value	0.881		
Skewness	3.870613			Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
97.5 % UCL (Assuming Normal Data)							
Student's-t	4.115008			Estimates Assuming Lognormal Distribution			
				MLE Mean	0.699199		
97.5 % UCL (Adjusted for Skewness)				MLE Standard Deviation	1.078217		
Adjusted-CLT	5.645953			MLE Coefficient of Variation	1.542074		
Modified-t	4.317158			MLE Skewness	8.293262		
				MLE Median	0.380427		
97.5 % Non-parametric UCL				MLE 80% Quantile	0.96641		
CLT	3.890699			MLE 90% Quantile	1.570331		
Jackknife	4.115008			MLE 95% Quantile	2.336085		
Standard Bootstrap	3.784119			MLE 99% Quantile	4.952175		
Bootstrap-t	140.2185						
Chebyshev (Mean, Std)	9.091206			MVU Estimate of Median	0.365262		
				MVU Estimate of Mean	0.659		
				MVU Estimate of Std. Dev.	0.840509		
				MVU Estimate of SE of Mean	0.20746		
				UCL Assuming Lognormal Distribution			
				Confidence Level not supported for H-Statistic			
				Chebyshev 97.5 % (MVUE)	1.954589		
				99% Chebyshev (MVUE) UCL	2.723203		

From File	C:\ProUCL\Little Valley\2004 HHRA\S				
Summary Statistics for	Benzo(ghi)		Summary Statistics for	ln(Benzo(ghi)perylene (Total))	
Number of Samples	10		Minimum	-3.506558	
Minimum	0.03		Maximum	-1.560648	
Maximum	0.21		Mean	-1.983014	
Mean	0.157		Standard Deviation	0.643311	
Median	0.18		Variance	0.413849	
Standard Deviation	0.060194				
Variance	0.003623		Shapiro-Wilk Test Statisitic	0.600952	
Coefficient of Variation	0.383402		Shapiro-Wilk 5% Critical Value	0.842	
Skewness	-1.721431		Data not Lognormal at 5% Significance Level		
			Data not Normal: Try Non-parametric UCL		
95 % UCL (Assuming Normal Data)					
Student's-t	0.191893		Estimates Assuming Lognormal Distribution		
			MLE Mean	0.169299	
95 % UCL (Adjusted for Skewness)			MLE Standard Deviation	0.121215	
Adjusted-CLT	0.177238		MLE Coefficient of Variation	0.715981	
Modified-t	0.190166		MLE Skewness	2.514976	
			MLE Median	0.137654	
95 % Non-parametric UCL			MLE 80% Quantile	0.237066	
CLT	0.18831		MLE 90% Quantile	0.31463	
Jackknife	0.191893		MLE 95% Quantile	0.396624	
Standard Bootstrap	0.186759		MLE 99% Quantile	0.614668	
Bootstrap-t	0.183481				
Chebyshev (Mean, Std)	0.239972		MVU Estimate of Median	0.134829	
			MVU Estimate of Mean	0.165329	
			MVU Estimate of Std. Dev.	0.109793	
			MVU Estimate of SE of Mean	0.034549	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	0.285506	
			95% Chebyshev (MVUE) UCL	0.315922	
			99% Chebyshev (MVUE) UCL	0.509082	

From File	C:\ProUCL\Little Valley\2004 HHRA\Soil\BIA SS\BIA SS data.xls				
Summary Statistics for	Phenanthrene (Total)		Summary Statistics for	ln(Phenanthrene (Total))	
Number of Samples	10		Minimum	-3.7297	
Minimum	0.024		Maximum	-1.56065	
Maximum	0.21		Mean	-2.33315	
Mean	0.1268		Standard Deviation	0.866461	
Median	0.18		Variance	0.750754	
Standard Deviation	0.076376				
Variance	0.005833		Shapiro-Wilk Test Statisitic	0.761673	
Coefficient of Variation	0.602334		Shapiro-Wilk 5% Critical Value	0.842	
Skewness	-0.48832		Data not Lognormal at 5% Significance Level		
			Data not Normal: Try Non-parametric UCL		
95 % UCL (Assuming Normal Data)					
Student's-t	0.171074		Estimates Assuming Lognormal Distribution		
			MLE Mean	0.141172	
95 % UCL (Adjusted for Skewness)			MLE Standard Deviation	0.149309	
Adjusted-CLT	0.162542		MLE Coefficient of Variation	1.057637	
Modified-t	0.170452		MLE Skewness	4.355982	
			MLE Median	0.09699	
95 % Non-parametric UCL			MLE 80% Quantile	0.201696	
CLT	0.166527		MLE 90% Quantile	0.295304	
Jackknife	0.171074		MLE 95% Quantile	0.403401	
Standard Bootstrap	0.164256		MLE 99% Quantile	0.727775	
Bootstrap-t	0.169092				
Chebyshev (Mean, Std)	0.232077		MVU Estimate of Median	0.093404	
			MVU Estimate of Mean	0.134657	
			MVU Estimate of Std. Dev.	0.123279	
			MVU Estimate of SE of Mean	0.038425	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	0.320246	
			95% Chebyshev (MVUE) UCL	0.30215	
			99% Chebyshev (MVUE) UCL	0.516985	

From File	C:\ProUCL\Little Valley\2004 HHRA\Soil\BIA SS\BIA SS data.xls			
Summary Statistics for	Aluminum (To		Summary Statistics for	ln(Aluminum (Total))
Number of Samples	10		Minimum	8.880446
Minimum	7190		Maximum	9.862666
Maximum	19200		Mean	9.181261
Mean	10379		Standard Deviation	0.36454
Median	8270		Variance	0.132889
Standard Deviation	4394.65698			
Variance	19313010		Shapiro-Wilk Test Statisitic	0.782742
Coefficient of Variation	0.42341815		Shapiro-Wilk 5% Critical Value	0.842
Skewness	1.44445543		Data not Lognormal at 5% Significance Level	
			Data not Normal: Try Non-parametric UCL	
95 % UCL (Assuming Normal Data)				
Student's-t	12926.4999		Estimates Assuming Lognormal Distribution	
			MLE Mean	10380.72
95 % UCL (Adjusted for Skewness)			MLE Standard Deviation	3913.457
Adjusted-CLT	13343.1546		MLE Coefficient of Variation	0.376993
Modified-t	13032.298		MLE Skewness	1.184558
			MLE Median	9713.393
95 % Non-parametric UCL			MLE 80% Quantile	13217.5
CLT	12664.8737		MLE 90% Quantile	15517.05
Jackknife	12926.4999		MLE 95% Quantile	17693.08
Standard Bootstrap	12513.3559		MLE 99% Quantile	22678.68
Bootstrap-t	16094.9746			
Chebyshev (Mean, Std)	16436.6166		MVU Estimate of Median	9649.028
			MVU Estimate of Mean	10308.66
			MVU Estimate of Std. Dev.	3798.136
			MVU Estimate of SE of Mean	1200.394
			UCL Assuming Lognormal Distribution	
			95% H-UCL	13313.03
			95% Chebyshev (MVUE) UCL	15541.06
			99% Chebyshev (MVUE) UCL	22252.44

From File	C:\ProUCL\Little Valley\2004 HHRA\Soil\BIA SS\BIA SS data.xls			
Summary Statistics for	Arsenic (Total)			
Number of Samples	9			
Minimum	5.4			
Maximum	11.4			
Mean	7.877778			
Median	8			
Standard Deviation	2.016047			
Variance	4.064444			
Coefficient of Variation	0.255916			
Skewness	0.406464			
Shapiro-Wilk Test Statisitic	0.951711			
Shapiro-Wilk 5% Critical Value	0.829			
Data are Normal at 5% Significance Level				
Recommended UCL to use	Student's-t			
95 % UCL (Assuming Normal Data)				
Student's-t	9.127423			
95 % UCL (Adjusted for Skewness)				
Adjusted-CLT	9.080433			
Modified-t	9.142598			
95 % Non-parametric UCL				
CLT	8.983145			
Jackknife	9.127423			
Standard Bootstrap	8.915922			
Bootstrap-t	9.283311			
Chebyshev (Mean, Std)	10.80703			

Data File	BIA SS			Variable:	Chromium (Total)	
Raw Statistics				Normal Distribution Test		
Number of Valid Samples			10	Shapiro-Wilk Test Statisitic		0.862175
Number of Unique Samples			10	Shapiro-Wilk 5% Critical Value		0.842
Minimum			7.7	Data are normal at 5% significance level		
Maximum			27.4			
Mean			14.03	95% UCL (Assuming Normal Distribution)		
Median			11.75	Student's-t UCL		17.45258
Standard Deviation			5.904245			
Variance			34.86011	Gamma Distribution Test		
Coefficient of Variation			0.42083	A-D Test Statistic		0.419773
Skewness			1.340593	A-D 5% Critical Value		0.727453
				K-S Test Statistic		0.220445
Gamma Statistics				K-S 5% Critical Value		0.267066
k hat			7.274163	Data follow gamma distribution		
k star (bias corrected)			5.158581	at 5% significance level		
Theta hat			1.928744			
Theta star			2.71974	95% UCLs (Assuming Gamma Distribution)		
nu hat			145.4833	Approximate Gamma UCL		17.93013
nu star			103.1716	Adjusted Gamma UCL		18.72914
Approx.Chi Square Value (.05)			80.72991			
Adjusted Level of Significance			0.0267	Lognormal Distribution Test		
Adjusted Chi Square Value			77.28585	Shapiro-Wilk Test Statisitic		0.941817
				Shapiro-Wilk 5% Critical Value		0.842
Log-transformed Statistics				Data are lognormal at 5% significance level		
Minimum of log data			2.04122			
Maximum of log data			3.310543	95% UCLs (Assuming Lognormal Distribution)		
Mean of log data			2.57089	95% H-UCL		18.38656
Standard Deviation of log data			0.385665	95% Chebyshev (MVUE) UCL		21.49089
Variance of log data			0.148738	97.5% Chebyshev (MVUE) UCL		24.74211
				99% Chebyshev (MVUE) UCL		31.12851
				95% Non-parametric UCLs		
				CLT UCL		17.10108
				Adj-CLT UCL (Adjusted for skewness)		17.94683
				Mod-t UCL (Adjusted for skewness)		17.5845
				Jackknife UCL		17.45258
				Standard Bootstrap UCL		16.8797
				Bootstrap-t UCL		18.64167
RECOMMENDATION				Hall's Bootstrap UCL		19.18836
Data are normal (0.05)				Percentile Bootstrap UCL		17.26
				BCA Bootstrap UCL		17.44
Use Student's-t UCL				95% Chebyshev (Mean, Sd) UCL		22.16844
				97.5% Chebyshev (Mean, Sd) UCL		25.68995
				99% Chebyshev (Mean, Sd) UCL		32.60727

From File	C:\ProUCL\Little Valley\2004 HHRA\Soil\BIA SS\BIA SS data.xls			
Summary Statistics for	Iron (Total)			
Number of Samples	10			
Minimum	15100			
Maximum	25500			
Mean	19990			
Median	19700			
Standard Deviation	3385.41			
Variance	11461000			
Coefficient of Variation	0.169355			
Skewness	0.363434			
Shapiro-Wilk Test Statisitic	0.957982			
Shapiro-Wilk 5% Critical Value	0.842			
Data are Normal at 5% Significance Level				
Recommended UCL to use	Student's-t			
95 % UCL (Assuming Normal Data)				
Student's-t	21952.46			
95 % UCL (Adjusted for Skewness)				
Adjusted-CLT	21882.38			
Modified-t	21972.96			
95 % Non-parametric UCL				
CLT	21750.92			
Jackknife	21952.46			
Standard Bootstrap	21669.37			
Bootstrap-t	22138.37			
Chebyshev (Mean, Std)	24656.47			

From File	C:\ProUCL\Little Valley\2004 HHRA\Soil\BIA SS\BIA SS data.xls			
Summary Statistics for	Manganese (Total)			
Number of Samples	10			
Minimum	336			
Maximum	776			
Mean	578.5			
Median	592.5			
Standard Deviation	125.9508			
Variance	15863.61			
Coefficient of Variation	0.21772			
Skewness	-0.569392			
Shapiro-Wilk Test Statisitic	0.964269			
Shapiro-Wilk 5% Critical Value	0.842			
Data are Normal at 5% Significance Level				
Recommended UCL to use	Student's-t			
95	% UCL (Assuming Normal Data)			
Student's-t	651.5113			
95	% UCL (Adjusted for Skewness)			
Adjusted-CLT	636.3502			
Modified-t	650.3161			
95	% Non-parametric UCL			
CLT	644.0131			
Jackknife	651.5113			
Standard Bootstrap	640.0982			
Bootstrap-t	641.4616			
Chebyshev (Mean, Std)	752.1112			

From File	C:\ProUCL\Little Valley\2004 HHRA\Soil\BIA			
Summary Statistics for	Thallium (Total)		Summary Statistics for	ln(Thallium (Total))
Number of Samples	10		Minimum	-0.91629
Minimum	0.4		Maximum	2.867899
Maximum	17.6		Mean	0.434465
Mean	4.716		Standard Deviation	1.575905
Median	0.8		Variance	2.483475
Standard Deviation	6.663103			
Variance	44.39694		Shapiro-Wilk Test Statisitic	0.774244
Coefficient of Variation	1.412872		Shapiro-Wilk 5% Critical Value	0.842
Skewness	1.214204		Data not Lognormal at 5% Significance Level	
			Data not Normal: Try Non-parametric UCL	
97.5 % UCL (Assuming Normal Data)				
Student's-t	9.482496		Estimates Assuming Lognormal Distribution	
			MLE Mean	5.34522
97.5 % UCL (Adjusted for Skewness)			MLE Standard Deviation	17.71425
Adjusted-CLT	10.01656		MLE Coefficient of Variation	3.314036
Modified-t	9.617336		MLE Skewness	46.33963
			MLE Median	1.544137
97.5 % Non-parametric UCL			MLE 80% Quantile	5.848028
CLT	8.845758		MLE 90% Quantile	11.69899
Jackknife	9.482496		MLE 95% Quantile	20.63169
Standard Bootstrap	8.590661		MLE 99% Quantile	60.34145
Bootstrap-t	61.97105			
Chebyshev (Mean, Std)	17.87457		MVU Estimate of Median	1.361862
			MVU Estimate of Mean	4.300757
			MVU Estimate of Std. Dev.	7.883269
			MVU Estimate of SE of Mean	2.258966
			UCL Assuming Lognormal Distribution	
			Confidence Level not supported for H-Statistic	
			Chebyshev 97.5 % (MVUE)	18.408
			99% Chebyshev (MVUE) UCL	26.77719

From File		
Summary Statistics for	Benzene (Total)	
Number of Samples	34	
Minimum	0.004	
Maximum	0.0075	
Mean	0.005911765	
Median	0.006	
Standard Deviation	0.000839107	
Variance	7.041E-07	
Coefficient of Variation	0.141938423	
Skewness	0.050347402	
Shapiro-Wilk Test Statisitic	0.946465758	
Shapiro-Wilk 5% Critical Value	0.933	
Data are Normal at 5% Significance Level		
Recommended UCL to use	Student's-t	
95 % UCL (Assuming Normal Data)		
Student's-t	0.006155305	
95 % UCL (Adjusted for Skewness)		
Adjusted-CLT	0.006149796	
Modified-t	0.006155512	
95 % Non-parametric UCL		
CLT	0.006148468	
Jackknife	0.006155305	
Standard Bootstrap	0.006150418	
Bootstrap-t	0.006163372	
Chebyshev (Mean, Std)	0.006539035	

From File					
Summary Statistics for	Trichloroethylene (Total)		Summary Statistics for	ln(Trichloroethylene (Total))	
Number of Samples	34		Minimum	-5.29832	
Minimum	0.005		Maximum	-2.8824	
Maximum	0.056		Mean	-4.90364	
Mean	0.009779		Standard Deviation	0.596001	
Median	0.00625		Variance	0.355217	
Standard Deviation	0.011498				
Variance	0.000132		Shapiro-Wilk Test Statisitic	0.574987	
Coefficient of Variation	1.175717		Shapiro-Wilk 5% Critical Value	0.933	
Skewness	3.25014		Data not Lognormal at 5% Significance Level Data not Normal: Try Non-parametric UCL		
95% UCL (Assuming Normal Data)					
Student's-t	0.013117		Estimates Assuming Lognormal Distribution		
			MLE Mean	0.008862	
95% UCL (Adjusted for Skewness)			MLE Standard Deviation	0.005787	
Adjusted-CLT	0.014197		MLE Coefficient of Variation	0.653062	
Modified-t	0.0133		MLE Skewness	2.237711	
			MLE Median	0.00742	
95% Non-parametric UCL			MLE 80% Quantile	0.012277	
CLT	0.013023		MLE 90% Quantile	0.015958	
Jackknife	0.013117		MLE 95% Quantile	0.019777	
Standard Bootstrap	0.012981		MLE 99% Quantile	0.029678	
Bootstrap-t	0.016891				
Chebyshev (Mean, Std)	0.018375		MVU Estimate of Median	0.007381	
			MVU Estimate of Mean	0.008808	
			MVU Estimate of Std. Dev.	0.005624	
			MVU Estimate of SE of Mean	0.000958	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	0.010902	
			95% Chebyshev (MVUE) UCL	0.012982	
			99% Chebyshev (MVUE) UCL	0.018336	

From File							
Summary Statistics for	Benzo(a)pyrene (Total)		Summary Statistics for	ln(Benzo(a)pyrene (Total))			
Number of Samples	27		Minimum	-3.96332			
Minimum	0.019		Maximum	-0.57093			
Maximum	0.565		Mean	-1.86087			
Mean	0.178944		Standard Deviation	0.622419			
Median	0.18		Variance	0.387405			
Standard Deviation	0.091529						
Variance	0.008378		Shapiro-Wilk Test Statisitic	0.632328			
Coefficient of Variation	0.511496		Shapiro-Wilk 5% Critical Value	0.923			
Skewness	2.62007		Data not Lognormal at 5% Significance Level Data not Normal: Try Non-parametric UCL				
95 % UCL (Assuming Normal Data)							
Student's-t	0.208989		Estimates Assuming Lognormal Distribution				
			MLE Mean	0.188781			
95 % UCL (Adjusted for Skewness)			MLE Standard Deviation	0.129855			
Adjusted-CLT	0.217409		MLE Coefficient of Variation	0.687861			
Modified-t	0.210469		MLE Skewness	2.389047			
			MLE Median	0.155537			
95 % Non-parametric UCL			MLE 80% Quantile	0.263178			
CLT	0.207918		MLE 90% Quantile	0.346088			
Jackknife	0.208989		MLE 95% Quantile	0.433012			
Standard Bootstrap	0.207486		MLE 99% Quantile	0.661581			
Bootstrap-t	0.218567						
Chebyshev (Mean, Std)	0.255726		MVU Estimate of Median	0.154425			
			MVU Estimate of Mean	0.187203			
			MVU Estimate of Std. Dev.	0.124883			
			MVU Estimate of SE of Mean	0.023846			
			UCL Assuming Lognormal Distribution				
			95% H-UCL	0.242783			
			95% Chebyshev (MVUE) UCL	0.291143			
			99% Chebyshev (MVUE) UCL	0.424463			

From File							
Summary Statistics for	Benzo(ghi)perylene (Total)			Summary Statistics for	ln(Benzo(ghi)perylene (Total))		
Number of Samples	27			Minimum	-3.50656		
Minimum	0.03			Maximum	-0.57093		
Maximum	0.565			Mean	-1.78287		
Mean	0.18463			Standard Deviation	0.477482		
Median	0.18			Variance	0.22799		
Standard Deviation	0.086034						
Variance	0.007402			Shapiro-Wilk Test Statisitic	0.613675		
Coefficient of Variation	0.465979			Shapiro-Wilk 5% Critical Value	0.923		
Skewness	3.196331			Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
95 % UCL (Assuming Normal Data)							
Student's-t	0.21287			Estimates Assuming Lognormal Distribution			
				MLE Mean	0.188458		
95 % UCL (Adjusted for Skewness)				MLE Standard Deviation	0.095367		
Adjusted-CLT	0.222746			MLE Coefficient of Variation	0.506036		
Modified-t	0.214567			MLE Skewness	1.647689		
				MLE Median	0.168154		
95 % Non-parametric UCL				MLE 80% Quantile	0.251729		
CLT	0.211864			MLE 90% Quantile	0.310581		
Jackknife	0.21287			MLE 95% Quantile	0.368831		
Standard Bootstrap	0.212356			MLE 99% Quantile	0.510558		
Bootstrap-t	0.225754						
Chebyshev (Mean, Std)	0.256801			MVU Estimate of Median	0.167446		
				MVU Estimate of Mean	0.187584		
				MVU Estimate of Std. Dev.	0.093312		
				MVU Estimate of SE of Mean	0.017906		
				UCL Assuming Lognormal Distribution			
				95% H-UCL	0.225879		
				95% Chebyshev (MVUE) UCL	0.265637		
				99% Chebyshev (MVUE) UCL	0.365751		

From File							
Summary Statistics for		Phenanthrene (Total)		Summary Statistics for		In(Phenanthrene (Total))	
Number of Samples		27		Minimum	-3.7297		
Minimum		0.024		Maximum	-1.56065		
Maximum		0.21		Mean	-1.94649		
Mean		0.160389		Standard Deviation	0.59853		
Median		0.18		Variance	0.358238		
Standard Deviation		0.053851					
Variance		0.0029		Shapiro-Wilk Test Statisitic	0.558675		
Coefficient of Variation		0.335755		Shapiro-Wilk 5% Critical Value	0.923		
Skewness		-1.84189		Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
95	% UCL (Assuming Normal Data)						
Student's-t		0.178065		Estimates Assuming Lognormal Distribution			
				MLE Mean	0.170782		
95	% UCL (Adjusted for Skewness)			MLE Standard Deviation	0.112094		
Adjusted-CLT		0.17351		MLE Coefficient of Variation	0.656359		
Modified-t		0.177453		MLE Skewness	2.251839		
				MLE Median	0.142775		
95	% Non-parametric UCL			MLE 80% Quantile	0.236755		
CLT		0.177436		MLE 90% Quantile	0.308086		
Jackknife		0.178065		MLE 95% Quantile	0.382164		
Standard Bootstrap		0.176764		MLE 99% Quantile	0.57447		
Bootstrap-t		0.175034					
Chebyshev (Mean, Std)		0.205563		MVU Estimate of Median	0.14183		
				MVU Estimate of Mean	0.169475		
				MVU Estimate of Std. Dev.	0.108156		
				MVU Estimate of SE of Mean	0.020674		
				UCL Assuming Lognormal Distribution			
				95% H-UCL	0.216954		
				95% Chebyshev (MVUE) UCL	0.259591		
				99% Chebyshev (MVUE) UCL	0.375178		

From File			
Summary Statistics for	Aluminum (Total)	Summary Statistics for	ln(Aluminum (Total))
Number of Samples	27	Minimum	8.880446
Minimum	7190	Maximum	9.862666
Maximum	19200	Mean	9.224496
Mean	10461.111	Standard Deviation	0.246056
Median	10000	Variance	0.060543
Standard Deviation	2850.3068		
Variance	8124248.7	Shapiro-Wilk Test Statisitic	0.936386
Coefficient of Variation	0.2724669	Shapiro-Wilk 5% Critical Value	0.923
Skewness	1.5357444	Data are Lognormal at 5% Significance Level	
95 % UCL (Assuming Normal Data)		Estimates Assuming Lognormal Distribution	
Student's-t	11396.714	MLE Mean	10454.29
		MLE Standard Deviation	2611.77
95 % UCL (Adjusted for Skewness)		MLE Coefficient of Variation	0.249827
Adjusted-CLT	11536.614	MLE Skewness	0.765075
Modified-t	11423.734	MLE Median	10142.57
		MLE 80% Quantile	12486.63
95 % Non-parametric UCL		MLE 90% Quantile	13914.38
CLT	11363.382	MLE 95% Quantile	15203.15
Jackknife	11396.714	MLE 99% Quantile	17976.53
Standard Bootstrap	11323.828		
Bootstrap-t	11788.201	MVU Estimate of Median	10131.2
Chebyshev (Mean, Std)	12852.149	MVU Estimate of Mean	10442.26
		MVU Estimate of Std. Dev.	2597.581
		MVU Estimate of SE of Mean	499.7976
		UCL Assuming Lognormal Distribution	
		95% H-UCL	11390.71
		95% Chebyshev (MVUE) UCL	12620.83
		99% Chebyshev (MVUE) UCL	15415.19
		Recommended UCL to use:	
		Student's-t or H-UCL	

From File					
Summary Statistics for	Arsenic (Total)		Summary Statistics for	ln(Arsenic (Total))	
Number of Samples	24		Minimum	1.686399	
Minimum	5.4		Maximum	3.325036	
Maximum	27.8		Mean	2.14643	
Mean	9.222917		Standard Deviation	0.363322	
Median	7.85		Variance	0.132003	
Standard Deviation	4.551254				
Variance	20.71391		Shapiro-Wilk Test Statisitic	0.877567	
Coefficient of Variation	0.493472		Shapiro-Wilk 5% Critical Value	0.916	
Skewness	3.137763		Data not Lognormal at 5% Significance Level		
			Data not Normal: Try Non-parametric UCL		
95% UCL (Assuming Normal Data)					
Student's-t	10.81514		Estimates Assuming Lognormal Distribution		
			MLE Mean	9.137906	
95% UCL (Adjusted for Skewness)			MLE Standard Deviation	3.432633	
Adjusted-CLT	11.38682		MLE Coefficient of Variation	0.375648	
Modified-t	10.91431		MLE Skewness	1.179951	
			MLE Median	8.554265	
95% Non-parametric UCL			MLE 80% Quantile	11.62824	
CLT	10.75102		MLE 90% Quantile	13.64398	
Jackknife	10.81514		MLE 95% Quantile	15.55052	
Standard Bootstrap	10.70982		MLE 99% Quantile	19.91585	
Bootstrap-t	12.08646				
Chebyshev (Mean, Std)	13.27242		MVU Estimate of Median	8.53077	
			MVU Estimate of Mean	9.111361	
			MVU Estimate of Std. Dev.	3.386249	
			MVU Estimate of SE of Mean	0.690557	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	10.52357	
			95% Chebyshev (MVUE) UCL	12.12143	
			99% Chebyshev (MVUE) UCL	15.98232	

From File					
Summary Statistics for	Barium (Total)		Summary Statistics for	ln(Barium (Total))	
Number of Samples	27		Minimum	3.8795	
Minimum	48.4		Maximum	6.602588	
Maximum	737		Mean	4.899219	
Mean	159.6111		Standard Deviation	0.548053	
Median	125		Variance	0.300362	
Standard Deviation	129.3995				
Variance	16744.23		Shapiro-Wilk Test Statisitic	0.937037	
Coefficient of Variation	0.810717		Shapiro-Wilk 5% Critical Value	0.923	
Skewness	3.668		Data are Lognormal at 5% Significance Level		
95 % UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t	202.086		MLE Mean	155.9289	
			MLE Standard Deviation	92.29449	
95 % UCL (Adjusted for Skewness)			MLE Coefficient of Variation	0.591901	
Adjusted-CLT	219.3564		MLE Skewness	1.983074	
Modified-t	205.0159		MLE Median	134.185	
			MLE 80% Quantile	213.2198	
95 % Non-parametric UCL			MLE 90% Quantile	271.3655	
CLT	200.5728		MLE 95% Quantile	330.5526	
Jackknife	202.086		MLE 99% Quantile	480.0976	
Standard Bootstrap	200.4414				
Bootstrap-t	250.771		MVU Estimate of Median	133.4405	
Chebyshev (Mean, Std)	268.1605		MVU Estimate of Mean	154.9497	
			MVU Estimate of Std. Dev.	89.61957	
			MVU Estimate of SE of Mean	17.16368	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	193.1809	
			95% Chebyshev (MVUE) UCL	229.7644	
			99% Chebyshev (MVUE) UCL	325.7261	
			Recommended UCL to use:		
			H-UCL		

From File					
Summary Statistics for	Chromium (Total)		Summary Statistics for	ln(Chromium (Total))	
Number of Samples	27		Minimum	2.04122	
Minimum	7.7		Maximum	4.171306	
Maximum	64.8		Mean	2.610957	
Mean	15.3		Standard Deviation	0.422104	
Median	11.9		Variance	0.178172	
Standard Deviation	10.82327				
Variance	117.1431		Shapiro-Wilk Test Statisitic	0.803217	
Coefficient of Variation	0.707403		Shapiro-Wilk 5% Critical Value	0.923	
Skewness	3.991656		Data not Lognormal at 5% Significance Level		
			Data not Normal: Try Non-parametric UCL		
95 % UCL (Assuming Normal Data)					
Student's-t	18.8527		Estimates Assuming Lognormal Distribution		
			MLE Mean	14.88037	
95 % UCL (Adjusted for Skewness)			MLE Standard Deviation	6.57151	
Adjusted-CLT	20.43586		MLE Coefficient of Variation	0.441623	
Modified-t	19.11938		MLE Skewness	1.410998	
			MLE Median	13.61207	
95 % Non-parametric UCL			MLE 80% Quantile	19.44587	
CLT	18.72613		MLE 90% Quantile	23.41462	
Jackknife	18.8527		MLE 95% Quantile	27.25721	
Standard Bootstrap	18.64373		MLE 99% Quantile	36.33462	
Bootstrap-t	24.27767				
Chebyshev (Mean, Std)	24.37932		MVU Estimate of Median	13.56723	
			MVU Estimate of Mean	14.82749	
			MVU Estimate of Std. Dev.	6.462505	
			MVU Estimate of SE of Mean	1.241496	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	17.40296	
			95% Chebyshev (MVUE) UCL	20.23904	
			99% Chebyshev (MVUE) UCL	27.18021	

From File		
Summary Statistics for	Iron (Total)	
Number of Samples	27	
Minimum	15100	
Maximum	28100	
Mean	22583.33	
Median	23300	
Standard Deviation	3586.594	
Variance	12863654	
Coefficient of Variation	0.158816	
Skewness	-0.43618	
Shapiro-Wilk Test Statisitic	0.951764	
Shapiro-Wilk 5% Critical Value	0.923	
Data are Normal at 5% Significance Level		
Recommended UCL to use	Student's-t	
95 % UCL (Assuming Normal Data)		
Student's-t	23760.62	
95 % UCL (Adjusted for Skewness)		
Adjusted-CLT	23656.77	
Modified-t	23750.96	
95 % Non-parametric UCL		
CLT	23718.68	
Jackknife	23760.62	
Standard Bootstrap	23684.87	
Bootstrap-t	23692.27	
Chebyshev (Mean, Std)	25592.02	

From File		
Summary Statistics for	Manganese (Total)	
Number of Samples	27	
Minimum	177	
Maximum	1080	
Mean	573.9074	
Median	596	
Standard Deviation	244.1095	
Variance	59589.42	
Coefficient of Variation	0.425346	
Skewness	0.154294	
Shapiro-Wilk Test Statisitic	0.960845	
Shapiro-Wilk 5% Critical Value	0.923	
Data are Normal at 5% Significance Level		
Recommended UCL to use	Student's-t	
95 % UCL (Assuming Normal Data)		
Student's-t	654.0354	
95 % UCL (Adjusted for Skewness)		
Adjusted-CLT	652.6714	
Modified-t	654.2679	
95 % Non-parametric UCL		
CLT	651.1808	
Jackknife	654.0354	
Standard Bootstrap	649.3917	
Bootstrap-t	657.7599	
Chebyshev (Mean, Std)	778.6836	

From File	
Summary Statistics for	Thallium (Total)
Number of Samples	27
Minimum	0.4
Maximum	17.6
Mean	4.851111
Median	1.1
Standard Deviation	6.391972
Variance	40.8573
Coefficient of Variation	1.31763
Skewness	1.038852
97.5 % UCL (Assuming Normal Data)	
Student's-t	7.37969
97.5 % UCL (Adjusted for Skewness)	
Adjusted-CLT	7.618042
Modified-t	7.42068
97.5 % Non-parametric UCL	
CLT	7.262132
Jackknife	7.37969
Standard Bootstrap	7.191921
Bootstrap-t	8.013349
Chebyshev (Mean, Std)	12.53331

Summary Statistics for	ln(Thallium (Total))
Minimum	-0.91629
Maximum	2.867899
Mean	0.549079
Standard Deviation	1.481625
Variance	2.195212
Shapiro-Wilk Test Statisitic	0.798579
Shapiro-Wilk 5% Critical Value	0.923
Data not Lognormal at 5% Significance Level	
Data not Normal: Try Non-parametric UCL	
Estimates Assuming Lognormal Distribution	
MLE Mean	5.189751
MLE Standard Deviation	14.66223
MLE Coefficient of Variation	2.825227
MLE Skewness	31.02639
MLE Median	1.731658
MLE 80% Quantile	6.056018
MLE 90% Quantile	11.62279
MLE 95% Quantile	19.81328
MLE 99% Quantile	54.34426
MVU Estimate of Median	1.662576
MVU Estimate of Mean	4.80411
MVU Estimate of Std. Dev.	10.37193
MVU Estimate of SE of Mean	1.702099
UCL Assuming Lognormal Distribution	
Confidence Level not supported for H-Statistic	
Chebyshev 97.5 % (MVUE)	15.43372
99% Chebyshev (MVUE) UCL	21.73978

From File							
Summary Statistics for	Trichloroethene (Total)			Summary Statistics for	ln(Trichloroethene (Total))		
Number of Samples	15			Minimum	-5.809143		
Minimum	0.003			Maximum	4.2766661		
Maximum	72			Mean	-3.069362		
Mean	5.6325			Standard Deviation	3.0520273		
Median	0.014			Variance	9.3148709		
Standard Deviation	18.5753						
Variance	345.0416			Shapiro-Wilk Test Statisitic	0.7935813		
Coefficient of Variation	3.297878			Shapiro-Wilk 5% Critical Value	0.881		
Skewness	3.732701			Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
99 % UCL (Assuming Normal Data)							
Student's-t	18.21988			Estimates Assuming Lognormal Distribution			
				MLE Mean	4.8943099		
99 % UCL (Adjusted for Skewness)				MLE Standard Deviation	515.66829		
Adjusted-CLT	25.899			MLE Coefficient of Variation	105.36078		
Modified-t	18.99028			MLE Skewness	1169914.8		
				MLE Median	0.0464508		
99 % Non-parametric UCL				MLE 80% Quantile	0.612382		
CLT	16.78995			MLE 90% Quantile	2.3454868		
Jackknife	18.21988			MLE 95% Quantile	7.0372876		
Standard Bootstrap	16.20229			MLE 99% Quantile	56.241417		
Bootstrap-t	4297.761						
Chebyshev (Mean, Std)	53.3533			MVU Estimate of Median	0.0338377		
				MVU Estimate of Mean	1.688133		
				MVU Estimate of Std. Dev.	11.041629		
				MVU Estimate of SE of Mean	1.3994976		
				UCL Assuming Lognormal Distribution			
				Confidence Level not supported for H-Statistic			
				99% Chebyshev (MVUE) UCL	15.612958		
				99% Chebyshev (MVUE) UCL	15.612958		

From File		
Summary Statistics for	Aluminum (Total)	
Number of Samples	11	
Minimum	3760	
Maximum	14000	
Mean	7990	
Median	6740	
Standard Deviation	2927.644	
Variance	8571100	
Coefficient of Variation	0.366414	
Skewness	0.897176	
Shapiro-Wilk Test Statisitic	0.920747	
Shapiro-Wilk 5% Critical Value	0.85	
Data are Normal at 5% Significance Level		
Recommended UCL to use	Student's-t	
95 % UCL (Assuming Normal Data)		
Student's-t	9589.892	
95 % UCL (Adjusted for Skewness)		
Adjusted-CLT	9697.085	
Modified-t	9629.689	
95 % Non-parametric UCL		
CLT	9441.942	
Jackknife	9589.892	
Standard Bootstrap	9376.41	
Bootstrap-t	10098	
Chebyshev (Mean, Std)	11837.68	

From File					
Summary Statistics for		Antimony (Total)		Summary Statistics for	ln(Antimony (Total))
Number of Samples		11		Minimum	0.262364
Minimum		1.3		Maximum	3.916015
Maximum		50.2		Mean	1.558421
Mean		9.186364		Standard Deviation	1.041352
Median		3.6		Variance	1.084413
Standard Deviation		14.63417			
Variance		214.159		Shapiro-Wilk Test Statisitic	0.815164
Coefficient of Variation		1.593032		Shapiro-Wilk 5% Critical Value	0.85
Skewness		2.676772		Data not Lognormal at 5% Significance Level	
				Data not Normal: Try Non-parametric UCL	
97.5	% UCL (Assuming Normal Data)				
Student's-t		19.01774		Estimates Assuming Lognormal Distribution	
				MLE Mean	8.171294
97.5	% UCL (Adjusted for Skewness)			MLE Standard Deviation	11.43311
Adjusted-CLT		22.98794		MLE Coefficient of Variation	1.39918
Modified-t		19.61126		MLE Skewness	6.93672
				MLE Median	4.751311
97.5	% Non-parametric UCL			MLE 80% Quantile	11.45427
CLT		17.83445		MLE 90% Quantile	18.11169
Jackknife		19.01774		MLE 95% Quantile	26.34936
Standard Bootstrap		17.48374		MLE 99% Quantile	53.54941
Bootstrap-t		105.5823			
Chebyshev (Mean, Std)		36.7416		MVU Estimate of Median	4.521866
				MVU Estimate of Mean	7.635353
				MVU Estimate of Std. Dev.	8.698737
				MVU Estimate of SE of Mean	2.546623
				UCL Assuming Lognormal Distribution	
				Confidence Level not supported for H-Statistic	
				Chebyshev 97.5 % (MVUE)	23.53901
				99% Chebyshev (MVUE) UCL	32.97393

From File		
Summary Statistics for	Arsenic (Total)	
Number of Samples	11	
Minimum	4.6	
Maximum	39.5	
Mean	17.4	
Median	15	
Standard Deviation	11.05803	
Variance	122.28	
Coefficient of Variation	0.635519	
Skewness	0.935114	
Shapiro-Wilk Test Statisitic	0.904133	
Shapiro-Wilk 5% Critical Value	0.85	
Data are Normal at 5% Significance Level		
Recommended UCL to use	Student's-t	
95 % UCL (Assuming Normal Data)		
Student's-t	23.44296	
95 % UCL (Adjusted for Skewness)		
Adjusted-CLT	23.8886	
Modified-t	23.59964	
95 % Non-parametric UCL		
CLT	22.88414	
Jackknife	23.44296	
Standard Bootstrap	22.63094	
Bootstrap-t	25.79519	
Chebyshev (Mean, Std)	31.9331	

From File					
Summary Statistics for	Cadmium (Total)		Summary Statistics for	ln(Cadmium (Total))	
Number of Samples	11		Minimum	-1.17118	
Minimum	0.31		Maximum	3.713572	
Maximum	41		Mean	0.94232	
Mean	6.294545		Standard Deviation	1.353119	
Median	3.4		Variance	1.830932	
Standard Deviation	11.67559				
Variance	136.3193		Shapiro-Wilk Test Statisitic	0.947109	
Coefficient of Variation	1.854874		Shapiro-Wilk 5% Critical Value	0.85	
Skewness	3.149633		Data are Lognormal at 5% Significance Level		
95 % UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t	12.67499		MLE Mean	6.409531	
			MLE Standard Deviation	14.67166	
95 % UCL (Adjusted for Skewness)			MLE Coefficient of Variation	2.289038	
Adjusted-CLT	15.65708		MLE Skewness	18.86098	
Modified-t	13.23217		MLE Median	2.565928	
			MLE 80% Quantile	8.050273	
95 % Non-parametric UCL			MLE 90% Quantile	14.60083	
CLT	12.08496		MLE 95% Quantile	23.7647	
Jackknife	12.67499		MLE 99% Quantile	59.72052	
Standard Bootstrap	11.70652				
Bootstrap-t	36.37072		MVU Estimate of Median	2.359641	
Chebyshev (Mean, Std)	21.63927		MVU Estimate of Mean	5.609622	
			MVU Estimate of Std. Dev.	8.739551	
			MVU Estimate of SE of Mean	2.461172	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	31.64521	
			95% Chebyshev (MVUE) UCL	16.33762	
			99% Chebyshev (MVUE) UCL	30.09798	
			Recommended UCL to use:		
			95 % Chebyshev (MVUE) UCL		

From File						
Summary Statistics for		Chromium (Total)		Summary Statistics for	ln(Chromium (Total))	
Number of Samples		11		Minimum	2.772589	
Minimum		16		Maximum	7.319865	
Maximum		1510		Mean	4.258366	
Mean		199.6091		Standard Deviation	1.265314	
Median		52		Variance	1.601019	
Standard Deviation		437.4868				
Variance		191394.7		Shapiro-Wilk Test Statisitic	0.890688	
Coefficient of Variation		2.191718		Shapiro-Wilk 5% Critical Value	0.85	
Skewness		3.238704		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t		438.6858		MLE Mean	157.4134	
				MLE Standard Deviation	313.1728	
95	% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	1.989493	
Adjusted-CLT		554.2107		MLE Skewness	13.84305	
Modified-t		460.1539		MLE Median	70.69437	
				MLE 80% Quantile	205.9341	
95	% Non-parametric UCL			MLE 90% Quantile	359.349	
CLT		416.5772		MLE 95% Quantile	566.687	
Jackknife		438.6858		MLE 99% Quantile	1341.422	
Standard Bootstrap		412.2215				
Bootstrap-t		1861.924		MVU Estimate of Median	65.70302	
Chebyshev (Mean, Std)		774.5794		MVU Estimate of Mean	140.7779	
				MVU Estimate of Std. Dev.	202.0347	
				MVU Estimate of SE of Mean	57.6307	
				UCL Assuming Lognormal Distribution		
				95% H-UCL	650.4882	
				95% Chebyshev (MVUE) UCL	391.9843	
				99% Chebyshev (MVUE) UCL	714.1961	
				Recommended UCL to use:		
				95 % Chebyshev (MVUE) UCL		

From File		
Summary Statistics for	Copper (Total)	
Number of Samples	11	
Minimum	58.6	
Maximum	1780	
Mean	855.2364	
Median	650	
Standard Deviation	657.5635	
Variance	432389.7	
Coefficient of Variation	0.768868	
Skewness	0.372101	
Shapiro-Wilk Test Statisitic	0.86844	
Shapiro-Wilk 5% Critical Value	0.85	
Data are Normal at 5% Significance Level		
Recommended UCL to use	Student's-t	
95 % UCL (Assuming Normal Data)		
Student's-t	1214.58	
95 % UCL (Adjusted for Skewness)		
Adjusted-CLT	1205.117	
Modified-t	1218.287	
95 % Non-parametric UCL		
CLT	1181.35	
Jackknife	1214.58	
Standard Bootstrap	1163.123	
Bootstrap-t	1250.187	
Chebyshev (Mean, Std)	1719.444	

From File		
Summary Statistics for	Iron (Total)	
Number of Samples	11	
Minimum	16600	
Maximum	69000	
Mean	35336.36	
Median	29000	
Standard Deviation	16964.57	
Variance	2.88E+08	
Coefficient of Variation	0.480088	
Skewness	0.911692	
Shapiro-Wilk Test Statisitic	0.894248	
Shapiro-Wilk 5% Critical Value	0.85	
Data are Normal at 5% Significance Level		
Recommended UCL to use	Student's-t	
95 % UCL (Assuming Normal Data)		
Student's-t	44607.12	
95 % UCL (Adjusted for Skewness)		
Adjusted-CLT	45252.18	
Modified-t	44841.46	
95 % Non-parametric UCL		
CLT	43749.81	
Jackknife	44607.12	
Standard Bootstrap	43214.9	
Bootstrap-t	47095.38	
Chebyshev (Mean, Std)	57632.17	

From File					
Summary Statistics for	Manganese (Total)		Summary Statistics for	ln(Manganese (Total))	
Number of Samples	11		Minimum	5.420535	
Minimum	226		Maximum	7.495542	
Maximum	1800		Mean	6.490692	
Mean	773.3636		Standard Deviation	0.586231	
Median	630		Variance	0.343667	
Standard Deviation	490.5848				
Variance	240673.5		Shapiro-Wilk Test Statisitic	0.944177	
Coefficient of Variation	0.634352		Shapiro-Wilk 5% Critical Value	0.85	
Skewness	1.433522		Data are Lognormal at 5% Significance Level		
95 % UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t	1041.457		MLE Mean	782.5248	
			MLE Standard Deviation	501.1266	
95 % UCL (Adjusted for Skewness)			MLE Coefficient of Variation	0.640397	
Adjusted-CLT	1084.979		MLE Skewness	2.183823	
Modified-t	1052.113		MLE Median	658.9795	
			MLE 80% Quantile	1081.449	
95 % Non-parametric UCL			MLE 90% Quantile	1399.68	
CLT	1016.665		MLE 95% Quantile	1728.557	
Jackknife	1041.457		MLE 99% Quantile	2576.701	
Standard Bootstrap	1010.17				
Bootstrap-t	1405.457		MVU Estimate of Median	648.7522	
Chebyshev (Mean, Std)	1418.118		MVU Estimate of Mean	768.8756	
			MVU Estimate of Std. Dev.	464.9604	
			MVU Estimate of SE of Mean	139.6594	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	1198.464	
			95% Chebyshev (MVUE) UCL	1377.637	
			99% Chebyshev (MVUE) UCL	2158.47	
			Recommended UCL to use:		
			H-UCL		

From File						
Summary Statistics for		Mercury (Total)		Summary Statistics for	ln(Mercury (Total))	
Number of Samples		11		Minimum	-3.68888	
Minimum		0.025		Maximum	1.064711	
Maximum		2.9		Mean	-1.97399	
Mean		0.46		Standard Deviation	1.514342	
Median		0.085		Variance	2.293232	
Standard Deviation		0.864046				
Variance		0.746575		Shapiro-Wilk Test Statisitic	0.890949	
Coefficient of Variation		1.87836		Shapiro-Wilk 5% Critical Value	0.85	
Skewness		2.688386		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t		0.932182		MLE Mean	0.437195	
				MLE Standard Deviation	1.304785	
95	% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	2.984444	
Adjusted-CLT		1.114157		MLE Skewness	35.53549	
Modified-t		0.967377		MLE Median	0.138901	
				MLE 80% Quantile	0.499388	
95	% Non-parametric UCL			MLE 90% Quantile	0.972329	
CLT		0.888517		MLE 95% Quantile	1.67716	
Jackknife		0.932182		MLE 99% Quantile	4.703792	
Standard Bootstrap		0.869574				
Bootstrap-t		2.218439		MVU Estimate of Median	0.125036	
Chebyshev (Mean, Std)		1.595579		MVU Estimate of Mean	0.365045	
				MVU Estimate of Std. Dev.	0.654959	
99	% Non-parametric UCL			MVU Estimate of SE of Mean	0.179455	
Chebyshev (Mean, Std)		3.052137				
				UCL Assuming Lognormal Distribution		
				95% H-UCL	3.088993	
				95% Chebyshev (MVUE) UCL	1.14727	
				99% Chebyshev (MVUE) UCL	2.150598	
				Recommended UCL to use:		
				99 % Chebyshev (MVUE) UCL		

From File							
Summary Statistics for			Nickel (Total)		Summary Statistics for	ln(Nickel (Total))	
Number of Samples			11		Minimum	2.76001	
Minimum			15.8		Maximum	7.17012	
Maximum			1300		Mean	4.723567	
Mean			222.7364		Standard Deviation	1.144584	
Median			110		Variance	1.310073	
Standard Deviation			364.4841				
Variance			132848.6		Shapiro-Wilk Test Statisitic	0.954493	
Coefficient of Variation			1.636392		Shapiro-Wilk 5% Critical Value	0.85	
Skewness			3.08418		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)				Estimates Assuming Lognormal Distribution		
Student's-t			421.9187		MLE Mean	216.7194	
					MLE Standard Deviation	356.531	
95	% UCL (Adjusted for Skewness)				MLE Coefficient of Variation	1.645127	
Adjusted-CLT			512.6951		MLE Skewness	9.387828	
Modified-t			438.9511		MLE Median	112.5691	
					MLE 80% Quantile	296.1128	
95	% Non-parametric UCL				MLE 90% Quantile	489.9766	
CLT			403.4993		MLE 95% Quantile	739.8207	
Jackknife			421.9187		MLE 99% Quantile	1613.03	
Standard Bootstrap			394.9658				
Bootstrap-t			931.7476		MVU Estimate of Median	106.0297	
Chebyshev (Mean, Std)			701.7623		MVU Estimate of Mean	198.8278	
					MVU Estimate of Std. Dev.	253.0348	
					MVU Estimate of SE of Mean	73.28424	
					UCL Assuming Lognormal Distribution		
					95% H-UCL	714.3484	
					95% Chebyshev (MVUE) UCL	518.2663	
					99% Chebyshev (MVUE) UCL	927.9967	
					Recommended UCL to use:		
					95 % Chebyshev (MVUE) UCL		

From File					
Summary Statistics for	Thallium (Total)		Summary Statistics for	ln(Thallium (Total))	
Number of Samples	11		Minimum	-0.28768	
Minimum	0.75		Maximum	1.280934	
Maximum	3.6		Mean	0.288369	
Mean	1.568182		Standard Deviation	0.567642	
Median	1.4		Variance	0.322217	
Standard Deviation	1.036406				
Variance	1.074136		Shapiro-Wilk Test Statisitic	0.855408	
Coefficient of Variation	0.660896		Shapiro-Wilk 5% Critical Value	0.85	
Skewness	1.47758		Data are Lognormal at 5% Significance Level		
95 % UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t	2.134554		MLE Mean	1.567494	
			MLE Standard Deviation	0.966502	
95 % UCL (Adjusted for Skewness)			MLE Coefficient of Variation	0.616591	
Adjusted-CLT	2.230933		MLE Skewness	2.08419	
Modified-t	2.157757		MLE Median	1.33425	
			MLE 80% Quantile	2.155508	
95 % Non-parametric UCL			MLE 90% Quantile	2.767069	
CLT	2.082179		MLE 95% Quantile	3.394443	
Jackknife	2.134554		MLE 99% Quantile	4.99633	
Standard Bootstrap	2.053398				
Bootstrap-t	2.829606		MVU Estimate of Median	1.314827	
Chebyshev (Mean, Std)	2.930286		MVU Estimate of Mean	1.542018	
			MVU Estimate of Std. Dev.	0.901256	
			MVU Estimate of SE of Mean	0.270826	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	2.357141	
			95% Chebyshev (MVUE) UCL	2.722521	
			99% Chebyshev (MVUE) UCL	4.236701	
			Recommended UCL to use:		
			H-UCL		

From File					
Summary Statistics for	Vanadium (Total)		Summary Statistics for	ln(Vanadium (Total))	
Number of Samples	11		Minimum	2.230014	
Minimum	9.3		Maximum	4.276666	
Maximum	72		Mean	3.040514	
Mean	24.51818		Standard Deviation	0.552802	
Median	19		Variance	0.30559	
Standard Deviation	17.32812				
Variance	300.2636		Shapiro-Wilk Test Statisitic	0.925955	
Coefficient of Variation	0.706746		Shapiro-Wilk 5% Critical Value	0.85	
Skewness	2.366765		Data are Lognormal at 5% Significance Level		
95 % UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t	33.98761		MLE Mean	24.36893	
			MLE Standard Deviation	14.569	
95 % UCL (Adjusted for Skewness)			MLE Coefficient of Variation	0.597851	
Adjusted-CLT	37.09569		MLE Skewness	2.007242	
Modified-t	34.609		MLE Median	20.91598	
			MLE 80% Quantile	33.36915	
95 % Non-parametric UCL			MLE 90% Quantile	42.55787	
CLT	33.11192		MLE 95% Quantile	51.9288	
Jackknife	33.98761		MLE 99% Quantile	75.66623	
Standard Bootstrap	32.78373				
Bootstrap-t	43.73218		MVU Estimate of Median	20.62713	
Chebyshev (Mean, Std)	47.29179		MVU Estimate of Mean	23.99515	
			MVU Estimate of Std. Dev.	13.63795	
			MVU Estimate of SE of Mean	4.09949	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	36.12435	
			95% Chebyshev (MVUE) UCL	41.86441	
			99% Chebyshev (MVUE) UCL	64.78456	
			Recommended UCL to use:		
			H-UCL		

From File						
Summary Statistics for	Benzene			Summary Statistics for	ln(Benzene (Total))	
Number of Samples	29			Minimum	-6.907755	
Minimum	0.001			Maximum	-0.356675	
Maximum	0.7			Mean	-4.985095	
Mean	0.03049			Standard Deviation	1.010435	
Median	0.0055			Variance	1.020979	
Standard Deviation	0.12885					
Variance	0.0166			Shapiro-Wilk Test Statisitic	0.511958	
Coefficient of Variation	4.22579			Shapiro-Wilk 5% Critical Value	0.926	
Skewness	5.3739			Data not Lognormal at 5% Significance Level		
				Data not Normal: Try Non-parametric UCL		
95 % UCL (Assuming Normal Data)						
Student's-t	0.07119			Estimates Assuming Lognormal Distribution		
				MLE Mean	0.011395	
95 % UCL (Adjusted for Skewness)				MLE Standard Deviation	0.015185	
Adjusted-CLT	0.09536			MLE Coefficient of Variation	1.332633	
Modified-t	0.07517			MLE Skewness	6.364539	
				MLE Median	0.006839	
95 % Non-parametric UCL				MLE 80% Quantile	0.016062	
CLT	0.06985			MLE 90% Quantile	0.025055	
Jackknife	0.07119			MLE 95% Quantile	0.036047	
Standard Bootstrap	0.06842			MLE 99% Quantile	0.071732	
Bootstrap-t	2.71431					
Chebyshev (Mean, Std)	0.13479			MVU Estimate of Median	0.00672	
				MVU Estimate of Mean	0.011109	
				MVU Estimate of Std. Dev.	0.013514	
				MVU Estimate of SE of Mean	0.002395	
				UCL Assuming Lognormal Distribution		
				95% H-UCL	0.01824	
				95% Chebyshev (MVUE) UCL	0.021549	
				99% Chebyshev (MVUE) UCL	0.034941	

From File							
Summary Statistics for		Methylcyclohexane (		Summary Statistics for		In(Methylcyclohexane (Total))	
Number of Samples		22		Minimum	-7.1309		
Minimum		0.0008		Maximum	0.262364		
Maximum		1.3		Mean	-4.92992		
Mean		0.065502		Standard Deviation	1.29684		
Median		0.0055		Variance	1.681795		
Standard Deviation		0.275782					
Variance		0.076056		Shapiro-Wilk Test Statisitic	0.531991		
Coefficient of Variation		4.210262		Shapiro-Wilk 5% Critical Value	0.911		
Skewness		4.687485		Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
97.5	% UCL (Assuming Normal Data)						
Student's-t		0.187777		Estimates Assuming Lognormal Distribution			
				MLE Mean	0.016756		
97.5	% UCL (Adjusted for Skewness)			MLE Standard Deviation	0.035048		
Adjusted-CLT		0.265777		MLE Coefficient of Variation	2.091697		
Modified-t		0.19757		MLE Skewness	15.42667		
				MLE Median	0.007227		
97.5	% Non-parametric UCL			MLE 80% Quantile	0.021621		
CLT		0.180742		MLE 90% Quantile	0.038255		
Jackknife		0.187777		MLE 95% Quantile	0.061016		
Standard Bootstrap		0.178667		MLE 99% Quantile	0.147567		
Bootstrap-t		17.36568					
Chebyshev (Mean, Std)		0.432689		MVU Estimate of Median	0.006956		
				MVU Estimate of Mean	0.015716		
				MVU Estimate of Std. Dev.	0.026462		
				MVU Estimate of SE of Mean	0.00513		
				UCL Assuming Lognormal Distribution			
				Confidence Level not supported for H-Statistic			
				Chebyshev 97.5 % (MVUE)	0.047753		
				99% Chebyshev (MVUE) UCL	0.066759		

From File					
Summary Statistics for	Trichloroethene (Total)		Summary Statistics for	ln(Trichloroethene (Total))	
Number of Samples	29		Minimum	-6.90776	
Minimum	0.001		Maximum	4.276666	
Maximum	72		Mean	-3.65884	
Mean	2.945759		Standard Deviation	2.545899	
Median	0.008		Variance	6.481602	
Standard Deviation	13.43657				
Variance	180.5414		Shapiro-Wilk Test Statisitic	0.823326	
Coefficient of Variation	4.561327		Shapiro-Wilk 5% Critical Value	0.926	
Skewness	5.205059		Data not Lognormal at 5% Significance Level Data not Normal: Try Non-parametric UCL		
99 % UCL (Assuming Normal Data)					
Student's-t	9.10154		Estimates Assuming Lognormal Distribution		
			MLE Mean	0.658333	
99 % UCL (Adjusted for Skewness)			MLE Standard Deviation	16.81029	
Adjusted-CLT	13.50274		MLE Coefficient of Variation	25.53461	
Modified-t	9.503484		MLE Skewness	16725.58	
			MLE Median	0.025762	
99 % Non-parametric UCL			MLE 80% Quantile	0.22145	
CLT	8.750249		MLE 90% Quantile	0.678844	
Jackknife	9.10154		MLE 95% Quantile	1.697504	
Standard Bootstrap	8.758776		MLE 99% Quantile	9.611078	
Bootstrap-t	743.0386				
Chebyshev (Mean, Std)	27.77177		MVU Estimate of Median	0.023029	
			MVU Estimate of Mean	0.452741	
			MVU Estimate of Std. Dev.	3.284772	
			MVU Estimate of SE of Mean	0.291961	
			UCL Assuming Lognormal Distribution		
			Confidence Level not supported for H-Statistic		
			99% Chebyshev (MVUE) UCL	3.357713	
			99% Chebyshev (MVUE) UCL	3.357713	

From File							
Summary Statistics for		Acenaphthylene (Total)		Summary Statistics for	ln(Acenaphthylene (Total))		
Number of Samples		13		Minimum	-1.66073		
Minimum		0.19		Maximum	1.568616		
Maximum		4.8		Mean	-0.91755		
Mean		0.825769		Standard Deviation	1.109324		
Median		0.205		Variance	1.2306		
Standard Deviation		1.310226					
Variance		1.716691		Shapiro-Wilk Test Statisitic	0.694156		
Coefficient of Variation		1.586673		Shapiro-Wilk 5% Critical Value	0.866		
Skewness		2.710432		Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
97.5	% UCL (Assuming Normal Data)						
Student's-t		1.617531		Estimates Assuming Lognormal Distribution			
				MLE Mean	0.739154		
97.5	% UCL (Adjusted for Skewness)			MLE Standard Deviation	1.150634		
Adjusted-CLT		1.933329		MLE Coefficient of Variation	1.55669		
Modified-t		1.66306		MLE Skewness	8.442368		
				MLE Median	0.399497		
97.5	% Non-parametric UCL			MLE 80% Quantile	1.020028		
CLT		1.538003		MLE 90% Quantile	1.661853		
Jackknife		1.617531		MLE 95% Quantile	2.477598		
Standard Bootstrap		1.496592		MLE 99% Quantile	5.273738		
Bootstrap-t		3.406366					
Chebyshev (Mean, Std)		3.095146		MVU Estimate of Median	0.380968		
				MVU Estimate of Mean	0.690269		
				MVU Estimate of Std. Dev.	0.868542		
				MVU Estimate of SE of Mean	0.2311		
				UCL Assuming Lognormal Distribution			
				Confidence Level not supported for H-Statistic			
				Chebyshev 97.5 % (MVUE)	2.133491		
				99% Chebyshev (MVUE) UCL	2.989689		

From File							
Summary Statistics for	Benzo(a)anthracene (Total)			Summary Statistics for	ln(Benzo(a)anthracene (Total))		
Number of Samples	13			Minimum	-1.66073		
Minimum	0.19			Maximum	3.367296		
Maximum	29			Mean	-0.26943		
Mean	3.418462			Standard Deviation	1.634298		
Median	0.43			Variance	2.670929		
Standard Deviation	7.898802						
Variance	62.39108			Shapiro-Wilk Test Statisitic	0.827417		
Coefficient of Variation	2.310631			Shapiro-Wilk 5% Critical Value	0.866		
Skewness	3.29569			Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
97.5 % UCL (Assuming Normal Data)							
Student's-t	8.19166			Estimates Assuming Lognormal Distribution			
				MLE Mean	2.903846		
97.5 % UCL (Adjusted for Skewness)				MLE Standard Deviation	10.65098		
Adjusted-CLT	10.61009			MLE Coefficient of Variation	3.667887		
Modified-t	8.525404			MLE Skewness	60.34918		
				MLE Median	0.763816		
97.5 % Non-parametric UCL				MLE 80% Quantile	3.039075		
CLT	7.712221			MLE 90% Quantile	6.237903		
Jackknife	8.19166			MLE 95% Quantile	11.23452		
Standard Bootstrap	7.567366			MLE 99% Quantile	34.19051		
Bootstrap-t	51.90891						
Chebyshev (Mean, Std)	17.09959			MVU Estimate of Median	0.688718		
				MVU Estimate of Mean	2.392889		
				MVU Estimate of Std. Dev.	4.999345		
				MVU Estimate of SE of Mean	1.209077		
				UCL Assuming Lognormal Distribution			
				Confidence Level not supported for H-Statistic			
				Chebyshev 97.5 % (MVUE)	9.943572		
				99% Chebyshev (MVUE) UCL	14.42305		

From File							
Summary Statistics for	Benzo(a)pyrene (Total)			Summary Statistics for	ln(Benzo(a)pyrene (Total))		
Number of Samples	13			Minimum	-1.66073		
Minimum	0.19			Maximum	3.367296		
Maximum	29			Mean	-0.33611		
Mean	3.282308			Standard Deviation	1.615066		
Median	0.31			Variance	2.608438		
Standard Deviation	7.884463						
Variance	62.16475			Shapiro-Wilk Test Statisitic	0.813718		
Coefficient of Variation	2.40211			Shapiro-Wilk 5% Critical Value	0.866		
Skewness	3.371114			Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
97.5 % UCL (Assuming Normal Data)							
Student's-t	8.046841			Estimates Assuming Lognormal Distribution			
				MLE Mean	2.632954		
97.5 % UCL (Adjusted for Skewness)				MLE Standard Deviation	9.337834		
Adjusted-CLT	10.52708			MLE Coefficient of Variation	3.546523		
Modified-t	8.387603			MLE Skewness	55.24713		
				MLE Median	0.714543		
97.5 % Non-parametric UCL				MLE 80% Quantile	2.797198		
CLT	7.568272			MLE 90% Quantile	5.693056		
Jackknife	8.046841			MLE 95% Quantile	10.1825		
Standard Bootstrap	7.424159			MLE 99% Quantile	30.58565		
Bootstrap-t	54.25064						
Chebyshev (Mean, Std)	16.9386			MVU Estimate of Median	0.645863		
				MVU Estimate of Mean	2.183342		
				MVU Estimate of Std. Dev.	4.486524		
				MVU Estimate of SE of Mean	1.090016		
				UCL Assuming Lognormal Distribution			
				Confidence Level not supported for H-Statistic			
				Chebyshev 97.5 % (MVUE)	8.990489		
				99% Chebyshev (MVUE) UCL	13.02886		

From File					
Summary Statistics for	Benzo(g,h,i)perylene		Summary Statistics for	ln(Benzo(g,h,i)perylene (Total))	
Number of Samples	13		Minimum	-1.66073	
Minimum	0.19		Maximum	2.116256	
Maximum	8.3		Mean	-0.64684	
Mean	1.431923		Standard Deviation	1.364065	
Median	0.205		Variance	1.860674	
Standard Deviation	2.431242				
Variance	5.91094		Shapiro-Wilk Test Statisitic	0.747307	
Coefficient of Variation	1.697886		Shapiro-Wilk 5% Critical Value	0.866	
Skewness	2.379475		Data not Lognormal at 5% Significance Level		
			Data not Normal: Try Non-parametric UCL		
97.5 % UCL (Assuming Normal Data)					
Student's-t	2.901108		Estimates Assuming Lognormal Distribution		
			MLE Mean	1.32776	
97.5 % UCL (Adjusted for Skewness)			MLE Standard Deviation	3.093442	
Adjusted-CLT	3.397529		MLE Coefficient of Variation	2.329821	
Modified-t	2.975276		MLE Skewness	19.63589	
			MLE Median	0.523696	
97.5 % Non-parametric UCL			MLE 80% Quantile	1.658297	
CLT	2.753537		MLE 90% Quantile	3.022184	
Jackknife	2.901108		MLE 95% Quantile	4.938409	
Standard Bootstrap	2.692195		MLE 99% Quantile	12.50304	
Bootstrap-t	7.4381				
Chebyshev (Mean, Std)	5.642958		MVU Estimate of Median	0.487347	
			MVU Estimate of Mean	1.180146	
			MVU Estimate of Std. Dev.	1.9295	
			MVU Estimate of SE of Mean	0.493931	
			UCL Assuming Lognormal Distribution		
			Confidence Level not supported for H-Statistic		
			Chebyshev 97.5 % (MVUE)	4.264741	
			99% Chebyshev (MVUE) UCL	6.094692	

From File							
Summary Statistics for		Benzo(b)fluoranthene		Summary Statistics for		In(Benzo(b)fluoranthene (Total))	
Number of Samples		13		Minimum	-1.66073		
Minimum		0.19		Maximum	3.78419		
Maximum		44		Mean	-0.11368		
Mean		4.643846		Standard Deviation	1.669473		
Median		0.77		Variance	2.78714		
Standard Deviation		11.96352					
Variance		143.1258		Shapiro-Wilk Test Statisitic	0.857977		
Coefficient of Variation		2.57621		Shapiro-Wilk 5% Critical Value	0.866		
Skewness		3.466277		Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
97.5	% UCL (Assuming Normal Data)						
Student's-t		11.87333		Estimates Assuming Lognormal Distribution			
				MLE Mean	3.596243		
97.5	% UCL (Adjusted for Skewness)			MLE Standard Deviation	14.03665		
Adjusted-CLT		15.76346		MLE Coefficient of Variation	3.903143		
Modified-t		12.40498		MLE Skewness	71.17195		
				MLE Median	0.892543		
97.5	% Non-parametric UCL			MLE 80% Quantile	3.658395		
CLT		11.14717		MLE 90% Quantile	7.626222		
Jackknife		11.87333		MLE 95% Quantile	13.90993		
Standard Bootstrap		10.85108		MLE 99% Quantile	43.35898		
Bootstrap-t		101.5905					
Chebyshev (Mean, Std)		25.36527		MVU Estimate of Median	0.801145		
				MVU Estimate of Mean	2.928466		
				MVU Estimate of Std. Dev.	6.304827		
				MVU Estimate of SE of Mean	1.511829		
				UCL Assuming Lognormal Distribution			
				Confidence Level not supported for H-Statistic			
				Chebyshev 97.5 % (MVUE)	12.36983		
				99% Chebyshev (MVUE) UCL	17.97097		

From File					
Summary Statistics for	Benzo(k)fluoranthene		Summary Statistics for	ln(Benzo(k)fluoranthene (Total))	
Number of Samples	13		Minimum	-1.66073	
Minimum	0.19		Maximum	2.890372	
Maximum	18		Mean	-0.4967	
Mean	2.245769		Standard Deviation	1.494335	
Median	0.22		Variance	2.233036	
Standard Deviation	4.913601				
Variance	24.14347		Shapiro-Wilk Test Statisitic	0.794237	
Coefficient of Variation	2.187937		Shapiro-Wilk 5% Critical Value	0.866	
Skewness	3.203204		Data not Lognormal at 5% Significance Level		
			Data not Normal: Try Non-parametric UCL		
97.5 % UCL (Assuming Normal Data)					
Student's-t	5.215028		Estimates Assuming Lognormal Distribution		
			MLE Mean	1.858589	
97.5 % UCL (Adjusted for Skewness)			MLE Standard Deviation	5.363615	
Adjusted-CLT	6.668871		MLE Coefficient of Variation	2.885853	
Modified-t	5.416814		MLE Skewness	32.69136	
			MLE Median	0.608535	
97.5 % Non-parametric UCL			MLE 80% Quantile	2.151171	
CLT	4.916784		MLE 90% Quantile	4.151707	
Jackknife	5.215028		MLE 95% Quantile	7.109843	
Standard Bootstrap	4.865976		MLE 99% Quantile	19.67054	
Bootstrap-t	22.34648				
Chebyshev (Mean, Std)	10.75638		MVU Estimate of Median	0.558154	
			MVU Estimate of Mean	1.598042	
			MVU Estimate of Std. Dev.	2.950684	
			MVU Estimate of SE of Mean	0.736393	
			UCL Assuming Lognormal Distribution		
			Confidence Level not supported for H-Statistic		
			Chebyshev 97.5 % (MVUE)	6.196816	
			99% Chebyshev (MVUE) UCL	8.925062	

From File							
Summary Statistics for		Dibenzo(a,h)anthracene		Summary Statistics for		ln(Dibenzo(a,h)anthracene (Total))	
Number of Samples		13		Minimum	-1.66073		
Minimum		0.19		Maximum	1.568616		
Maximum		4.8		Mean	-0.97168		
Mean		0.751923		Standard Deviation	1.042015		
Median		0.205		Variance	1.085795		
Standard Deviation		1.271104					
Variance		1.615706		Shapiro-Wilk Test Statisitic	0.688136		
Coefficient of Variation		1.690471		Shapiro-Wilk 5% Critical Value	0.866		
Skewness		3.115326		Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
97.5	% UCL (Assuming Normal Data)						
Student's-t		1.520044		Estimates Assuming Lognormal Distribution			
				MLE Mean	0.651301		
97.5	% UCL (Adjusted for Skewness)			MLE Standard Deviation	0.912238		
Adjusted-CLT		1.883705		MLE Coefficient of Variation	1.400641		
Modified-t		1.570812		MLE Skewness	6.949692		
				MLE Median	0.378446		
97.5	% Non-parametric UCL			MLE 80% Quantile	0.912855		
CLT		1.442891		MLE 90% Quantile	1.443842		
Jackknife		1.520044		MLE 95% Quantile	2.101042		
Standard Bootstrap		1.43422		MLE 99% Quantile	4.271844		
Bootstrap-t		3.559452					
Chebyshev (Mean, Std)		2.95354		MVU Estimate of Median	0.362922		
				MVU Estimate of Mean	0.614388		
				MVU Estimate of Std. Dev.	0.716467		
				MVU Estimate of SE of Mean	0.192128		
				UCL Assuming Lognormal Distribution			
				Confidence Level not supported for H-Statistic			
				Chebyshev 97.5 % (MVUE)	1.814225		
				99% Chebyshev (MVUE) UCL	2.526034		

From File							
Summary Statistics for		Indeno(1,2,3-cd)pyrene		Summary Statistics for		ln(Indeno(1,2,3-cd)pyrene (Total))	
Number of Samples		13		Minimum	-1.66073		
Minimum		0.19		Maximum	2.302585		
Maximum		10		Mean	-0.61268		
Mean		1.601154		Standard Deviation	1.415715		
Median		0.205		Variance	2.004248		
Standard Deviation		2.847784					
Variance		8.109876		Shapiro-Wilk Test Statisitic	0.749908		
Coefficient of Variation		1.778583		Shapiro-Wilk 5% Critical Value	0.866		
Skewness		2.57225		Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
97.5	% UCL (Assuming Normal Data)						
Student's-t		3.322053		Estimates Assuming Lognormal Distribution			
				MLE Mean	1.476163		
97.5	% UCL (Adjusted for Skewness)			MLE Standard Deviation	3.740408		
Adjusted-CLT		3.964637		MLE Coefficient of Variation	2.533873		
Modified-t		3.415966		MLE Skewness	23.87037		
				MLE Median	0.541898		
97.5	% Non-parametric UCL			MLE 80% Quantile	1.792481		
CLT		3.149199		MLE 90% Quantile	3.341819		
Jackknife		3.322053		MLE 95% Quantile	5.563195		
Standard Bootstrap		3.127258		MLE 99% Quantile	14.58909		
Bootstrap-t		10.54764					
Chebyshev (Mean, Std)		6.533661		MVU Estimate of Median	0.501479		
				MVU Estimate of Mean	1.295802		
				MVU Estimate of Std. Dev.	2.225148		
				MVU Estimate of SE of Mean	0.564159		
				UCL Assuming Lognormal Distribution			
				Confidence Level not supported for H-Statistic			
				Chebyshev 97.5 % (MVUE)	4.818972		
				99% Chebyshev (MVUE) UCL	6.90911		

From File					
Summary Statistics for	Naphthalene (Total)		Summary Statistics for	ln(Naphthalene (Total))	
Number of Samples	13		Minimum	-1.66073	
Minimum	0.19		Maximum	2.140066	
Maximum	8.5		Mean	-0.6785	
Mean	1.401154		Standard Deviation	1.342	
Median	0.205		Variance	1.800964	
Standard Deviation	2.478987				
Variance	6.145376		Shapiro-Wilk Test Statisitic	0.739877	
Coefficient of Variation	1.769247		Shapiro-Wilk 5% Critical Value	0.866	
Skewness	2.476615		Data not Lognormal at 5% Significance Level Data not Normal: Try Non-parametric UCL		
97.5 % UCL (Assuming Normal Data)					
Student's-t	2.899191		Estimates Assuming Lognormal Distribution		
			MLE Mean	1.248551	
97.5 % UCL (Adjusted for Skewness)			MLE Standard Deviation	2.80729	
Adjusted-CLT	3.432167		MLE Coefficient of Variation	2.248439	
Modified-t	2.977902		MLE Skewness	18.11226	
			MLE Median	0.507378	
97.5 % Non-parametric UCL			MLE 80% Quantile	1.576948	
CLT	2.748722		MLE 90% Quantile	2.846162	
Jackknife	2.899191		MLE 95% Quantile	4.613982	
Standard Bootstrap	2.682616		MLE 99% Quantile	11.50743	
Bootstrap-t	9.137632				
Chebyshev (Mean, Std)	5.694885		MVU Estimate of Median	0.473259	
			MVU Estimate of Mean	1.115368	
			MVU Estimate of Std. Dev.	1.785109	
			MVU Estimate of SE of Mean	0.458767	
			UCL Assuming Lognormal Distribution		
			Confidence Level not supported for H-Statistic		
			Chebyshev 97.5 % (MVUE)	3.980364	
			99% Chebyshev (MVUE) UCL	5.680037	

From File							
Summary Statistics for	Phenanthrene (Total)			Summary Statistics for	ln(Phenanthrene (Total))		
Number of Samples	13			Minimum	-1.66073		
Minimum	0.19			Maximum	2.995732		
Maximum	20			Mean	-0.10904		
Mean	3.082308			Standard Deviation	1.576144		
Median	0.72			Variance	2.484231		
Standard Deviation	5.689845						
Variance	32.37434			Shapiro-Wilk Test Statisitic	0.874423		
Coefficient of Variation	1.845969			Shapiro-Wilk 5% Critical Value	0.866		
Skewness	2.61905			Data are Lognormal at 5% Significance Level			
95 % UCL (Assuming Normal Data)				Estimates Assuming Lognormal Distribution			
Student's-t	5.894898			MLE Mean	3.105184		
				MLE Standard Deviation	10.29493		
95 % UCL (Adjusted for Skewness)				MLE Coefficient of Variation	3.315403		
Adjusted-CLT	6.902862			MLE Skewness	46.38877		
Modified-t	6.085949			MLE Median	0.896692		
				MLE 80% Quantile	3.396683		
95 % Non-parametric UCL				MLE 90% Quantile	6.795787		
CLT	5.678017			MLE 95% Quantile	11.98571		
Jackknife	5.894898			MLE 99% Quantile	35.06029		
Standard Bootstrap	5.598802						
Bootstrap-t	13.17224			MVU Estimate of Median	0.814441		
Chebyshev (Mean, Std)	9.960995			MVU Estimate of Mean	2.606739		
				MVU Estimate of Std. Dev.	5.177846		
99 % Non-parametric UCL				MVU Estimate of SE of Mean	1.269346		
Chebyshev (Mean, Std)	18.784						
				UCL Assuming Lognormal Distribution			
				95% H-UCL	18.76483		
				95% Chebyshev (MVUE) UCL	8.139691		
				99% Chebyshev (MVUE) UCL	15.23658		
				Recommended UCL to use:			
				99 % Chebyshev (MVUE) UCL			

From File		
Summary Statistics for	Aluminum (Total)	
Number of Samples	15	
Minimum	3760	
Maximum	14000	
Mean	8351.333	
Median	8330	
Standard Deviation	2581.278	
Variance	6662998	
Coefficient of Variation	0.309086	
Skewness	0.483081	
Shapiro-Wilk Test Statisitic	0.966827	
Shapiro-Wilk 5% Critical Value	0.881	
Data are Normal at 5% Significance Level		
Recommended UCL to use	Student's-t	
95 % UCL (Assuming Normal Data)		
Student's-t	9525.217	
95 % UCL (Adjusted for Skewness)		
Adjusted-CLT	9536.427	
Modified-t	9539.072	
95 % Non-parametric UCL		
CLT	9447.601	
Jackknife	9525.217	
Standard Bootstrap	9408.347	
Bootstrap-t	9623.301	
Chebyshev (Mean, Std)	11256.47	

From File					
Summary Statistics for	Antimony (Total)		Summary Statistics for	ln(Antimony (Total))	
Number of Samples	15		Minimum	-0.59784	
Minimum	0.55		Maximum	3.916015	
Maximum	50.2		Mean	1.114471	
Mean	7.01		Standard Deviation	1.195899	
Median	3.4		Variance	1.430174	
Standard Deviation	12.923				
Variance	167.004		Shapiro-Wilk Test Statisitic	0.905672	
Coefficient of Variation	1.84351		Shapiro-Wilk 5% Critical Value	0.881	
Skewness	3.125993		Data are Lognormal at 5% Significance Level		
95 % UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t	12.88697		MLE Mean	6.23113	
			MLE Standard Deviation	11.11069	
95 % UCL (Adjusted for Skewness)			MLE Coefficient of Variation	1.783094	
Adjusted-CLT	15.37606		MLE Skewness	11.0185	
Modified-t	13.33583		MLE Median	3.047955	
			MLE 80% Quantile	8.372941	
95 % Non-parametric UCL			MLE 90% Quantile	14.17104	
CLT	12.49839		MLE 95% Quantile	21.79595	
Jackknife	12.88697		MLE 99% Quantile	49.21169	
Standard Bootstrap	12.36438				
Bootstrap-t	50.34953		MVU Estimate of Median	2.905644	
Chebyshev (Mean, Std)	21.55436		MVU Estimate of Mean	5.792065	
			MVU Estimate of Std. Dev.	8.192476	
			MVU Estimate of SE of Mean	1.994834	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	16.61502	
			95% Chebyshev (MVUE) UCL	14.48734	
			99% Chebyshev (MVUE) UCL	25.64041	
			Recommended UCL to use:		
			95 % Chebyshev (MVUE) UCL		

From File						
Summary Statistics for		Arsenic (Total)		Summary Statistics for	ln(Arsenic (Total))	
Number of Samples		15		Minimum	1.526056	
Minimum		4.6		Maximum	3.676301	
Maximum		39.5		Mean	2.621617	
Mean		16		Standard Deviation	0.561924	
Median		12.6		Variance	0.315758	
Standard Deviation		9.689538				
Variance		93.88714		Shapiro-Wilk Test Statisitic	0.967126	
Coefficient of Variation		0.605596		Shapiro-Wilk 5% Critical Value	0.881	
Skewness		1.373581		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t		20.40649		MLE Mean	16.1109	
				MLE Standard Deviation	9.817058	
95	% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	0.609343	
Adjusted-CLT		21.06322		MLE Skewness	2.054276	
Modified-t		20.55438		MLE Median	13.75795	
				MLE 80% Quantile	22.11912	
95	% Non-parametric UCL			MLE 90% Quantile	28.32341	
CLT		20.11514		MLE 95% Quantile	34.67369	
Jackknife		20.40649		MLE 99% Quantile	50.83836	
Standard Bootstrap		19.88762				
Bootstrap-t		22.02045		MVU Estimate of Median	13.61381	
Chebyshev (Mean, Std)		26.90522		MVU Estimate of Mean	15.92105	
				MVU Estimate of Std. Dev.	9.314438	
				MVU Estimate of SE of Mean	2.395265	
				UCL Assuming Lognormal Distribution		
				95% H-UCL	22.20567	
				95% Chebyshev (MVUE) UCL	26.36177	
				99% Chebyshev (MVUE) UCL	39.75364	
				Recommended UCL to use:		
				H-UCL		

From File						
Summary Statistics for		Cadmium (Total)		Summary Statistics for	ln(Cadmium (Total))	
Number of Samples		15		Minimum	-2.30259	
Minimum		0.1		Maximum	3.713572	
Maximum		41		Mean	0.104645	
Mean		4.626		Standard Deviation	1.83042	
Median		2		Variance	3.350438	
Standard Deviation		10.2613				
Variance		105.2943		Shapiro-Wilk Test Statisitic	0.920367	
Coefficient of Variation		2.21818		Shapiro-Wilk 5% Critical Value	0.881	
Skewness		3.624745		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t		9.292515		MLE Mean	5.929051	
				MLE Standard Deviation	31.10082	
95	% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	5.245497	
Adjusted-CLT		11.6335		MLE Skewness	160.0676	
Modified-t		9.705788		MLE Median	1.110316	
				MLE 80% Quantile	5.214014	
95	% Non-parametric UCL			MLE 90% Quantile	11.66666	
CLT		8.983969		MLE 95% Quantile	22.5489	
Jackknife		9.292515		MLE 99% Quantile	78.42969	
Standard Bootstrap		8.783727				
Bootstrap-t		24.0384		MVU Estimate of Median	0.992201	
Chebyshev (Mean, Std)		16.17471		MVU Estimate of Mean	4.677674	
				MVU Estimate of Std. Dev.	12.15846	
99	% Non-parametric UCL			MVU Estimate of SE of Mean	2.546348	
Chebyshev (Mean, Std)		30.98776				
				UCL Assuming Lognormal Distribution		
				95% H-UCL	47.06604	
				95% Chebyshev (MVUE) UCL	15.77695	
				99% Chebyshev (MVUE) UCL	30.01352	
				Recommended UCL to use:		
				99 % Chebyshev (MVUE) UCL		

From File						
Summary Statistics for		Chromium (Total)		Summary Statistics for	ln(Chromium (Total))	
Number of Samples		15		Minimum	2.322388	
Minimum		10.2		Maximum	7.319865	
Maximum		1510		Mean	4.096468	
Mean		160.3		Standard Deviation	1.198908	
Median		52		Variance	1.43738	
Standard Deviation		376.2559				
Variance		141568.5		Shapiro-Wilk Test Statisitic	0.915738	
Coefficient of Variation		2.347198		Shapiro-Wilk 5% Critical Value	0.881	
Skewness		3.773374		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t		331.4093		MLE Mean	123.3663	
				MLE Standard Deviation	221.0169	
95	% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	1.79155	
Adjusted-CLT		421.2308		MLE Skewness	11.12491	
Modified-t		347.1843		MLE Median	60.12751	
				MLE 80% Quantile	165.595	
95	% Non-parametric UCL			MLE 90% Quantile	280.6376	
CLT		320.0957		MLE 95% Quantile	432.1061	
Jackknife		331.4093		MLE 99% Quantile	977.6262	
Standard Bootstrap		314.0256				
Bootstrap-t		1312.484		MVU Estimate of Median	57.30629	
Chebyshev (Mean, Std)		583.7621		MVU Estimate of Mean	114.6178	
				MVU Estimate of Std. Dev.	162.6509	
				MVU Estimate of SE of Mean	39.5859	
				UCL Assuming Lognormal Distribution		
				95% H-UCL	330.3132	
				95% Chebyshev (MVUE) UCL	287.1688	
				99% Chebyshev (MVUE) UCL	508.4926	
				Recommended UCL to use:		
				95 % Chebyshev (MVUE) UCL		

From File						
Summary Statistics for		Copper (Total)		Summary Statistics for	ln(Copper (Total))	
Number of Samples		15		Minimum	3.407842	
Minimum		30.2		Maximum	7.484369	
Maximum		1780		Mean	5.6531	
Mean		638.68		Standard Deviation	1.508041	
Median		328		Variance	2.274188	
Standard Deviation		668.6189				
Variance		447051.2		Shapiro-Wilk Test Statisitic	0.887251	
Coefficient of Variation		1.046876		Shapiro-Wilk 5% Critical Value	0.881	
Skewness		0.810923		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t		942.7467		MLE Mean	889.0858	
				MLE Standard Deviation	2625.443	
95	% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	2.952969	
Adjusted-CLT		961.2651		MLE Skewness	34.60887	
Modified-t		948.7711		MLE Median	285.174	
				MLE 80% Quantile	1019.833	
95	% Non-parametric UCL			MLE 90% Quantile	1980.159	
CLT		922.642		MLE 95% Quantile	3407.818	
Jackknife		942.7467		MLE 99% Quantile	9516.7	
Standard Bootstrap		911.1263				
Bootstrap-t		1017.08		MVU Estimate of Median	264.2591	
Chebyshev (Mean, Std)		1391.186		MVU Estimate of Mean	775.2763	
				MVU Estimate of Std. Dev.	1505.513	
99	% Non-parametric UCL			MVU Estimate of SE of Mean	344.6108	
Chebyshev (Mean, Std)		2356.393				
				UCL Assuming Lognormal Distribution		
				95% H-UCL	3835.029	
				95% Chebyshev (MVUE) UCL	2277.4	
				99% Chebyshev (MVUE) UCL	4204.11	
				Recommended UCL to use:		
				99 % Chebyshev (MVUE) UCL		

From File						
Summary Statistics for		Iron (Total)		Summary Statistics for	ln(Iron (Total))	
Number of Samples		15		Minimum	9.717158	
Minimum		16600		Maximum	11.14186	
Maximum		69000		Mean	10.29198	
Mean		32213.33		Standard Deviation	0.416271	
Median		26000		Variance	0.173282	
Standard Deviation		15350.94				
Variance		2.36E+08		Shapiro-Wilk Test Statisitic	0.906804	
Coefficient of Variation		0.47654		Shapiro-Wilk 5% Critical Value	0.881	
Skewness		1.383311		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t		39194.45		MLE Mean	32164.43	
				MLE Standard Deviation	13990.64	
95	% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	0.434972	
Adjusted-CLT		40245.53		MLE Skewness	1.387214	
Modified-t		39430.4		MLE Median	29494.99	
				MLE 80% Quantile	41928.66	
95	% Non-parametric UCL			MLE 90% Quantile	50356.56	
CLT		38732.87		MLE 95% Quantile	58497.64	
Jackknife		39194.45		MLE 99% Quantile	77669.85	
Standard Bootstrap		38470.32				
Bootstrap-t		43009.57		MVU Estimate of Median	29325.06	
Chebyshev (Mean, Std)		49490.24		MVU Estimate of Mean	31966.27	
				MVU Estimate of Std. Dev.	13608	
				MVU Estimate of SE of Mean	3509.056	
				UCL Assuming Lognormal Distribution		
				95% H-UCL	40105.43	
				95% Chebyshev (MVUE) UCL	47261.89	
				99% Chebyshev (MVUE) UCL	66880.94	
				Recommended UCL to use:		
				Student's-t or H-UCL		

From File			
Summary Statistics for	Manganese (Total)	Summary Statistics for	ln(Manganese (Total))
Number of Samples	15	Minimum	5.420535
Minimum	226	Maximum	7.816014
Maximum	2480	Mean	6.624418
Mean	907.1333	Standard Deviation	0.622492
Median	637	Variance	0.387496
Standard Deviation	615.7007		
Variance	379087.4	Shapiro-Wilk Test Statisitic	0.968
Coefficient of Variation	0.678732	Shapiro-Wilk 5% Critical Value	0.881
Skewness	1.502275	Data are Lognormal at 5% Significance Level	
95% UCL (Assuming Normal Data)		Estimates Assuming Lognormal Distribution	
Student's-t	1187.135	MLE Mean	914.3066
		MLE Standard Deviation	629.005
95% UCL (Adjusted for Skewness)		MLE Coefficient of Variation	0.687959
Adjusted-CLT	1234.509	MLE Skewness	2.389477
Modified-t	1197.412	MLE Median	753.2657
		MLE 80% Quantile	1274.646
95% Non-parametric UCL		MLE 90% Quantile	1676.259
CLT	1168.621	MLE 95% Quantile	2097.323
Jackknife	1187.135	MLE 99% Quantile	3204.571
Standard Bootstrap	1157.912		
Bootstrap-t	1327.724	MVU Estimate of Median	743.5909
Chebyshev (Mean, Std)	1600.082	MVU Estimate of Mean	900.7778
		MVU Estimate of Std. Dev.	588.9895
		MVU Estimate of SE of Mean	151.1761
		UCL Assuming Lognormal Distribution	
		95% H-UCL	1320.172
		95% Chebyshev (MVUE) UCL	1559.739
		99% Chebyshev (MVUE) UCL	2404.961
		Recommended UCL to use:	
		H-UCL	

From File					
Summary Statistics for	Mercury (Total)		Summary Statistics for	ln(Mercury (Total))	
Number of Samples	15		Minimum	-3.68888	
Minimum	0.025		Maximum	1.064711	
Maximum	2.9		Mean	-2.22104	
Mean	0.352		Standard Deviation	1.348277	
Median	0.06		Variance	1.817852	
Standard Deviation	0.753416				
Variance	0.567635		Shapiro-Wilk Test Statisitic	0.808348	
Coefficient of Variation	2.140385		Shapiro-Wilk 5% Critical Value	0.881	
Skewness	3.183071		Data not Lognormal at 5% Significance Level		
			Data not Normal: Try Non-parametric UCL		
97.5 % UCL (Assuming Normal Data)					
Student's-t	0.769228		Estimates Assuming Lognormal Distribution		
			MLE Mean	0.26925	
97.5 % UCL (Adjusted for Skewness)			MLE Standard Deviation	0.611537	
Adjusted-CLT	0.964642		MLE Coefficient of Variation	2.271258	
Modified-t	0.795874		MLE Skewness	18.53032	
			MLE Median	0.108496	
97.5 % Non-parametric UCL			MLE 80% Quantile	0.339004	
CLT	0.733274		MLE 90% Quantile	0.613544	
Jackknife	0.769228		MLE 95% Quantile	0.996882	
Standard Bootstrap	0.702607		MLE 99% Quantile	2.49691	
Bootstrap-t	6.861496				
Chebyshev (Mean, Std)	1.566846		MVU Estimate of Median	0.102094	
			MVU Estimate of Mean	0.243457	
			MVU Estimate of Std. Dev.	0.404112	
			MVU Estimate of SE of Mean	0.09577	
			UCL Assuming Lognormal Distribution		
			Confidence Level not supported for H-Statistic		
			Chebyshev 97.5 % (MVUE)	0.84154	
			99% Chebyshev (MVUE) UCL	1.196356	

From File					
Summary Statistics for	Nickel (Total)		Summary Statistics for	ln(Nickel (Total))	
Number of Samples	15		Minimum	2.694627	
Minimum	14.8		Maximum	7.17012	
Maximum	1300		Mean	4.257968	
Mean	168.7067		Standard Deviation	1.260417	
Median	54.7		Variance	1.588651	
Standard Deviation	321.7119				
Variance	103498.6		Shapiro-Wilk Test Statisitic	0.932125	
Coefficient of Variation	1.906931		Shapiro-Wilk 5% Critical Value	0.881	
Skewness	3.529166		Data are Lognormal at 5% Significance Level		
95 % UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t	315.0111		MLE Mean	156.3807	
			MLE Standard Deviation	308.7139	
95 % UCL (Adjusted for Skewness)			MLE Coefficient of Variation	1.974117	
Adjusted-CLT	386.2152		MLE Skewness	13.61576	
Modified-t	327.6263		MLE Median	70.66624	
			MLE 80% Quantile	205.0021	
95 % Non-parametric UCL			MLE 90% Quantile	356.9529	
CLT	305.3375		MLE 95% Quantile	561.9169	
Jackknife	315.0111		MLE 99% Quantile	1325.703	
Standard Bootstrap	304.9992				
Bootstrap-t	673.2135		MVU Estimate of Median	67.00962	
Chebyshev (Mean, Std)	530.7815		MVU Estimate of Mean	143.7816	
			MVU Estimate of Std. Dev.	217.9327	
			MVU Estimate of SE of Mean	52.49842	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	456.6349	
			95% Chebyshev (MVUE) UCL	372.6169	
			99% Chebyshev (MVUE) UCL	666.1343	
			Recommended UCL to use:		
			95 % Chebyshev (MVUE) UCL		

From File					
Summary Statistics for	Thallium (Total)		Summary Statistics for	ln(Thallium (Total))	
Number of Samples	15		Minimum	-0.28768	
Minimum	0.75		Maximum	1.280934	
Maximum	3.6		Mean	0.143361	
Mean	1.356667		Standard Deviation	0.540748	
Median	0.85		Variance	0.292408	
Standard Deviation	0.948282				
Variance	0.899238		Shapiro-Wilk Test Statisitic	0.77713	
Coefficient of Variation	0.698979		Shapiro-Wilk 5% Critical Value	0.881	
Skewness	1.893081		Data not Lognormal at 5% Significance Level		
			Data not Normal: Try Non-parametric UCL		
95 % UCL (Assuming Normal Data)					
Student's-t	1.787915		Estimates Assuming Lognormal Distribution		
			MLE Mean	1.335846	
95 % UCL (Adjusted for Skewness)			MLE Standard Deviation	0.778525	
Adjusted-CLT	1.887279		MLE Coefficient of Variation	0.582795	
Modified-t	1.807861		MLE Skewness	1.946332	
			MLE Median	1.154146	
95 % Non-parametric UCL			MLE 80% Quantile	1.822653	
CLT	1.759401		MLE 90% Quantile	2.312252	
Jackknife	1.787915		MLE 95% Quantile	2.809177	
Standard Bootstrap	1.749564		MLE 99% Quantile	4.059829	
Bootstrap-t	2.3547				
Chebyshev (Mean, Std)	2.423922		MVU Estimate of Median	1.142945	
			MVU Estimate of Mean	1.321381	
			MVU Estimate of Std. Dev.	0.741768	
			MVU Estimate of SE of Mean	0.190854	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	1.812781	
			95% Chebyshev (MVUE) UCL	2.153296	
			99% Chebyshev (MVUE) UCL	3.220358	

From File					
Summary Statistics for	Vanadium (Total)		Summary Statistics for	ln(Vanadium (Total))	
Number of Samples	15		Minimum	2.230014	
Minimum	9.3		Maximum	4.276666	
Maximum	72		Mean	2.913553	
Mean	21.46667		Standard Deviation	0.519062	
Median	18.6		Variance	0.269426	
Standard Deviation	15.57258				
Variance	242.5052		Shapiro-Wilk Test Statisitic	0.895761	
Coefficient of Variation	0.725431		Shapiro-Wilk 5% Critical Value	0.881	
Skewness	2.749334		Data are Lognormal at 5% Significance Level		
95 % UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t	28.54858		MLE Mean	21.07876	
			MLE Standard Deviation	11.72124	
95 % UCL (Adjusted for Skewness)			MLE Coefficient of Variation	0.556069	
Adjusted-CLT	31.13017		MLE Skewness	1.840149	
Modified-t	29.0243		MLE Median	18.42214	
			MLE 80% Quantile	28.56439	
95 % Non-parametric UCL			MLE 90% Quantile	35.89321	
CLT	28.08033		MLE 95% Quantile	43.26788	
Jackknife	28.54858		MLE 99% Quantile	61.61417	
Standard Bootstrap	27.97352				
Bootstrap-t	36.43725		MVU Estimate of Median	18.25734	
Chebyshev (Mean, Std)	38.99303		MVU Estimate of Mean	20.87005	
			MVU Estimate of Std. Dev.	11.21348	
			MVU Estimate of SE of Mean	2.886643	
			UCL Assuming Lognormal Distribution		
			95% H-UCL	28.16271	
			95% Chebyshev (MVUE) UCL	33.45263	
			99% Chebyshev (MVUE) UCL	49.59179	
			Recommended UCL to use:		
			H-UCL		

From File	
Summary Statistics for	Acenaphthylene (Total)
Number of Samples	12
Minimum	0.061
Maximum	0.5
Mean	0.201083
Median	0.19
Standard Deviation	0.129386
Variance	0.016741
Coefficient of Variation	0.643446
Skewness	1.187964
Shapiro-Wilk Test Statisitic	0.872688
Shapiro-Wilk 5% Critical Value	0.859
Data are Normal at 5% Significance Level	
Recommended UCL to use	Student's-t
95% UCL (Assuming Normal Data)	
Student's-t	0.268161
95% UCL (Adjusted for Skewness)	
Adjusted-CLT	0.276206
Modified-t	0.270296
95% Non-parametric UCL	
CLT	0.26252
Jackknife	0.268161
Standard Bootstrap	0.259359
Bootstrap-t	0.288356
Chebyshev (Mean, Std)	0.363891

From File							
Summary Statistics for	Benzo(a)anthracene		Summary Statistics for	ln(Benzo(a)anthracene (Total))			
Number of Samples	12		Minimum	-3.12357			
Minimum	0.044		Maximum	0.470004			
Maximum	1.6		Mean	-1.75585			
Mean	0.335583		Standard Deviation	1.154413			
Median	0.205		Variance	1.33267			
Standard Deviation	0.465569						
Variance	0.216754		Shapiro-Wilk Test Statisitic	0.91171			
Coefficient of Variation	1.387342		Shapiro-Wilk 5% Critical Value	0.859			
Skewness	2.27819		Data are Lognormal at 5% Significance Level				
95 % UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution				
Student's-t	0.576947		MLE Mean	0.33638			
			MLE Standard Deviation	0.561981			
95 % UCL (Adjusted for Skewness)			MLE Coefficient of Variation	1.670674			
Adjusted-CLT	0.651092		MLE Skewness	9.675125			
Modified-t	0.591678		MLE Median	0.17276			
			MLE 80% Quantile	0.458236			
95 % Non-parametric UCL			MLE 90% Quantile	0.761527			
CLT	0.556649		MLE 95% Quantile	1.153914			
Jackknife	0.576947		MLE 99% Quantile	2.532774			
Standard Bootstrap	0.555484						
Bootstrap-t	1.239765		MVU Estimate of Median	0.16339			
Chebyshev (Mean, Std)	0.921411		MVU Estimate of Mean	0.310057			
			MVU Estimate of Std. Dev.	0.404481			
			MVU Estimate of SE of Mean	0.111688			
			UCL Assuming Lognormal Distribution				
			95% H-UCL	1.025478			
			95% Chebyshev (MVUE) UCL	0.796894			
			99% Chebyshev (MVUE) UCL	1.421339			
			Recommended UCL to use:				
			95 % Chebyshev (MVUE) UCL				

From File							
Summary Statistics for		Benzo(a)pyrene (Total)		Summary Statistics for		ln(Benzo(a)pyrene (Total))	
Number of Samples		12		Minimum	-2.99573		
Minimum		0.05		Maximum	0.470004		
Maximum		1.6		Mean	-1.64191		
Mean		0.36225		Standard Deviation	1.113816		
Median		0.21		Variance	1.240586		
Standard Deviation		0.484092					
Variance		0.234345		Shapiro-Wilk Test Statisitic	0.913068		
Coefficient of Variation		1.336347		Shapiro-Wilk 5% Critical Value	0.859		
Skewness		2.079278		Data are Lognormal at 5% Significance Level			
95	% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution			
Student's-t		0.613216		MLE Mean	0.360013		
				MLE Standard Deviation	0.564388		
95	% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	1.567686		
Adjusted-CLT		0.681738		MLE Skewness	8.555864		
Modified-t		0.627196		MLE Median	0.19361		
				MLE 80% Quantile	0.496221		
95	% Non-parametric UCL			MLE 90% Quantile	0.810054		
CLT		0.592111		MLE 95% Quantile	1.209636		
Jackknife		0.613216		MLE 99% Quantile	2.582682		
Standard Bootstrap		0.580268					
Bootstrap-t		1.295641		MVU Estimate of Median	0.183819		
Chebyshev (Mean, Std)		0.971386		MVU Estimate of Mean	0.334223		
				MVU Estimate of Std. Dev.	0.417541		
				MVU Estimate of SE of Mean	0.115861		
				UCL Assuming Lognormal Distribution			
				95% H-UCL	1.028314		
				95% Chebyshev (MVUE) UCL	0.839248		
				99% Chebyshev (MVUE) UCL	1.487022		
				Recommended UCL to use:			
				95 % Chebyshev (MVUE) UCL			

From File							
Summary Statistics for	Benzo(b)fluoranthene		Summary Statistics for	ln(Benzo(b)fluoranthene (Total))			
Number of Samples	12		Minimum	-2.81341			
Minimum	0.06		Maximum	0.405465			
Maximum	1.5		Mean	-1.46155			
Mean	0.388333		Standard Deviation	1.017358			
Median	0.205		Variance	1.035018			
Standard Deviation	0.465839						
Variance	0.217006		Shapiro-Wilk Test Statisitic	0.937335			
Coefficient of Variation	1.199586		Shapiro-Wilk 5% Critical Value	0.859			
Skewness	1.912019		Data are Lognormal at 5% Significance Level				
95% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution				
Student's-t	0.629837		MLE Mean	0.389054			
			MLE Standard Deviation	0.524164			
95% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	1.347277			
Adjusted-CLT	0.688837		MLE Skewness	6.487349			
Modified-t	0.642208		MLE Median	0.231878			
			MLE 80% Quantile	0.547782			
95% Non-parametric UCL			MLE 90% Quantile	0.857066			
CLT	0.609527		MLE 95% Quantile	1.236159			
Jackknife	0.629837		MLE 99% Quantile	2.471511			
Standard Bootstrap	0.600315						
Bootstrap-t	1.231081		MVU Estimate of Median	0.222058			
Chebyshev (Mean, Std)	0.974502		MVU Estimate of Mean	0.366721			
			MVU Estimate of Std. Dev.	0.411357			
			MVU Estimate of SE of Mean	0.115325			
			UCL Assuming Lognormal Distribution				
			95% H-UCL	0.960573			
			95% Chebyshev (MVUE) UCL	0.869412			
			99% Chebyshev (MVUE) UCL	1.514192			
			Recommended UCL to use:				
			95 % Chebyshev (MVUE) UCL				

From File							
Summary Statistics for	Benzo(g,h,i)perylene			Summary Statistics for	ln(Benzo(g,h,i)perylene (Total))		
Number of Samples	12			Minimum	-3.27017		
Minimum	0.038			Maximum	-0.18633		
Maximum	0.83			Mean	-1.98527		
Mean	0.219			Standard Deviation	0.99193		
Median	0.165			Variance	0.983925		
Standard Deviation	0.241588						
Variance	0.058365			Shapiro-Wilk Test Statisitic	0.917448		
Coefficient of Variation	1.103141			Shapiro-Wilk 5% Critical Value	0.859		
Skewness	1.916537			Data are Lognormal at 5% Significance Level			
95 % UCL (Assuming Normal Data)				Estimates Assuming Lognormal Distribution			
Student's-t	0.344246			MLE Mean	0.224629		
				MLE Standard Deviation	0.290713		
95 % UCL (Adjusted for Skewness)				MLE Coefficient of Variation	1.294193		
Adjusted-CLT	0.374941			MLE Skewness	6.050268		
Modified-t	0.350676			MLE Median	0.137344		
				MLE 80% Quantile	0.31756		
95 % Non-parametric UCL				MLE 90% Quantile	0.49133		
CLT	0.333713			MLE 95% Quantile	0.702194		
Jackknife	0.344246			MLE 99% Quantile	1.379829		
Standard Bootstrap	0.33132						
Bootstrap-t	0.553334			MVU Estimate of Median	0.13181		
Chebyshev (Mean, Std)	0.522991			MVU Estimate of Mean	0.212501		
				MVU Estimate of Std. Dev.	0.231398		
				MVU Estimate of SE of Mean	0.065029		
				UCL Assuming Lognormal Distribution			
				95% H-UCL	0.534798		
				95% Chebyshev (MVUE) UCL	0.495955		
				99% Chebyshev (MVUE) UCL	0.85953		
				Recommended UCL to use:			
				H-UCL			

From File			
Summary Statistics for	Dibenzo(a,h)anthracene (Total)		
Number of Samples	12		
Minimum	0.08		
Maximum	0.43		
Mean	0.213792		
Median	0.215		
Standard Deviation	0.089309		
Variance	0.007976		
Coefficient of Variation	0.41774		
Skewness	0.985968		
Shapiro-Wilk Test Statisitic	0.88637		
Shapiro-Wilk 5% Critical Value	0.859		
Data are Normal at 5% Significance Level			
Recommended UCL to use	Student's-t		
95% UCL (Assuming Normal Data)			
Student's-t	0.260092		
95% UCL (Adjusted for Skewness)			
Adjusted-CLT	0.264039		
Modified-t	0.261315		
95% Non-parametric UCL			
CLT	0.256198		
Jackknife	0.260092		
Standard Bootstrap	0.255099		
Bootstrap-t	0.270833		
Chebyshev (Mean, Std)	0.32617		

From File							
Summary Statistics for		Indeno(1,2,3-cd)pyrene		Summary Statistics for		ln(Indeno(1,2,3-cd)pyrene (Total))	
Number of Samples		12		Minimum	-3.21888		
Minimum		0.04		Maximum	0.182322		
Maximum		1.2		Mean	-1.85542		
Mean		0.279167		Standard Deviation	1.084568		
Median		0.185		Variance	1.176288		
Standard Deviation		0.355906					
Variance		0.126669		Shapiro-Wilk Test Statisitic	0.917803		
Coefficient of Variation		1.274886		Shapiro-Wilk 5% Critical Value	0.859		
Skewness		2.091834		Data are Lognormal at 5% Significance Level			
95	% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution			
Student's-t		0.463678		MLE Mean	0.281599		
				MLE Standard Deviation	0.421676		
95	% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	1.497437		
Adjusted-CLT		0.514453		MLE Skewness	7.850036		
Modified-t		0.474018		MLE Median	0.156388		
				MLE 80% Quantile	0.391036		
95	% Non-parametric UCL			MLE 90% Quantile	0.630183		
CLT		0.448161		MLE 95% Quantile	0.931181		
Jackknife		0.463678		MLE 99% Quantile	1.948948		
Standard Bootstrap		0.439256					
Bootstrap-t		0.903592		MVU Estimate of Median	0.14888		
Chebyshev (Mean, Std)		0.727005		MVU Estimate of Mean	0.262703		
				MVU Estimate of Std. Dev.	0.317887		
				MVU Estimate of SE of Mean	0.088502		
				UCL Assuming Lognormal Distribution			
				95% H-UCL	0.768548		
				95% Chebyshev (MVUE) UCL	0.648473		
				99% Chebyshev (MVUE) UCL	1.143284		
				Recommended UCL to use:			
				95 % Chebyshev (MVUE) UCL			

From File							
Summary Statistics for	Phenanthrene (Total)		Summary Statistics for	ln(Phenanthrene (Total))			
Number of Samples	12		Minimum	-3.17009			
Minimum	0.042		Maximum	0.693147			
Maximum	2		Mean	-1.67195			
Mean	0.375667		Standard Deviation	1.17212			
Median	0.22		Variance	1.373866			
Standard Deviation	0.559286						
Variance	0.312801		Shapiro-Wilk Test Statisitic	0.938005			
Coefficient of Variation	1.488783		Shapiro-Wilk 5% Critical Value	0.859			
Skewness	2.647663		Data are Lognormal at 5% Significance Level				
95 % UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution				
Student's-t	0.665616		MLE Mean	0.373434			
			MLE Standard Deviation	0.641459			
95 % UCL (Adjusted for Skewness)			MLE Coefficient of Variation	1.717729			
Adjusted-CLT	0.773086		MLE Skewness	10.22151			
Modified-t	0.686182		MLE Median	0.187881			
			MLE 80% Quantile	0.505855			
95 % Non-parametric UCL			MLE 90% Quantile	0.847239			
CLT	0.641231		MLE 95% Quantile	1.291999			
Jackknife	0.665616		MLE 99% Quantile	2.870266			
Standard Bootstrap	0.630277						
Bootstrap-t	1.544095		MVU Estimate of Median	0.177383			
Chebyshev (Mean, Std)	1.079419		MVU Estimate of Mean	0.343089			
			MVU Estimate of Std. Dev.	0.455944			
			MVU Estimate of SE of Mean	0.125616			
			UCL Assuming Lognormal Distribution				
			95% H-UCL	1.172097			
			95% Chebyshev (MVUE) UCL	0.890636			
			99% Chebyshev (MVUE) UCL	1.592951			
			Recommended UCL to use:				
			95 % Chebyshev (MVUE) UCL				

From File		
Summary Statistics for	Aluminum (Total)	
Number of Samples	12	
Minimum	7190	
Maximum	14500	
Mean	11393.33	
Median	12300	
Standard Deviation	2466.983	
Variance	6086006	
Coefficient of Variation	0.216529	
Skewness	-0.619765	
Shapiro-Wilk Test Statisitic	0.910884	
Shapiro-Wilk 5% Critical Value	0.859	
Data are Normal at 5% Significance Level		
Recommended UCL to use	Student's-t	
95 % UCL (Assuming Normal Data)		
Student's-t	12672.28	
95 % UCL (Adjusted for Skewness)		
Adjusted-CLT	12428.58	
Modified-t	12651.05	
95 % Non-parametric UCL		
CLT	12564.73	
Jackknife	12672.28	
Standard Bootstrap	12500.92	
Bootstrap-t	12516.16	
Chebyshev (Mean, Std)	14497.55	

From File		
Summary Statistics for	Arsenic (Total)	
Number of Samples	12	
Minimum	8.3	
Maximum	14	
Mean	10.95833	
Median	11.1	
Standard Deviation	1.83821	
Variance	3.379015	
Coefficient of Variation	0.167745	
Skewness	0.118411	
Shapiro-Wilk Test Statisitic	0.920405	
Shapiro-Wilk 5% Critical Value	0.859	
Data are Normal at 5% Significance Level		
Recommended UCL to use	Student's-t	
95 % UCL (Assuming Normal Data)		
Student's-t	11.91131	
95 % UCL (Adjusted for Skewness)		
Adjusted-CLT	11.85055	
Modified-t	11.91433	
95 % Non-parametric UCL		
CLT	11.83117	
Jackknife	11.91131	
Standard Bootstrap	11.81892	
Bootstrap-t	12.00693	
Chebyshev (Mean, Std)	13.27136	

Data File	RRAA SS and SB		Variable:	Chromium (Total)	
Raw Statistics			Normal Distribution Test		
Number of Valid Samples		12	Shapiro-Wilk Test Statisitic		0.939814
Number of Unique Samples		12	Shapiro-Wilk 5% Critical Value		0.859
Minimum		8.9	Data are normal at 5% significance level		
Maximum		19.8			
Mean		13.625	95% UCL (Assuming Normal Distribution)		
Median		13.95	Student's-t UCL		15.0573
Standard Deviation		2.76278			
Variance		7.632955	Gamma Distribution Test		
Coefficient of Variation		0.202773	A-D Test Statistic		0.390552
Skewness		0.49289	A-D 5% Critical Value		0.731374
			K-S Test Statistic		0.203732
Gamma Statistics			K-S 5% Critical Value		0.245146
k hat		26.53199	Data follow gamma distribution		
k star (bias corrected)		19.95454	at 5% significance level		
Theta hat		0.513531			
Theta star		0.682802	95% UCLs (Assuming Gamma Distribution)		
nu hat		636.7676	Approximate Gamma UCL		15.20462
nu star		478.9091	Adjusted Gamma UCL		15.46379
Approx.Chi Square Value (.05)		429.1549			
Adjusted Level of Significance		0.02896	Lognormal Distribution Test		
Adjusted Chi Square Value		421.9624	Shapiro-Wilk Test Statisitic		0.950366
			Shapiro-Wilk 5% Critical Value		0.859
Log-transformed Statistics			Data are lognormal at 5% significance level		
Minimum of log data		2.186051			
Maximum of log data		2.985682	95% UCLs (Assuming Lognormal Distribution)		
Mean of log data		2.592943	95% H-UCL		15.30178
Standard Deviation of log data		0.204829	95% Chebyshev (MVUE) UCL		17.15605
Variance of log data		0.041955	97.5% Chebyshev (MVUE) UCL		18.68254
			99% Chebyshev (MVUE) UCL		21.68103
			95% Non-parametric UCLs		
			CLT UCL		14.93685
			Adj-CLT UCL (Adjusted for skewness)		15.0581
			Mod-t UCL (Adjusted for skewness)		15.07621
			Jackknife UCL		15.0573
			Standard Bootstrap UCL		14.88375
			Bootstrap-t UCL		15.0661
RECOMMENDATION			Hall's Bootstrap UCL		15.49666
Data are normal (0.05)			Percentile Bootstrap UCL		14.91667
			BCA Bootstrap UCL		15.10833
Student's-t UCL			95% Chebyshev (Mean, Sd) UCL		17.10142
			97.5% Chebyshev (Mean, Sd) UCL		18.60567
			99% Chebyshev (Mean, Sd) UCL		21.56048

From File				
Summary Statistics for			Iron (Total)	
Number of Samples			12	
Minimum			16300	
Maximum			26300	
Mean			22041.67	
Median			23000	
Standard Deviation			2844.599	
Variance			8091742	
Coefficient of Variation			0.129056	
Skewness			-0.744573	
Shapiro-Wilk Test Statisitic			0.932606	
Shapiro-Wilk 5% Critical Value			0.859	
Data are Normal at 5% Significance Level				
Recommended UCL to use			Student's-t	
95	% UCL (Assuming Normal Data)			
Student's-t			23516.38	
95	% UCL (Adjusted for Skewness)			
Adjusted-CLT			23203.77	
Modified-t			23486.97	
95	% Non-parametric UCL			
CLT			23392.36	
Jackknife			23516.38	
Standard Bootstrap			23325.54	
Bootstrap-t			23356.42	
Chebyshev (Mean, Std)			25621.04	

From File		
Summary Statistics for	Manganese (Total)	
Number of Samples	12	
Minimum	462	
Maximum	1180	
Mean	868.0833	
Median	881	
Standard Deviation	191.2283	
Variance	36568.27	
Coefficient of Variation	0.220288	
Skewness	-0.515638	
Shapiro-Wilk Test Statisitic	0.947202	
Shapiro-Wilk 5% Critical Value	0.859	
Data are Normal at 5% Significance Level		
Recommended UCL to use	Student's-t	
95 % UCL (Assuming Normal Data)		
Student's-t	967.2213	
95 % UCL (Adjusted for Skewness)		
Adjusted-CLT	950.1039	
Modified-t	965.8518	
95 % Non-parametric UCL		
CLT	958.884	
Jackknife	967.2213	
Standard Bootstrap	954.4927	
Bootstrap-t	958.5455	
Chebyshev (Mean, Std)	1108.707	

From File						
Summary Statistics for		Thallium (Total)		Summary Statistics for	ln(Thallium (Total))	
Number of Samples		12		Minimum	-1.07881	
Minimum		0.34		Maximum	1.029619	
Maximum		2.8		Mean	-0.00611	
Mean		1.231667		Standard Deviation	0.682155	
Median		0.895		Variance	0.465336	
Standard Deviation		0.856418				
Variance		0.733452		Shapiro-Wilk Test Statisitic	0.940957	
Coefficient of Variation		0.695332		Shapiro-Wilk 5% Critical Value	0.859	
Skewness		0.963701		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t		1.675657		MLE Mean	1.254276	
				MLE Standard Deviation	0.965507	
95	% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	0.769772	
Adjusted-CLT		1.711808		MLE Skewness	2.765445	
Modified-t		1.68712		MLE Median	0.993909	
				MLE 80% Quantile	1.768818	
95	% Non-parametric UCL			MLE 90% Quantile	2.388009	
CLT		1.638318		MLE 95% Quantile	3.052729	
Jackknife		1.675657		MLE 99% Quantile	4.857791	
Standard Bootstrap		1.625136				
Bootstrap-t		1.814349		MVU Estimate of Median	0.974795	
Chebyshev (Mean, Std)		2.309302		MVU Estimate of Mean	1.226049	
				MVU Estimate of Std. Dev.	0.876235	
				MVU Estimate of SE of Mean	0.251149	
				UCL Assuming Lognormal Distribution		
				95% H-UCL	2.049549	
				95% Chebyshev (MVUE) UCL	2.32078	
				99% Chebyshev (MVUE) UCL	3.724946	
				Recommended UCL to use:		
				H-UCL		

From File							
Summary Statistics for	Acenaphthylene (		Summary Statistics for	ln(Acenaphthylene (Total))			
Number of Samples	16		Minimum	-2.796881			
Minimum	0.061		Maximum	-0.693147			
Maximum	0.5		Mean	-1.775046			
Mean	0.195813		Standard Deviation	0.566057			
Median	0.18		Variance	0.32042			
Standard Deviation	0.11138						
Variance	0.012405		Shapiro-Wilk Test Statisitic	0.917295			
Coefficient of Variation	0.568809		Shapiro-Wilk 5% Critical Value	0.887			
Skewness	1.459196		Data are Lognormal at 5% Significance Level				
95 % UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution				
Student's-t	0.244626		MLE Mean	0.198923			
			MLE Standard Deviation	0.122254			
95 % UCL (Adjusted for Skewness)			MLE Coefficient of Variation	0.614578			
Adjusted-CLT	0.252467		MLE Skewness	2.075865			
Modified-t	0.246319		MLE Median	0.169476			
			MLE 80% Quantile	0.273425			
95 % Non-parametric UCL			MLE 90% Quantile	0.350756			
CLT	0.241613		MLE 95% Quantile	0.430038			
Jackknife	0.244626		MLE 99% Quantile	0.632296			
Standard Bootstrap	0.240082						
Bootstrap-t	0.266874		MVU Estimate of Median	0.167786			
Chebyshev (Mean, Std)	0.317186		MVU Estimate of Mean	0.196686			
			MVU Estimate of Std. Dev.	0.116235			
			MVU Estimate of SE of Mean	0.028933			
			UCL Assuming Lognormal Distribution				
			95% H-UCL	0.271421			
			95% Chebyshev (MVUE) UCL	0.322803			
			99% Chebyshev (MVUE) UCL	0.48457			
			Recommended UCL to use:				
			H-UCL				

From File							
Summary Statistics for	Benzo(a)anthracene			Summary Statistics for	ln(Benzo(a)anthracene (Total))		
Number of Samples	16			Minimum	-3.12357		
Minimum	0.044			Maximum	0.470004		
Maximum	1.6			Mean	-1.74615		
Mean	0.296688			Standard Deviation	0.989326		
Median	0.185			Variance	0.978767		
Standard Deviation	0.404765						
Variance	0.163834			Shapiro-Wilk Test Statisitic	0.910379		
Coefficient of Variation	1.364279			Shapiro-Wilk 5% Critical Value	0.887		
Skewness	2.734213			Data are Lognormal at 5% Significance Level			
95% UCL (Assuming Normal Data)				Estimates Assuming Lognormal Distribution			
Student's-t	0.474081			MLE Mean	0.284574		
				MLE Standard Deviation	0.366777		
95% UCL (Adjusted for Skewness)				MLE Coefficient of Variation	1.288865		
Adjusted-CLT	0.537041			MLE Skewness	6.007621		
Modified-t	0.485609			MLE Median	0.174445		
				MLE 80% Quantile	0.402457		
95% Non-parametric UCL				MLE 90% Quantile	0.621971		
CLT	0.463132			MLE 95% Quantile	0.88807		
Jackknife	0.474081			MLE 99% Quantile	1.741987		
Standard Bootstrap	0.453712						
Bootstrap-t	0.970404			MVU Estimate of Median	0.169181		
Chebyshev (Mean, Std)	0.737769			MVU Estimate of Mean	0.272806		
				MVU Estimate of Std. Dev.	0.305983		
				MVU Estimate of SE of Mean	0.074048		
				UCL Assuming Lognormal Distribution			
				95% H-UCL	0.566817		
				95% Chebyshev (MVUE) UCL	0.595575		
				99% Chebyshev (MVUE) UCL	1.009577		
				Recommended UCL to use:			
				H-UCL			

From File							
Summary Statistics for	Benzo(a)pyrene (Total)			Summary Statistics for	ln(Benzo(a)pyrene (Total))		
Number of Samples	16			Minimum	-2.99573		
Minimum	0.05			Maximum	0.470004		
Maximum	1.6			Mean	-1.66069		
Mean	0.316688			Standard Deviation	0.955022		
Median	0.19			Variance	0.912066		
Standard Deviation	0.422535						
Variance	0.178536			Shapiro-Wilk Test Statisitic	0.911369		
Coefficient of Variation	1.334234			Shapiro-Wilk 5% Critical Value	0.887		
Skewness	2.530289			Data are Lognormal at 5% Significance Level			
95 % UCL (Assuming Normal Data)				Estimates Assuming Lognormal Distribution			
Student's-t	0.501869			MLE Mean	0.299795		
				MLE Standard Deviation	0.36588		
95 % UCL (Adjusted for Skewness)				MLE Coefficient of Variation	1.220435		
Adjusted-CLT	0.561839			MLE Skewness	5.479095		
Modified-t	0.513006			MLE Median	0.190008		
				MLE 80% Quantile	0.425838		
95 % Non-parametric UCL				MLE 90% Quantile	0.648244		
CLT	0.49044			MLE 95% Quantile	0.914224		
Jackknife	0.501869			MLE 99% Quantile	1.751881		
Standard Bootstrap	0.485216						
Bootstrap-t	1.043883			MVU Estimate of Median	0.18466		
Chebyshev (Mean, Std)	0.777135			MVU Estimate of Mean	0.288427		
				MVU Estimate of Std. Dev.	0.309792		
				MVU Estimate of SE of Mean	0.075249		
				UCL Assuming Lognormal Distribution			
				95% H-UCL	0.575536		
				95% Chebyshev (MVUE) UCL	0.616429		
				99% Chebyshev (MVUE) UCL	1.037142		
				Recommended UCL to use:			
				H-UCL			

From File							
Summary Statistics for	Benzo(b)fluoranthene		Summary Statistics for	In(Benzo(b)fluoranthene (Total))			
Number of Samples	16		Minimum	-2.81341			
Minimum	0.06		Maximum	0.405465			
Maximum	1.5		Mean	-1.52542			
Mean	0.33625		Standard Deviation	0.879342			
Median	0.185		Variance	0.773242			
Standard Deviation	0.409705						
Variance	0.167858		Shapiro-Wilk Test Statisitic	0.911671			
Coefficient of Variation	1.218455		Shapiro-Wilk 5% Critical Value	0.887			
Skewness	2.360777		Data are Lognormal at 5% Significance Level				
95% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution				
Student's-t	0.515809		MLE Mean	0.320204			
			MLE Standard Deviation	0.345877			
95% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	1.080176			
Adjusted-CLT	0.56932		MLE Skewness	4.500857			
Modified-t	0.525884		MLE Median	0.21753			
			MLE 80% Quantile	0.457319			
95% Non-parametric UCL			MLE 90% Quantile	0.673368			
CLT	0.504726		MLE 95% Quantile	0.924132			
Jackknife	0.515809		MLE 99% Quantile	1.681912			
Standard Bootstrap	0.497879						
Bootstrap-t	0.985412		MVU Estimate of Median	0.212329			
Chebyshev (Mean, Std)	0.782716		MVU Estimate of Mean	0.310268			
			MVU Estimate of Std. Dev.	0.301693			
			MVU Estimate of SE of Mean	0.073811			
			UCL Assuming Lognormal Distribution				
			95% H-UCL	0.56906			
			95% Chebyshev (MVUE) UCL	0.632001			
			99% Chebyshev (MVUE) UCL	1.044675			
			Recommended UCL to use:				
			H-UCL				

From File							
Summary Statistics for		Benzo(g,h,i)perylene		Summary Statistics for	ln(Benzo(g,h,i)perylene (Total))		
Number of Samples		16		Minimum	-3.27017		
Minimum		0.038		Maximum	-0.18633		
Maximum		0.83		Mean	-1.91821		
Mean		0.20925		Standard Deviation	0.858551		
Median		0.175		Variance	0.737109		
Standard Deviation		0.207714					
Variance		0.043145		Shapiro-Wilk Test Statisitic	0.910163		
Coefficient of Variation		0.992658		Shapiro-Wilk 5% Critical Value	0.887		
Skewness		2.264503		Data are Lognormal at 5% Significance Level			
95	% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution			
Student's-t		0.300283		MLE Mean	0.212321		
				MLE Standard Deviation	0.221658		
95	% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	1.043976		
Adjusted-CLT		0.326077		MLE Skewness	4.269741		
Modified-t		0.305183		MLE Median	0.146869		
				MLE 80% Quantile	0.30339		
95	% Non-parametric UCL			MLE 90% Quantile	0.442651		
CLT		0.294665		MLE 95% Quantile	0.602965		
Jackknife		0.300283		MLE 99% Quantile	1.081963		
Standard Bootstrap		0.293842					
Bootstrap-t		0.441948		MVU Estimate of Median	0.14352		
Chebyshev (Mean, Std)		0.435601		MVU Estimate of Mean	0.2061		
				MVU Estimate of Std. Dev.	0.194796		
				MVU Estimate of SE of Mean	0.047741		
				UCL Assuming Lognormal Distribution			
				95% H-UCL	0.369771		
				95% Chebyshev (MVUE) UCL	0.414199		
				99% Chebyshev (MVUE) UCL	0.681118		
				Recommended UCL to use:			
				H-UCL			

From File									
Summary Statistics for		Dibenzo(a,h)anthracene		Summary Statistics for		ln(Dibenzo(a,h)anthracene (Total))			
Number of Samples		16		Minimum		-2.52573			
Minimum		0.08		Maximum		-0.84397			
Maximum		0.43		Mean		-1.6496			
Mean		0.205344		Standard Deviation		0.385849			
Median		0.2		Variance		0.148879			
Standard Deviation		0.078215							
Variance		0.006118		Shapiro-Wilk Test Statisitic		0.891524			
Coefficient of Variation		0.380897		Shapiro-Wilk 5% Critical Value		0.887			
Skewness		1.363723		Data are Lognormal at 5% Significance Level					
95 % UCL (Assuming Normal Data)				Estimates Assuming Lognormal Distribution					
Student's-t		0.239622		MLE Mean		0.206975			
				MLE Standard Deviation		0.082928			
95 % UCL (Adjusted for Skewness)				MLE Coefficient of Variation		0.400666			
Adjusted-CLT		0.24463		MLE Skewness		1.266317			
Modified-t		0.240733		MLE Median		0.192128			
				MLE 80% Quantile		0.266188			
95 % Non-parametric UCL				MLE 90% Quantile		0.315442			
CLT		0.237507		MLE 95% Quantile		0.362448			
Jackknife		0.239622		MLE 99% Quantile		0.47137			
Standard Bootstrap		0.236783							
Bootstrap-t		0.252061		MVU Estimate of Median		0.191235			
Chebyshev (Mean, Std)		0.290576		MVU Estimate of Mean		0.205956			
				MVU Estimate of Std. Dev.		0.081096			
				MVU Estimate of SE of Mean		0.020254			
				UCL Assuming Lognormal Distribution					
				95% H-UCL		0.251228			
				95% Chebyshev (MVUE) UCL		0.294241			
				99% Chebyshev (MVUE) UCL		0.407479			
				Recommended UCL to use:					
					Student's-t or H-UCL				

From File							
Summary Statistics for	Indeno(1,2,3-cd)pyrene			Summary Statistics for	ln(Indeno(1,2,3-cd)pyrene (Total))		
Number of Samples	16			Minimum	-3.21888		
Minimum	0.04			Maximum	0.182322		
Maximum	1.2			Mean	-1.82082		
Mean	0.254375			Standard Deviation	0.931459		
Median	0.175			Variance	0.867615		
Standard Deviation	0.308054						
Variance	0.094897			Shapiro-Wilk Test Statisitic	0.909776		
Coefficient of Variation	1.211023			Shapiro-Wilk 5% Critical Value	0.887		
Skewness	2.518956			Data are Lognormal at 5% Significance Level			
95 % UCL (Assuming Normal Data)				Estimates Assuming Lognormal Distribution			
Student's-t	0.389384			MLE Mean	0.24982		
				MLE Standard Deviation	0.293603		
95 % UCL (Adjusted for Skewness)				MLE Coefficient of Variation	1.175255		
Adjusted-CLT	0.432872			MLE Skewness	5.149059		
Modified-t	0.397467			MLE Median	0.161893		
				MLE 80% Quantile	0.355675		
95 % Non-parametric UCL				MLE 90% Quantile	0.535852		
CLT	0.381051			MLE 95% Quantile	0.749333		
Jackknife	0.389384			MLE 99% Quantile	1.413052		
Standard Bootstrap	0.376597						
Bootstrap-t	0.72816			MVU Estimate of Median	0.157555		
Chebyshev (Mean, Std)	0.590069			MVU Estimate of Mean	0.240908		
				MVU Estimate of Std. Dev.	0.251013		
				MVU Estimate of SE of Mean	0.061117		
				UCL Assuming Lognormal Distribution			
				95% H-UCL	0.46793		
				95% Chebyshev (MVUE) UCL	0.507311		
				99% Chebyshev (MVUE) UCL	0.849014		
				Recommended UCL to use:			
				H-UCL			

From File							
Summary Statistics for	Phenanthrene (Total)		Summary Statistics for	ln(Phenanthrene (Total))			
Number of Samples	16		Minimum	-3.17009			
Minimum	0.042		Maximum	0.693147			
Maximum	2		Mean	-1.68322			
Mean	0.32675		Standard Deviation	1.004531			
Median	0.19		Variance	1.009083			
Standard Deviation	0.486913						
Variance	0.237084		Shapiro-Wilk Test Statisitic	0.929817			
Coefficient of Variation	1.49017		Shapiro-Wilk 5% Critical Value	0.887			
Skewness	3.128025		Data are Lognormal at 5% Significance Level				
95 % UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution				
Student's-t	0.540146		MLE Mean	0.307685			
			MLE Standard Deviation	0.406224			
95 % UCL (Adjusted for Skewness)			MLE Coefficient of Variation	1.320259			
Adjusted-CLT	0.628689		MLE Skewness	6.262098			
Modified-t	0.556011		MLE Median	0.185775			
			MLE 80% Quantile	0.434139			
95 % Non-parametric UCL			MLE 90% Quantile	0.675436			
CLT	0.526975		MLE 95% Quantile	0.969702			
Jackknife	0.540146		MLE 99% Quantile	1.92191			
Standard Bootstrap	0.519303						
Bootstrap-t	1.261933		MVU Estimate of Median	0.179998			
Chebyshev (Mean, Std)	0.857351		MVU Estimate of Mean	0.294473			
			MVU Estimate of Std. Dev.	0.336579			
			MVU Estimate of SE of Mean	0.081311			
			UCL Assuming Lognormal Distribution				
			95% H-UCL	0.623173			
			95% Chebyshev (MVUE) UCL	0.648901			
			99% Chebyshev (MVUE) UCL	1.10351			
			Recommended UCL to use:				
			95 % Chebyshev (MVUE) UCL				

From File							
Summary Statistics for		Benzene (Total)		Summary Statistics for		ln(Benzene (Total))	
Number of Samples		32		Minimum		-1.38629	
Minimum		0.25		Maximum		0.978326	
Maximum		2.66		Mean		-1.13214	
Mean		0.434688		Standard Deviation		0.60184	
Median		0.25		Variance		0.362212	
Standard Deviation		0.570557					
Variance		0.325535		Shapiro-Wilk Test Statisitic		0.48005	
Coefficient of Variation		1.312568		Shapiro-Wilk 5% Critical Value		0.93	
Skewness		3.644577		Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
95	% UCL (Assuming Normal Data)						
Student's-t		0.6057		Estimates Assuming Lognormal Distribution			
				MLE Mean		0.386341	
95	% UCL (Adjusted for Skewness)			MLE Standard Deviation		0.25525	
Adjusted-CLT		0.670024		MLE Coefficient of Variation		0.660684	
Modified-t		0.61653		MLE Skewness		2.270443	
				MLE Median		0.322343	
95	% Non-parametric UCL			MLE 80% Quantile		0.536019	
CLT		0.600589		MLE 90% Quantile		0.698532	
Jackknife		0.6057		MLE 95% Quantile		0.867524	
Standard Bootstrap		0.599759		MLE 99% Quantile		1.307009	
Bootstrap-t		1.335603					
Chebyshev (Mean, Std)		0.874331		MVU Estimate of Median		0.320523	
				MVU Estimate of Mean		0.383808	
				MVU Estimate of Std. Dev.		0.247465	
				MVU Estimate of SE of Mean		0.043427	
				UCL Assuming Lognormal Distribution			
				95% H-UCL		0.480014	
				95% Chebyshev (MVUE) UCL		0.5731	
				99% Chebyshev (MVUE) UCL		0.815898	

From File								
Summary Statistics for	cis-1,2-Dichloroethylene		Summary Statistics for	ln(cis-1,2-Dichloroethylene (Total))				
Number of Samples	33		Minimum	-1.38629				
Minimum	0.25		Maximum	3.78419				
Maximum	44		Mean	-0.57306				
Mean	4.001515		Standard Deviation	1.565363				
Median	0.25		Variance	2.450361				
Standard Deviation	11.00186							
Variance	121.0409		Shapiro-Wilk Test Statisitic	0.582666				
Coefficient of Variation	2.749423		Shapiro-Wilk 5% Critical Value	0.931				
Skewness	3.1748		Data not Lognormal at 5% Significance Level					
			Data not Normal: Try Non-parametric UCL					
97.5 % UCL (Assuming Normal Data)								
Student's-t	7.902603		Estimates Assuming Lognormal Distribution					
			MLE Mean	1.919603				
97.5 % UCL (Adjusted for Skewness)			MLE Standard Deviation	6.247572				
Adjusted-CLT	9.286926		MLE Coefficient of Variation	3.254617				
Modified-t	8.079011		MLE Skewness	44.2385				
			MLE Median	0.563796				
97.5 % Non-parametric UCL			MLE 80% Quantile	2.1163				
CLT	7.755194		MLE 90% Quantile	4.21407				
Jackknife	7.902603		MLE 95% Quantile	7.40355				
Standard Bootstrap	7.686516		MLE 99% Quantile	21.49826				
Bootstrap-t	33.42331							
Chebyshev (Mean, Std)	15.96179		MVU Estimate of Median	0.543226				
			MVU Estimate of Mean	1.780242				
			MVU Estimate of Std. Dev.	4.414851				
			MVU Estimate of SE of Mean	0.625762				
			UCL Assuming Lognormal Distribution					
			Confidence Level not supported for H-Statistic					
			Chebyshev 97.5 % (MVUE)	5.688126				
			99% Chebyshev (MVUE) UCL	8.006497				

From File							
Summary Statistics for		Tetrachloroethylene		Summary Statistics for	ln(Tetrachloroethylene (Total))		
Number of Samples		33		Minimum	-1.60944		
Minimum		0.2		Maximum	0.916291		
Maximum		2.5		Mean	-1.18839		
Mean		0.367273		Standard Deviation	0.481964		
Median		0.25		Variance	0.232289		
Standard Deviation		0.39922					
Variance		0.159377		Shapiro-Wilk Test Statisitic	0.537053		
Coefficient of Variation		1.086985		Shapiro-Wilk 5% Critical Value	0.931		
Skewness		5.068993		Data not Lognormal at 5% Significance Level Data not Normal: Try Non-parametric UCL			
95	% UCL (Assuming Normal Data)						
Student's-t		0.48499		Estimates Assuming Lognormal Distribution			
				MLE Mean	0.342241		
95	% UCL (Adjusted for Skewness)			MLE Standard Deviation	0.175007		
Adjusted-CLT		0.547106		MLE Coefficient of Variation	0.511355		
Modified-t		0.49521		MLE Skewness	1.667777		
				MLE Median	0.304713		
95	% Non-parametric UCL			MLE 80% Quantile	0.45789		
CLT		0.481582		MLE 90% Quantile	0.566056		
Jackknife		0.48499		MLE 95% Quantile	0.673306		
Standard Bootstrap		0.479799		MLE 99% Quantile	0.934879		
Bootstrap-t		0.754592					
Chebyshev (Mean, Std)		0.670196		MVU Estimate of Median	0.303642		
				MVU Estimate of Mean	0.340912		
				MVU Estimate of Std. Dev.	0.17181		
				MVU Estimate of SE of Mean	0.029814		
				UCL Assuming Lognormal Distribution			
				95% H-UCL	0.402698		
				95% Chebyshev (MVUE) UCL	0.470867		
				99% Chebyshev (MVUE) UCL	0.637555		

From File							
Summary Statistics for		Trichloroethylene		Summary Statistics for		ln(Trichloroethylene (Total))	
Number of Samples		33		Minimum		-1.56065	
Minimum		0.21		Maximum		4.620059	
Maximum		101.5		Mean		0.663956	
Mean		11.01318		Standard Deviation		1.926483	
Median		1.4		Variance		3.711338	
Standard Deviation		23.1786					
Variance		537.2473		Shapiro-Wilk Test Statisitic		0.892988	
Coefficient of Variation		2.104623		Shapiro-Wilk 5% Critical Value		0.931	
Skewness		2.879181		Data not Lognormal at 5% Significance Level			
				Data not Normal: Try Non-parametric UCL			
97.5	% UCL (Assuming Normal Data)						
Student's-t		19.23195		Estimates Assuming Lognormal Distribution			
				MLE Mean		12.42393	
97.5	% UCL (Adjusted for Skewness)			MLE Standard Deviation		78.48591	
Adjusted-CLT		21.84795		MLE Coefficient of Variation		6.317317	
Modified-t		19.569		MLE Skewness		271.0666	
				MLE Median		1.942461	
97.5	% Non-parametric UCL			MLE 80% Quantile		9.893065	
CLT		18.92139		MLE 90% Quantile		23.09201	
Jackknife		19.23195		MLE 95% Quantile		46.20189	
Standard Bootstrap		18.89699		MLE 99% Quantile		171.5639	
Bootstrap-t		34.43887					
Chebyshev (Mean, Std)		36.21097		MVU Estimate of Median		1.836075	
				MVU Estimate of Mean		10.79365	
				MVU Estimate of Std. Dev.		41.17845	
				MVU Estimate of SE of Mean		4.910201	
				UCL Assuming Lognormal Distribution			
				Confidence Level not supported for H-Statistic			
				Chebyshev	97.5 % (MVUE)	41.45785	
				99% Chebyshev (MVUE) UCL		59.64954	

From File							
Summary Statistics for			Aluminum (Total)		Summary Statistics for	ln(Aluminum (Total))	
Number of Samples			19		Minimum	4.521789	
Minimum			92		Maximum	8.649974	
Maximum			5710		Mean	5.755089	
Mean			856.07895		Standard Deviation	1.315745	
Median			215		Variance	1.731185	
Standard Deviation			1483.8268				
Variance			2201742.1		Shapiro-Wilk Test Statisitic	0.832467	
Coefficient of Variation			1.7332827		Shapiro-Wilk 5% Critical Value	0.901	
Skewness			2.4918787		Data not Lognormal at 5% Significance Level		
					Data not Normal: Try Non-parametric UCL		
97.5	% UCL (Assuming Normal Data)						
Student's-t			1571.2605		Estimates Assuming Lognormal Distribution		
					MLE Mean	750.4569	
97.5	% UCL (Adjusted for Skewness)				MLE Standard Deviation	1617.813	
Adjusted-CLT			1804.9014		MLE Coefficient of Variation	2.15577	
Modified-t			1603.6949		MLE Skewness	16.48592	
					MLE Median	315.7938	
97.5	% Non-parametric UCL				MLE 80% Quantile	959.9625	
CLT			1523.2766		MLE 90% Quantile	1712.693	
Jackknife			1571.2605		MLE 95% Quantile	2750.369	
Standard Bootstrap			1493.6328		MLE 99% Quantile	6737.963	
Bootstrap-t			2781.721				
Chebyshev (Mean, Std)			2981.9588		MVU Estimate of Median	301.6983	
					MVU Estimate of Mean	695.3832	
					MVU Estimate of Std. Dev.	1166.921	
					MVU Estimate of SE of Mean	244.1775	
					UCL Assuming Lognormal Distribution		
					Confidence Level not supported for H-Statistic		
					Chebyshev 97.5 % (MVUE)	2220.271	
					99% Chebyshev (MVUE) UCL	3124.919	

From File						
Summary Statistics for	Arsenic (Total)			Summary Statistics for	ln(Arsenic (Total))	
Number of Samples	21			Minimum	-0.22314	
Minimum	0.8			Maximum	2.014903	
Maximum	7.5			Mean	1.295458	
Mean	4.447619			Standard Deviation	0.679947	
Median	4.1			Variance	0.462328	
Standard Deviation	2.581011					
Variance	6.661619			Shapiro-Wilk Test Statisitic	0.814147	
Coefficient of Variation	0.580313			Shapiro-Wilk 5% Critical Value	0.908	
Skewness	0.143925			Data not Lognormal at 5% Significance Level		
				Data not Normal: Try Non-parametric UCL		
95 % UCL (Assuming Normal Data)						
Student's-t	5.41902			Estimates Assuming Lognormal Distribution		
				MLE Mean	4.602603	
95 % UCL (Adjusted for Skewness)				MLE Standard Deviation	3.528626	
Adjusted-CLT	5.392939			MLE Coefficient of Variation	0.766659	
Modified-t	5.421968			MLE Skewness	2.750591	
				MLE Median	3.652669	
95 % Non-parametric UCL				MLE 80% Quantile	6.488383	
CLT	5.374038			MLE 90% Quantile	8.751192	
Jackknife	5.41902			MLE 95% Quantile	11.17826	
Standard Bootstrap	5.348465			MLE 99% Quantile	17.76117	
Bootstrap-t	5.459796					
Chebyshev (Mean, Std)	6.90265			MVU Estimate of Median	3.612662	
				MVU Estimate of Mean	4.542436	
				MVU Estimate of Std. Dev.	3.323981	
				MVU Estimate of SE of Mean	0.718234	
				UCL Assuming Lognormal Distribution		
				95% H-UCL	6.400586	
				95% Chebyshev (MVUE) UCL	7.673144	
				99% Chebyshev (MVUE) UCL	11.68877	

From File							
Summary Statistics for			Barium (Total)		Summary Statistics for	ln(Barium (Total))	
Number of Samples			21		Minimum	4.09601	
Minimum			60.1		Maximum	5.746203	
Maximum			313		Mean	5.047697	
Mean			173.8952		Standard Deviation	0.492043	
Median			146		Variance	0.242106	
Standard Deviation			80.83326				
Variance			6534.016		Shapiro-Wilk Test Statisitic	0.907293	
Coefficient of Variation			0.464839		Shapiro-Wilk 5% Critical Value	0.908	
Skewness			0.306018		Data not Lognormal at 5% Significance Level		
					Data not Normal: Try Non-parametric UCL		
95	% UCL (Assuming Normal Data)						
Student's-t			204.318		Estimates Assuming Lognormal Distribution		
					MLE Mean	175.6951	
95	% UCL (Adjusted for Skewness)				MLE Standard Deviation	91.95573	
Adjusted-CLT			204.1679		MLE Coefficient of Variation	0.523383	
Modified-t			204.5143		MLE Skewness	1.713518	
					MLE Median	155.6635	
95	% Non-parametric UCL				MLE 80% Quantile	235.9153	
CLT			202.9092		MLE 90% Quantile	292.9412	
Jackknife			204.318		MLE 95% Quantile	349.711	
Standard Bootstrap			202.1572		MLE 99% Quantile	488.9148	
Bootstrap-t			205.4569				
Chebyshev (Mean, Std)			250.783		MVU Estimate of Median	154.7686	
					MVU Estimate of Mean	174.581	
					MVU Estimate of Std. Dev.	89.30441	
					MVU Estimate of SE of Mean	19.43109	
					UCL Assuming Lognormal Distribution		
					95% H-UCL	218.5039	
					95% Chebyshev (MVUE) UCL	259.2791	
					99% Chebyshev (MVUE) UCL	367.9179	

From File							
Summary Statistics for			Chromium (Total)		Summary Statistics for		ln(Chromium (Total))
Number of Samples			19		Minimum	-1.38629	
Minimum			0.25		Maximum	4.651099	
Maximum			104.7		Mean	1.990976	
Mean			19.84211		Standard Deviation	1.499172	
Median			5		Variance	2.247517	
Standard Deviation			30.84114				
Variance			951.1762		Shapiro-Wilk Test Statisitic	0.946326	
Coefficient of Variation			1.554328		Shapiro-Wilk 5% Critical Value	0.901	
Skewness			2.150598		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)				Estimates Assuming Lognormal Distribution		
Student's-t			32.11137		MLE Mean	22.52745	
					MLE Standard Deviation	65.53983	
95	% UCL (Adjusted for Skewness)				MLE Coefficient of Variation	2.909332	
Adjusted-CLT			35.21024		MLE Skewness	33.35319	
Modified-t			32.69319		MLE Median	7.322678	
					MLE 80% Quantile	25.99168	
95	% Non-parametric UCL				MLE 90% Quantile	50.2702	
CLT			31.48017		MLE 95% Quantile	86.2383	
Jackknife			32.11137		MLE 99% Quantile	239.3796	
Standard Bootstrap			30.8413				
Bootstrap-t			45.23339		MVU Estimate of Median	6.90092	
Chebyshev (Mean, Std)			50.68325		MVU Estimate of Mean	20.19005	
					MVU Estimate of Std. Dev.	41.20318	
					MVU Estimate of SE of Mean	8.236856	
					UCL Assuming Lognormal Distribution		
					95% H-UCL	75.16328	
					95% Chebyshev (MVUE) UCL	56.09368	
					99% Chebyshev (MVUE) UCL	102.1457	
					Recommended UCL to use:		
					95 % Chebyshev (MVUE) UCL		

From File						
Summary Statistics for		Iron (Total)		Summary Statistics for	ln(Iron (Total))	
Number of Samples		20		Minimum	3.793239	
Minimum		44.4		Maximum	9.495519	
Maximum		13300		Mean	6.391593	
Mean		2661.49		Standard Deviation	1.872177	
Median		360		Variance	3.505046	
Standard Deviation		4309.7492				
Variance		18573938.1		Shapiro-Wilk Test Statisitic	0.921125	
Coefficient of Variation		1.61929941		Shapiro-Wilk 5% Critical Value	0.905	
Skewness		1.72053982		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)			Estimates Assuming Lognormal Distribution		
Student's-t		4327.83639		MLE Mean	3443.06	
				MLE Standard Deviation	19562.82	
95	% UCL (Adjusted for Skewness)			MLE Coefficient of Variation	5.681811	
Adjusted-CLT		4642.77453		MLE Skewness	200.4712	
Modified-t		4389.62885		MLE Median	596.8066	
				MLE 80% Quantile	2903.239	
95	% Non-parametric UCL			MLE 90% Quantile	6616.622	
CLT		4246.6177		MLE 95% Quantile	12982.06	
Jackknife		4327.83639		MLE 99% Quantile	46456.71	
Standard Bootstrap		4220.35572				
Bootstrap-t		5327.48293		MVU Estimate of Median	546.5345	
Chebyshev (Mean, Std)		6862.11391		MVU Estimate of Mean	2821.224	
				MVU Estimate of Std. Dev.	8495.279	
				MVU Estimate of SE of Mean	1450.934	
				UCL Assuming Lognormal Distribution		
				95% H-UCL	19097.78	
				95% Chebyshev (MVUE) UCL	9145.698	
				99% Chebyshev (MVUE) UCL	17257.83	
				Recommended UCL to use:		
				95 % Chebyshev (MVUE) UCL		

From File							
Summary Statistics for			Manganese (Total)		Summary Statistics for		ln(Manganese (Total))
Number of Samples			21		Minimum	0.693147	
Minimum			2		Maximum	7.003065	
Maximum			1100		Mean	4.081092	
Mean			234.4048		Standard Deviation	2.011231	
Median			83.6		Variance	4.04505	
Standard Deviation			329.1259				
Variance			108323.9		Shapiro-Wilk Test Statisitic	0.942679	
Coefficient of Variation			1.404092		Shapiro-Wilk 5% Critical Value	0.908	
Skewness			1.553811		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)				Estimates Assuming Lognormal Distribution		
Student's-t			358.276		MLE Mean	447.4732	
					MLE Standard Deviation	3351.99	
95	% UCL (Adjusted for Skewness)				MLE Coefficient of Variation	7.490929	
Adjusted-CLT			378.5609		MLE Skewness	442.8189	
Modified-t			362.3347		MLE Median	59.21008	
					MLE 80% Quantile	323.9476	
95	% Non-parametric UCL				MLE 90% Quantile	784.8742	
CLT			352.5401		MLE 95% Quantile	1619.004	
Jackknife			358.276		MLE 99% Quantile	6369.108	
Standard Bootstrap			347.8335				
Bootstrap-t			401.488		MVU Estimate of Median	53.7506	
Chebyshev (Mean, Std)			547.4659		MVU Estimate of Mean	353.1853	
					MVU Estimate of Std. Dev.	1241.768	
99	% Non-parametric UCL				MVU Estimate of SE of Mean	193.4695	
Chebyshev (Mean, Std)			949.0163				
					UCL Assuming Lognormal Distribution		
					95% H-UCL	2906.054	
					95% Chebyshev (MVUE) UCL	1196.499	
					99% Chebyshev (MVUE) UCL	2278.182	
					Recommended UCL to use:		
					99 % Chebyshev (MVUE) UCL		

From File							
Summary Statistics for			Nickel (Total)		Summary Statistics for	ln(Nickel (Total))	
Number of Samples			21		Minimum	-0.43078	
Minimum			0.65		Maximum	4.325456	
Maximum			75.6		Mean	2.222742	
Mean			19.6881		Standard Deviation	1.411921	
Median			20		Variance	1.99352	
Standard Deviation			22.47211				
Variance			504.9957		Shapiro-Wilk Test Statisitic	0.934691	
Coefficient of Variation			1.141406		Shapiro-Wilk 5% Critical Value	0.908	
Skewness			1.533361		Data are Lognormal at 5% Significance Level		
95	% UCL (Assuming Normal Data)				Estimates Assuming Lognormal Distribution		
Student's-t			28.1458		MLE Mean	25.01567	
					MLE Standard Deviation	62.99448	
95	% UCL (Adjusted for Skewness)				MLE Coefficient of Variation	2.5182	
Adjusted-CLT			29.50743		MLE Skewness	23.52334	
Modified-t			28.41927		MLE Median	9.232616	
					MLE 80% Quantile	30.44177	
95	% Non-parametric UCL				MLE 90% Quantile	56.65956	
CLT			27.75416		MLE 95% Quantile	94.19359	
Jackknife			28.1458		MLE 99% Quantile	246.3788	
Standard Bootstrap			27.51921				
Bootstrap-t			31.66992		MVU Estimate of Median	8.803724	
Chebyshev (Mean, Std)			41.06334		MVU Estimate of Mean	22.98579	
					MVU Estimate of Std. Dev.	43.67352	
					MVU Estimate of SE of Mean	8.442089	
					UCL Assuming Lognormal Distribution		
					95% H-UCL	68.07654	
					95% Chebyshev (MVUE) UCL	59.784	
					99% Chebyshev (MVUE) UCL	106.9835	
					Recommended UCL to use:		
					95 % Chebyshev (MVUE) UCL		