

103026

RESIDENTIAL WELLS

AR302850

VOLATILE ORGANIC COMPOUNDS

Phase 1A (EPA Method 524.2)
Phase 1B (CLP SOW 10/92) (First Quarter)
Second Quarter
Third Quarter

AR302851

December 1992

913-6773

SUMMARY OF VOLATILE ORGANIC COMPOUNDS BY METHOD 524.2 - PHASE 1A

BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

MATRIX: Residential Well

Parameter	Sample Location 2753A/AQ Date Sampled: 09/01/92			Sample Location 2753B/AQ Date Sampled: 09/01/92			Sample Location 7579B/AQ Date Sampled: 09/01/92			Sample Location 6883A/AQ Date Sampled: 09/01/92			Sample Location 6883B/AQ Date Sampled: 09/01/92		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Chloromethane	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Bromomethane	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Vinyl Chloride	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Chloroethane	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Dichlorodifluoromethane	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Trichlorofluoromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Dichloromethane	1	1	B	1	4	B	1	1	4	1	1	B	1	1	B
1,1-Dichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Bromochloromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1-Dichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
cis-1,2-Dichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
trans-1,2-Dichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Chloroform	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Dibromomethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
2,2-Dichloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1,1-Trichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Carbon tetrachloride	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Bromodichloromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dichloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U

Notes:

All results are reported in ug/l.
RL is the laboratory reporting limit.
NA = Not Analyzed
ND = Not Detected

Qualifiers

A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
K - Estimated Biased High Data
L - Estimated, Biased Low Data
B - Present in associated blanks (Semi-quantitative) Data

U - Not Detected (Quantitative) Data
UJ - Not Detected (Semi-quantitative) Data
UL - Not Detected, Biased Low Data
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

AR302852

SUMMARY OF VOLATILE ORGANIC COMPOUNDS BY METHOD 524.2 - PHASE 1A

BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

MATRIX: Residential Well

Parameter	Sample Location 2753A/AQ Date Sampled: 09/01/92			Sample Location 2753B/AQ Date Sampled: 09/01/92			Sample Location 7579B/AQ Date Sampled: 09/01/92			Sample Location 6883A/AQ Date Sampled: 09/01/92			Sample Location 6883B/AQ Date Sampled: 09/01/92		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
trans-1,3-Dichloropropene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1-Dichloropropene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Trichloroethene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Benzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Dibromochloromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
cis-1,3-Dichloropropene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dibromoethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,3-Dichloropropene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Bromoforn	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1,2,2-Tetrachloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1,1,2-Tetrachloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1,2-Trichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Tetrachloroethene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Toluene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Chlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dibromo-3-Chloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Bromobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Ethylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Isopropylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Xylenes (total)	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U

Notes:

All results are reported in ug/l.
RL is the laboratory reporting limit.

NA = Not Analyzed.

ND = Not Detected

Qualifiers

A - Acceptable (Quantitative) Data

J - Estimated (Semi-quantitative) Data

K - Estimated Biased High Data

L - Estimated, Biased Low Data

B - Present in associated blanks (Semi-quantitative) Data

U - Not Detected (Quantitative) Data

UJ - Not Detected (Semi-quantitative) Data

UL - Not Detected, Biased Low Data

N - Tentative Identification

R - Unusable Data

Q - Not Applicable

AR302853

SUMMARY OF VOLATILE ORGANIC COMPOUNDS BY METHOD 524.2 - PHASE 1A

BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

MATRIX: Residential Well

Parameter	Sample Location 2753A/AQ Date Sampled: 09/01/92			Sample Location 2753B/AQ Date Sampled: 09/01/92			Sample Location 7579B/AQ Date Sampled: 09/01/92			Sample Location 6883A/AQ Date Sampled: 09/01/92			Sample Location 6883B/AQ Date Sampled: 09/01/92		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Styrene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
n-Propylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
t-Butylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
2-Chlorotoluene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Hexachlorobutadiene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
sec-Butylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
4-Chlorotoluene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,3-Dichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2,3-Trichloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,4-Dichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
p-Isopropyltoluene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
n-Butylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,3,5-Trimethylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2,4-Trimethylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2,4-Trichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Naphthalene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2,3-Trichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U

Notes:

All results are reported in ug/l.
 RL is the laboratory reporting limit.
 NA = Not Analyzed
 ND = Not Detected

Qualifiers

A - Acceptable (Quantitative) Data
 J - Estimated (Semi-quantitative) Data
 K - Estimated Biased High Data
 L - Estimated, Biased Low Data
 B - Present in associated blanks (Semiquantitative) Data
 U - Not Detected (Quantitative) Data
 UJ - Not Detected (Semi-quantitative) Data
 UL - Not Detected, Biased Low Data
 N - Tentative Identification
 R - Unusable Data
 Q - Not Applicable

AR302854

SUMMARY OF VOLATILE ORGANIC COMPOUNDS BY METHOD 524.2 - PHASE 1A

BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

MATRIX: Residential Well

Parameter	Sample Location 80820/AQ Date Sampled: 09/03/92			Sample Location 12330/AQ Date Sampled: 09/03/92			Sample Location 25140/AQ Date Sampled: 09/03/92			Sample Location 46120/AQ Date Sampled: 09/03/92			Sample Location 52090/AQ Date Sampled: 09/03/92		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Chloromethane	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Bromomethane	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Vinyl Chloride	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Chloroethane	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Dichlorodifluoromethane	2	ND	U	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Trichlorofluoromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Dichloromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1-Dichloroethene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Bromochloromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1-Dichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
cis-1,2-Dichloroethene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
trans-1,2-Dichloroethene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Chloroform	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Dibromomethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
2,2-Dichloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1,1-Trichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Carbon tetrachloride	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Bromodichloromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dichloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U

Notes:

All results are reported in ug/L.
RL is the laboratory reporting limit.
NA = Not Analyzed
ND = Not Detected

Qualifiers

A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
K - Estimated Biased High Data
L - Estimated, Biased Low Data
B - Present in associated blanks (Semi-quantitative) Data

U - Not Detected (Quantitative) Data
UJ - Not Detected (Semi-quantitative) Data
UL - Not Detected, Biased Low Data
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

AR302855

SUMMARY OF VOLATILE ORGANIC COMPOUNDS BY METHOD 524.2 - PHASE 1A

BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

MATRIX: Residential Well

Parameter	Sample Location 80820/AQ Date Sampled: 09/03/92			Sample Location 12330/AQ Date Sampled: 09/03/92			Sample Location 25140/AQ Date Sampled: 09/03/92			Sample Location 46120/AQ Date Sampled: 09/03/92			Sample Location 52090/AQ Date Sampled: 09/03/92		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
trans-1,3-Dichloropropene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1-Dichloropropene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Trichloroethene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Benzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Dibromochloromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
cis-1,3-Dichloropropene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dibromoethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,3-Dichloropropene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Bromoforn	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1,2,2-Tetrachloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1,1,2-Tetrachloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1,2,2-Trichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Tetrachloroethene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Toluene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Chlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dibromo-3-chloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Bromobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Ethylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Isopropylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Xylenes (total)	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U

Notes:

All results are reported in ug/l.
 RL is the laboratory reporting limit.
 NA = Not Analyzed
 ND = Not Detected

Qualifiers

A - Acceptable (Quantitative) Data
 J - Estimated (Semi-quantitative) Data
 K - Estimated Biased High Data
 L - Estimated, Biased Low Data
 B - Present in associated blanks (Semi-quantitative) Data

U - Not Detected (Quantitative) Data
 UJ - Not Detected (Semi-quantitative) Data
 UL - Not Detected, Biased Low Data
 N - Tentative Identification
 R - Unusable Data
 Q - Not Applicable

AR302856

SUMMARY OF VOLATILE ORGANIC COMPOUNDS BY METHOD 524.2 - PHASE 1A

BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

MATRIX: Residential Well

Parameter	Sample Location 80820/AQ Date Sampled: 09/03/92			Sample Location 12330/AQ Date Sampled: 09/03/92			Sample Location 25140/AQ Date Sampled: 09/03/92			Sample Location 46120/AQ Date Sampled: 09/03/92			Sample Location 52090/AQ Date Sampled: 09/03/92		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Styrene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
n-Propylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
i-Butylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
2-Chlorotoluene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Hexachlorobutadiene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
sec-Butylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
4-Chlorotoluene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,3-Dichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2,3-Trichloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,4-Dichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
p-Isopropyltoluene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
n-Butylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,3,5-Trimethylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2,4-Trimethylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2,4-Trichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Naphthalene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2,3-Trichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U

Notes:

All results are reported in ug/L.

RL is the laboratory reporting limit.

NA = Not Analyzed

ND = Not Detected

Qualifiers

A - Acceptable (Quantitative) Data

J - Estimated (Semi-quantitative) Data

K - Estimated Biased High Data

L - Estimated, Biased Low Data

B - Present in associated blanks (Semi-quantitative) Data

U - Not Detected (Quantitative) Data

UJ - Not Detected (Semi-quantitative) Data

UL - Not Detected, Biased Low Data

N - Tentative Identification

R - Unusable Data

Q - Not Applicable

AR302857

SUMMARY OF VOLATILE ORGANIC COMPOUNDS BY METHOD 524.2 - PHASE 1A

BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

MATRIX: Residential Well

Parameter	Sample Location 72250/AQ Date Sampled: 09/03/92			Sample Location 7579A/AR Date Sampled: 11/13/92			Sample Location 71290/FD Date Sampled: 11/13/92			Sample Location 7579B/FD Date Sampled: 9/1/92		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Chloromethane	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Bromomethane	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Vinyl Chloride	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Chloroethane	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Dichlorodifluoromethane	2	ND	U	2	ND	U	2	ND	U	2	ND	U
Trichlorofluoromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Dichloromethane	1	1	B	1	ND	U	1	ND	U	1	ND	U
1,1-Dichloroethene	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Bromochloromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1-Dichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U
cis-1,2-Dichloroethene	1	ND	U	1	ND	U	1	ND	U	1	ND	U
trans-1,2-Dichloroethene	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Chloroform	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Dibromomethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U
2,2-Dichloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1,1-Trichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Carbon tetrachloride	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Bromodichloromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dichloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U

Notes:

All results are reported in ug/l.
RL is the laboratory reporting limit.

NA = Not Analyzed

ND = Not Detected

Qualifiers

A - Acceptable (Quantitative) Data

J - Estimated (Semi-quantitative) Data

K - Estimated Biased High Data

L - Estimated, Biased Low Data

B - Present in associated blanks (Semiquantitative) Data

U - Not Detected (Quantitative) Data

UJ - Not Detected (Semi-quantitative) Data

UL - Not Detected, Biased Low Data

N - Tentative Identification

R - Unusable Data

Q - Not Applicable

AR302858

SUMMARY OF VOLATILE ORGANIC COMPOUNDS BY METHOD 524.2 - PHASE 1A

BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

MATRIX: Residential Well

Parameter	Sample Location 7250/AQ Date Sampled: 09/03/92			Sample Location 7579A/AR Date Sampled: 11/13/92			Sample Location 71290/AR Date Sampled: 11/13/92			Sample Location 71290/FD Date Sampled: 11/13/92			Sample Location 7579B/FD Date Sampled: 9/1/92		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
trans-1,3-Dichloropropene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1-Dichloropropene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Trichloroethene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Benzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Dibromochloromethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
cis-1,3-Dichloropropene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dibromoethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,3-Dichloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Bromofom	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1,2,2-Tetrachloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1,1,2-Tetrachloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,1,2-Trichloroethane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Tetrachloroethene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Toluene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Chlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dibromo-3-chloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Bromobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Ethylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Isopropylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Xylenes (total)	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U

Notes:

All results are reported in ug/l.
RL is the laboratory reporting limit.

NA = Not Analyzed

ND = Not Detected

Qualifiers

A - Acceptable (Quantitative) Data

J - Estimated (Semi-quantitative) Data

K - Estimated Biased High Data

L - Estimated, Biased Low Data

B - Present in associated blanks (Semiquantitative) Data

U - Not Detected (Quantitative) Data

UJ - Not Detected (Semi-quantitative) Data

UL - Not Detected, Biased Low Data

N - Tentative Identification

R - Unusable Data

Q - Not Applicable

AR302859

SUMMARY OF VOLATILE ORGANIC COMPOUNDS BY METHOD 524.2 - PHASE 1A

BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

MATRIX: Residential Well

Parameter	Sample Location 72250/AQ Date Sampled: 09/03/92			Sample Location 7579A/AR Date Sampled: 11/13/92			Sample Location 71290/AR Date Sampled: 11/13/92			Sample Location 71290/FD Date Sampled: 11/13/92			Sample Location 7579B/FD Date Sampled: 9/1/92		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Styrene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
n-Propylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1-Butylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
2-Chlorotoluene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Hexachlorobutadiene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
sec-Butylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
4-Chlorotoluene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,3-Dichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2,3-Trichloropropane	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2-Dichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,4-Dichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
p-Isopropyltoluene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
n-Butylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,3,5-Trimethylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2,4-Trimethylbenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2,4-Trichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
Naphthalene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U
1,2,3-Trichlorobenzene	1	ND	U	1	ND	U	1	ND	U	1	ND	U	1	ND	U

Notes:

All results are reported in ug/l.
RL is the laboratory reporting limit.
NA = Not Analyzed
ND = Not Detected

Qualifiers

A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
K - Estimated Biased High Data
L - Estimated, Biased Low Data
B - Present in associated blanks (Semi-quantitative) Data
U - Not Detected (Quantitative) Data
UJ - Not Detected (Semi-quantitative) Data
UL - Not Detected, Biased Low Data
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

AR302860

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913-6

Matrix: Residential Well

Volatile Organics

CRCL	Parameter	Sample Point 12330/80			Sample Point 12330/FD			Sample Point 25140/80			Sample Point 27534/80		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
5	Acetone	5	5	R	5	5	R	5	5	R	5	5	R
1	Benzene	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromochloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromodichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromoform	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromomethane	1	1	U	1	1	U	1	1	U	1	1	U
5	2-Butanone	5	5	R	5	5	R	5	5	R	5	5	R
1	Carbon Disulfide	1	1	U	1	1	U	1	1	U	1	1	U
1	Carbon Tetrachloride	1	1	U	1	1	U	1	1	U	1	1	U
1	Chlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	Chloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Chloroform	1	1	U	1	1	U	1	1	U	1	1	U
1	Chloromethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dibromo-3-Chloropropane	1	1	U	1	1	U	1	1	U	1	1	U
1	Dibromochloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dibromoethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dichlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,3-Dichlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,4-Dichlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1-Dichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1-Dichloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	cis-1,2-Dichloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	trans-1,2-Dichloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dichloropropane	1	1	U	1	1	U	1	1	U	1	1	U
1	cis-1,3-Dichloropropene	1	1	U	1	1	U	1	1	U	1	1	U
1	trans-1,3-Dichloropropene	1	1	U	1	1	U	1	1	U	1	1	U
1	Ethylbenzene	1	1	U	1	1	U	1	1	U	1	1	U
5	2-Hexanone	5	5	R	5	5	R	5	5	R	5	5	R
5	4-Methyl-2-Pentanone	5	5	R	5	5	R	5	5	R	5	5	R
2	Methylene Chloride	2	4	B	2	4	B	2	4	B	2	4	B
1	Styrene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1,2,2-Tetrachloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Tetrachloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	Toluene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1,1-Trichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1,2-Trichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Trichloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	Vinyl Chloride	1	1	U	1	1	U	1	1	U	1	1	U
1	Total Xylenes	1	1	U	1	1	U	1	1	U	1	1	U

Notes:

All units are ug/l

Sample quantitation Limit (SQL) is CRCL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UL - Not Detected/Biased Low
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data N - Tentative Identification
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low U - Not Detected/Quantitative Data R - Unusable Data
 Q - Not Applicable

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October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Residential Well

Volatile Organics

CROL	Parameter	Sample Point 2/538/BQ Date Sampled: 06/24/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point 46120/BQ Date Sampled: 06/24/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point 52090/BQ Date Sampled: 06/24/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point 6883A/BQ Date Sampled: 06/24/93 Dilution Factor: 1.0 Percent Moisture: NA %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
5	Acetone	5	5	R	5	5	R	5	5	R	5	5	R
1	Benzene	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromochloromethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromodichloromethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromoform	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromomethane	1	1	U	1	1	U	1	1	U	1	1	U
5	2-Butanone	5	5	R	5	5	R	5	5	R	5	5	R
1	Carbon Disulfide	1	1	U	1	1	U	1	1	U	1	1	U
1	Carbon Tetrachloride	1	1	U	1	1	U	1	1	U	1	1	U
1	Chlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	Chloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Chloroform	1	1	U	1	1	U	1	1	U	1	1	U
1	Chloromethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dibromo-3-Chloropropane	1	1	U	1	1	U	1	1	U	1	1	U
1	Dibromochloromethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dibromoethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dichlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,3-Dichlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,4-Dichlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1-Dichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1-Dichloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	cis-1,2-Dichloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	trans-1,2-Dichloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dichloropropane	1	1	U	1	1	U	1	1	U	1	1	U
1	cis-1,3-Dichloropropene	1	1	U	1	1	U	1	1	U	1	1	U
1	trans-1,3-Dichloropropene	1	1	U	1	1	U	1	1	U	1	1	U
1	Ethylbenzene	1	1	U	1	1	U	1	1	U	1	1	U
5	2-Hexanone	5	5	R	5	5	R	5	5	R	5	5	R
5	4-Methyl-2-Pentanone	5	5	R	5	5	R	5	5	R	5	5	R
2	Methylene Chloride	2	2	B	2	2	B	2	2	B	2	2	B
1	Styrene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1,2,2-Tetrachloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Tetrachloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	Toluene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1,1-Trichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1,2-Trichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Trichloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	Vinyl Chloride	1	1	U	1	1	U	1	1	U	1	1	U
1	Total Xylenes	1	1	U	1	1	U	1	1	U	1	1	U

Notes:

All units are ug/l
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302862

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913-6.

Matrix: Residential Well

Volatile Organics

CRQL	Parameter	Sample Point 6839/BQ			Sample Point 71290/BQ			Sample Point 72250/BQ			Sample Point 7579A/BQ		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
5	Acetone	5	5	R	5	5	R	5	5	R	5	5	R
1	Benzene	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromochloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromodichloromethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromoform	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromomethane	1	1	U	1	1	U	1	1	U	1	1	U
5	2-Butanone	5	5	R	5	5	R	5	5	R	5	5	R
1	Carbon Disulfide	1	1	U	1	1	U	1	1	U	1	1	U
1	Carbon Tetrachloride	1	1	U	1	1	U	1	1	U	1	1	U
1	Chlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	Chloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Chloroform	1	1	U	1	1	U	1	1	U	1	1	U
1	Chloromethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dibromo-3-Chloropropane	1	1	U	1	1	U	1	1	U	1	1	U
1	Dibromochloromethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dibromoethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dichlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,3-Dichlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,4-Dichlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1-Dichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1-Dichloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	cis-1,2-Dichloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	trans-1,2-Dichloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dichloropropane	1	1	U	1	1	U	1	1	U	1	1	U
1	cis-1,3-Dichloropropene	1	1	U	1	1	U	1	1	U	1	1	U
1	trans-1,3-Dichloropropene	1	1	U	1	1	U	1	1	U	1	1	U
1	Ethylbenzene	1	1	U	1	1	U	1	1	U	1	1	U
5	2-Hexanone	5	5	R	5	5	R	5	5	R	5	5	R
5	4-Methyl-2-Pentanone	5	5	R	5	5	R	5	5	R	5	5	R
2	Methylene Chloride	2	1	B	2	1	B	2	1	B	2	1	B
1	Styrene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1,2,2-Tetrachloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Tetrachloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Toluene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1,1-Trichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1,2-Trichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Trichloroethene	1	1	U	1	1	U	1	1	U	1	1	U
1	Vinyl Chloride	1	1	U	1	1	U	1	1	U	1	1	U
1	Total Xylenes	1	1	U	1	1	U	1	1	U	1	1	U

Notes:

All units are ug/l
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913-6

Matrix: Residential Well

Volatile Organics

CROL	Parameter	Sample Point 75798/8Q			Sample Point 80820/8Q			Sample Point			Sample Point		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
5	Acetone	5	5	R	5	5	R						
1	Benzene	1	1	U	1	1	U						
1	Bromochloromethane	1	1	U	1	1	U						
1	Bromodichloromethane	1	1	U	1	1	U						
1	Bromoform	1	1	U	1	1	U						
1	Bromomethane	1	1	U	1	1	U						
5	2-Butanone	5	5	R	5	5	R						
1	Carbon Disulfide	1	1	U	1	1	U						
1	Carbon Tetrachloride	1	1	U	1	1	U						
1	Chlorobenzene	1	1	U	1	1	U						
1	Chloroethane	1	1	U	1	1	U						
1	Chloroform	1	1	U	1	1	U						
1	Chloromethane	1	1	U	1	1	U						
1	1,2-Dibromo-3-Chloropropane	1	1	U	1	1	U						
1	Dibromochloromethane	1	1	U	1	1	U						
1	1,2-Dibromoethane	1	1	U	1	1	U						
1	1,2-Dichlorobenzene	1	1	U	1	1	U						
1	1,3-Dichlorobenzene	1	1	U	1	1	U						
1	1,4-Dichlorobenzene	1	1	U	1	1	U						
1	1,1-Dichloroethane	1	2	A	1	1	U						
1	1,2-Dichloroethane	1	1	A	1	1	U						
1	1,1-Dichloroethene	1	1	U	1	1	U						
1	cis-1,2-Dichloroethene	1	1	A	1	1	U						
1	trans-1,2-Dichloroethene	1	1	U	1	1	U						
1	1,2-Dichloropropane	1	1	U	1	1	U						
1	cis-1,3-Dichloropropene	1	1	U	1	1	U						
1	trans-1,3-Dichloropropene	1	1	U	1	1	U						
1	Ethylbenzene	1	1	U	1	1	U						
1	2-Hexanone	1	5	U	1	5	U						
5	4-Methyl-2-Pentanone	5	5	R	5	5	R						
5	Methylene Chloride	5	5	U	5	5	U						
2	Styrene	2	1	B	2	1	U						
1	1,1,2,2-Tetrachloroethane	1	1	U	1	1	U						
1	Tetrachloroethene	1	1	U	1	1	U						
1	Toluene	1	1	U	1	1	U						
1	1,1,1-Trichloroethane	1	1	U	1	1	U						
1	1,1,2-Trichloroethane	1	1	U	1	1	U						
1	Trichloroethene	1	1	U	1	1	U						
1	Vinyl Chloride	1	1	U	1	1	U						
1	Total Xylenes	1	1	U	1	1	U						

Notes:

All units are ug/l
 Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
 The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302864

SUMMARY OF CLP ORGANICS ANALYSES
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Residential Well

Volatiles Organics
2nd Quarter

CRQL	Parameter	Sample Point 12330-CQ			Sample Point 12330-FD			Sample Point 25140-CQ			Sample Point 2753A-CQ		
		SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual
5	Acetone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
1	Benzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromochloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromodichloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromoform	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromomethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
5	2-Butanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
1	Carbon Disulfide	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Carbon Tetrachloride	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloroform	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dibromo-3-Chloropropane	1.0	1.0	R	1.0	1.0	R	1.0	1.0	R	1.0	1.0	R
1	Dibromochloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dibromoethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,3-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,4-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1-Dichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	cis-1,2-Dichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	trans-1,2-Dichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichloropropane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	cis-1,3-Dichloropropene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	trans-1,3-Dichloropropene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Ethylbenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
5	2-Hexanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
5	4-Methyl-2-Pentanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
2	Methylene Chloride	2.0	2.0	B	2.0	2.0	B	2.0	2.0	B	2.0	2.0	B
1	Styrene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,2,2-Tetrachloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Tetrachloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Toluene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,1-Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,2-Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Trichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Vinyl Chloride	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Total Xylenes	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U

Notes:

All units are ug/l
Sample Quantitation Limit (SOL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UL - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302865

September 1993

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SUMMARY OF CL- ORGANICS ANALYSES
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Residential Well

Volatile Organics
2nd Quarter

CROL	Parameter	Sample Point 2738-CQ			Sample Point 46120-CQ			Sample Point 52090-CQ			Sample Point 6883A-CQ		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
5	Acetone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
1	Benzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromochloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromodichloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromoform	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromomethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
5	2-Butanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
1	Carbon Disulfide	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Carbon Tetrachloride	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloroform	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dibromo-3-Chloropropane	1.0	1.0	R	1.0	1.0	R	1.0	1.0	R	1.0	1.0	R
1	Dibromochloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dibromoethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,3-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,4-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1-Dichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	cis-1,2-Dichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	trans-1,2-Dichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichloropropane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	cis-1,3-Dichloropropane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	trans-1,3-Dichloropropane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Ethylbenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	2-Hexanone	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
5	4-Methyl-2-Pentanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
5	Methylene Chloride	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
2	Styrene	2.0	2.0	B	2.0	2.0	B	2.0	2.0	B	2.0	2.0	B
1	1,1,2,2-Tetrachloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Tetrachloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Toluene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,1-Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,2-Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Trichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Vinyl Chloride	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Total Xylenes	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302866

SUMMARY OF ORGANICS ANALYSES
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Residential Well

Volatile Organics
2nd Quarter

CRQL	Parameter	Sample Point 6838-CO			Sample Point 71290-CO			Sample Point 72250-CO			Sample Point 7579A-CO		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
5	Acetone	5.0	1.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
1	Benzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromochloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromodichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromoform	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromoethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
5	2-Butanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
1	Carbon Disulfide	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Carbon Tetrachloride	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloroform	1.0	0.6	J	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dibromo-3-Chloropropane	1.0	1.0	R	1.0	1.0	R	1.0	1.0	R	1.0	1.0	R
1	Dibromochloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dibromoethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,3-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,4-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	cis-1,2-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	trans-1,2-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichloropropane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	cis-1,3-Dichloropropene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	trans-1,3-Dichloropropene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Ethylbenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
5	2-Hexanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
5	4-Methyl-2-Pentanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
2	Methylene Chloride	2.0	2.0	B	2.0	2.0	B	2.0	2.0	B	2.0	2.0	B
1	Styrene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,2,2-Tetrachloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Tetrachloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Toluene	1.0	0.9	J	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,1-Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,2-Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Vinyl Chloride	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Total Xylenes	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U

Notes:

All units are ug/l
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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SUMMARY OF ORGANICS ANALYSES
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Residential Well

Volatiles Organics
2nd Quarter

CROL	Parameter	Sample Point 75798-CQ			Sample Point 80820-CQ			Sample Point			Sample Point		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
5	Acetone	5.0	5.0	R	5.0	5.0	R						
1	Benzene	1.0	1.0	U	1.0	1.0	U						
1	Bromochloromethane	1.0	1.0	U	1.0	1.0	U						
1	Bromodichloromethane	1.0	1.0	U	1.0	1.0	U						
1	Bromoform	1.0	1.0	U	1.0	1.0	U						
1	Bromomethane	1.0	1.0	U	1.0	1.0	U						
5	2-Butanone	5.0	5.0	R	5.0	5.0	R						
1	Carbon Disulfide	1.0	1.0	U	1.0	1.0	U						
1	Carbon Tetrachloride	1.0	1.0	U	1.0	1.0	U						
1	Chlorobenzene	1.0	1.0	U	1.0	1.0	U						
1	Chloroethane	1.0	0.8	JN	1.0	1.0	U						
1	Chloroform	1.0	1.0	U	1.0	1.0	U						
1	Chloromethane	1.0	1.0	U	1.0	1.0	U						
1	1,2-Dibromo-3-Chloropropane	1.0	1.0	R	1.0	1.0	R						
1	Dibromochloromethane	1.0	1.0	U	1.0	1.0	U						
1	1,2-Dibromoethane	1.0	1.0	U	1.0	1.0	U						
1	1,2-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U						
1	1,3-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U						
1	1,4-Dichlorobenzene	1.0	0.7	JN	1.0	1.0	U						
1	1,1-Dichloroethane	1.0	1.0	A	1.0	1.0	U						
1	1,2-Dichloroethane	1.0	1.0	U	1.0	1.0	U						
1	1,1-Dichloroethane	1.0	1.0	U	1.0	1.0	U						
1	cis-1,2-Dichloroethane	1.0	0.8	J	1.0	1.0	U						
1	trans-1,2-Dichloroethane	1.0	1.0	U	1.0	1.0	U						
1	1,2-Dichloropropane	1.0	1.0	U	1.0	1.0	U						
1	cis-1,3-Dichloropropane	1.0	1.0	U	1.0	1.0	U						
1	trans-1,3-Dichloropropane	1.0	1.0	U	1.0	1.0	U						
1	Ethylbenzene	1.0	1.0	U	1.0	1.0	U						
5	2-Hexanone	5.0	5.0	R	5.0	5.0	R						
5	4-Methyl-2-Pentanone	5.0	5.0	R	5.0	5.0	R						
2	Methylene Chloride	2.0	2.0	B	2.0	2.0	B						
1	Styrene	1.0	1.0	U	1.0	1.0	U						
1	1,1,2,2-Tetrachloroethane	1.0	1.0	U	1.0	1.0	U						
1	Tetrachloroethane	1.0	1.0	U	1.0	1.0	U						
1	Toluene	1.0	1.0	U	1.0	1.0	U						
1	1,1,1-Trichloroethane	1.0	1.0	U	1.0	1.0	U						
1	1,1,2-Trichloroethane	1.0	1.0	U	1.0	1.0	U						
1	Trichloroethene	1.0	1.0	U	1.0	1.0	U						
1	Vinyl Chloride	1.0	1.0	U	1.0	1.0	U						
1	Total Xylenes	1.0	1.0	U	1.0	1.0	U						

Notes:

All units are ug/l
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data / UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302868

SUMMARY OF ORGANICS ANALYSES
BERKS LANDFILL K-REDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA
Sample Results
Volatile Organics
3rd Quarter

Matrix: Residential Well

CRQL	Parameter	Sample Point 25140-DQ Date Sampled: 01/26/94 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point 2753A-DQ Date Sampled: 01/27/94 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point 2753B-DQ Date Sampled: 01/27/94 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point 46120-DQ Date Sampled: 01/27/94 Dilution Factor: 1.0 Percent Moisture: NA %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
5	Acetone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
1	Benzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromochloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromodichloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromoform	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromomethane	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ
5	2-Butanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
1	Carbon Disulfide	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Carbon Tetrachloride	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chlorobenzene	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ
1	Chloroethane	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ
1	Chloroform	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ
1	Chloromethane	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ
1	1,2-Dibromo-3-Chloropropane	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ
1	Dibromochloromethane	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ	1.0	1.0	UJ
1	1,2-Dibromomethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,3-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,4-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	2.0	A	1.0	1.0	U
1	1,1-Dichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	cis-1,2-Dichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	trans-1,2-Dichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichloropropane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	cis-1,3-Dichloropropene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	trans-1,3-Dichloropropene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Ethylbenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	2-Hexanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
5	4-Methyl-2-Pentanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
5	Methylene Chloride	2.0	2.0	B	2.0	3.0	B	2.0	5.0	B	2.0	2.0	B
1	Styrene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,2,2-Tetrachloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Tetrachloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Toluene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,1-Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,2-Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Vinyl Chloride	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Total Xylenes	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U

Notes:

All units are ug/
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302869

SUMMARY OF ORGANICS ANALYSES
BERKS LANDFILL TOTAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA
Sample Results
Volatile Organics
3rd Quarter

Matrix: Residential Well

CRQL	Parameter	Sample Point 52090-00			Sample Point 6833A-00			Sample Point 6833B-00			Sample Point 6833B-FD		
		SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual
5	Acetone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
1	Benzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromochloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromodichloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromoform	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromomethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
5	2-Butanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
1	Carbon Disulfide	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Carbon Tetrachloride	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloroform	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dibromo-3-Chloropropane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Dibromochloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dibromomethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,3-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,4-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1-Dichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	cis-1,2-Dichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	trans-1,2-Dichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichloropropene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	cis-1,3-Dichloropropene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	trans-1,3-Dichloropropene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Ethylbenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
5	2-Hexanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
5	4-Methyl-2-Pentanone	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U
2	Methylene Chloride	2.0	3.0	B	2.0	3.0	B	2.0	0.9	B	2.0	0.9	B
1	Styrene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,2,2-Tetrachloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Tetrachloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Toluene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,1-Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,2-Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Trichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Vinyl Chloride	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Total Xylenes	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U

Notes:

All units are ug/l
Sample Quantitation Limit (SOL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
M - Tentative Identification
N - Unusable Data
R - Unusable Data
Q - Not Applicable

AR302870

SUMMARY OF CL JANICS ANALYSES
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA
Sample Results
Volatile Organics
3rd Quarter

913-6773

Matrix: Residential Well

CQL	Parameter	Sample Point 71250-DQ			Sample Point 72250-DQ			Sample Point 7579A-DQ			Sample Point 7579B-DQ		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
5	Acetone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
1	Benzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromochloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromodichloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromoform	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Bromomethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
5	2-Butanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
1	Carbon Disulfide	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Carbon Tetrachloride	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloroform	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Chloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dibromo-3-Chloropropane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dibromochloromethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dibromomethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,3-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,4-Dichlorobenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	cis-1,2-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	trans-1,2-Dichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,2-Dichloropropane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	cis-1,3-Dichloropropene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	trans-1,3-Dichloropropene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Ethylbenzene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
5	2-Hexanone	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R	5.0	5.0	R
5	4-Methyl-2-Pentanone	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U
2	Methylene Chloride	2.0	3.0	B	2.0	2.0	B	2.0	2.0	B	2.0	2.0	B
1	Styrene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,2,2-Tetrachloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Toluene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,1-Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	1,1,2-Trichloroethane	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Trichloroethene	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Vinyl Chloride	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U
1	Total xylenes	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U

Notes:

All units are ug/l
Sample quantitation limit (SQL) is CQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data R - Unusable Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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AR302871

SUMMARY OF ORGANICS ANALYSES
BERKS LANDFILL MEDICAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA
Sample Results
Volatile Organics
3rd Quarter

28 1994

Matrix: Residential Well

CRQL	Parameter	Sample Point 80820-DQ			Sample Point			Sample Point			Sample Point		
		Date Sampled: Dilution Factor: 1.0 Percent Moisture: NA	%	Qual	SQL	Result	Qual	Date Sampled: Dilution Factor: Percent Moisture:	%	Qual	SQL	Result	Qual
5	Acetone	5.0	5.0	R									
1	Benzene	1.0	1.0	U									
1	Bromochloromethane	1.0	1.0	U									
1	Bromodichloromethane	1.0	1.0	U									
1	Bromoform	1.0	1.0	U									
1	Bromomethane	1.0	1.0	UJ									
5	2-Butanone	5.0	5.0	R									
1	Carbon Disulfide	1.0	1.0	U									
1	Carbon Tetrachloride	1.0	1.0	U									
1	Chlorobenzene	1.0	1.0	U									
1	Chloroethane	1.0	1.0	UJ									
1	Chloroform	1.0	1.0	U									
1	Chloromethane	1.0	1.0	UJ									
1	1,2-Dibromo-3-Chloropropene	1.0	1.0	UJ									
1	Dibromochloromethane	1.0	1.0	UJ									
1	1,2-Dibromoethane	1.0	1.0	U									
1	1,2-Dichlorobenzene	1.0	1.0	U									
1	1,3-Dichlorobenzene	1.0	1.0	U									
1	1,4-Dichlorobenzene	1.0	1.0	U									
1	1,1-Dichloroethane	1.0	1.0	U									
1	1,2-Dichloroethane	1.0	1.0	U									
1	1,1-Dichloroethene	1.0	1.0	U									
1	cis-1,2-Dichloroethene	1.0	1.0	U									
1	trans-1,2-Dichloroethene	1.0	1.0	U									
1	1,2-Dichloropropene	1.0	1.0	U									
1	cis-1,3-Dichloropropene	1.0	1.0	U									
1	trans-1,3-Dichloropropene	1.0	1.0	U									
1	Ethylbenzene	1.0	1.0	U									
5	2-Hexanone	5.0	5.0	R									
5	4-Methyl-2-Pentanone	5.0	5.0	U									
2	Methylene Chloride	2.0	2.0	B									
1	Styrene	1.0	1.0	U									
1	1,1,2,2-Tetrachloroethane	1.0	1.0	U									
1	Tetrachloroethene	1.0	1.0	U									
1	Toluene	1.0	1.0	U									
1	1,1,1-Trichloroethane	1.0	1.0	U									
1	1,1,2-Trichloroethane	1.0	1.0	U									
1	Trichloroethene	1.0	1.0	U									
1	Vinyl Chloride	1.0	1.0	U									
1	Total Xylenes	1.0	1.0	U									

Notes:

All Units are ug/l

Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:

A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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SEMI-VOLATILE ORGANIC COMPOUNDS

**Phase 1A
Phase 1B (First Quarter)
Second Quarter**

AR302873

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913

Matrix: Residential Well

Semivolatile Organics

CROL	Parameter	Sample Point 12330/AQ			Sample Point 71290/AQ			Sample Point 7579A/AQ			Sample Point		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acenaphthene	10	10	U	10	10	U	10	10	U			
10	Acenaphthylene	10	10	U	10	10	U	10	10	U			
10	Anthracene	10	10	U	10	10	U	10	10	U			
10	Benzo(a)Anthracene	10	10	U	10	10	U	10	10	U			
10	4-Bromophenyl-phenylether	10	10	U	10	10	U	10	10	U			
10	Butylbenzylphthalate	10	10	U	10	10	U	10	10	U			
10	Carbazole	10	10	U	10	10	U	10	10	U			
10	4-Chloro-3-Methylphenol	10	10	U	10	10	U	10	10	U			
10	4-Chloroaniline	10	10	U	10	10	U	10	10	U			
10	bis(2-Chloroethoxy)Methane	10	10	U	10	10	U	10	10	U			
10	bis(2-Chloroethyl) ether	10	10	U	10	10	U	10	10	U			
10	2-Chloronaphthalene	10	10	U	10	10	U	10	10	U			
10	2-Chlorophenol	10	10	U	10	10	U	10	10	U			
10	4-Chlorophenyl-phenylether	10	10	U	10	10	U	10	10	U			
10	Chrysene	10	10	U	10	10	U	10	10	U			
10	Dibenz(a,h)Anthracene	10	10	U	10	10	U	10	10	U			
10	Dibenzofuran	10	10	U	10	10	U	10	10	U			
10	1,2-Dichlorobenzene	10	10	U	10	10	U	10	10	U			
10	1,3-Dichlorobenzene	10	10	U	10	10	U	10	10	U			
10	1,4-Dichlorobenzene	10	10	U	10	10	U	10	10	U			
10	3,3'-Dichlorobenzidine	10	10	U	10	10	U	10	10	U			
10	2,4-Dichlorophenol	10	10	U	10	10	U	10	10	U			
10	Diethylphthalate	10	10	U	10	10	U	10	10	U			
10	2,4-Dimethylphenol	10	10	U	10	10	U	10	10	U			
10	Dimethyl Phthalate	10	10	U	10	10	U	10	10	U			
10	Di-n-butylphthalate	10	10	U	10	10	U	10	10	U			
25	4,6-Dinitro-2-methylphenol	25	25	U	25	25	U	25	25	U			
25	2,4-Dinitrophenol	25	25	U	25	25	U	25	25	U			
10	2,4-Dinitrotoluene	10	10	U	10	10	U	10	10	U			
10	2,6-Dinitrotoluene	10	10	U	10	10	U	10	10	U			
10	Di-n-Octyl Phthalate	10	10	U	10	10	U	10	10	U			
10	bis(2-Ethylhexyl)Phthalate	10	10	U	10	10	U	10	10	U			
10	Fluoranthene	10	10	U	10	10	U	10	10	U			
10	Benzo(b)Fluoranthene	10	10	U	10	10	U	10	10	U			
10	Benzo(k)Fluoranthene	10	10	U	10	10	U	10	10	U			
10	Fluorene	10	10	U	10	10	U	10	10	U			
10	Hexachlorobenzene	10	10	U	10	10	U	10	10	U			
10	Hexachlorobutadiene	10	10	U	10	10	U	10	10	U			
10	Hexachlorocyclopentadiene	10	10	U	10	10	U	10	10	U			
10	Hexachloroethane	10	10	U	10	10	U	10	10	U			

Notes:

All units are ug/l
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation. (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
UL - Not Detected/Biased Low
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

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SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Residential Well

Primary Sample Results
Semivolatile Organics

CRQL	Parameter	Sample Point 12330/AQ			Sample Point 71250/AQ			Sample Point 7579/AQ			Sample Point	
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	Date Sampled: Dilution Factor: Percent Moisture: %	Qual
10	Indeno(1,2,3-cd)Pyrene	10	10	U	10	10	U	10	10	U		
10	Isophorone	10	10	U	10	10	U	10	10	U		
10	2-Methylnaphthalene	10	10	U	10	10	U	10	10	U		
10	2-Methylphenol	10	10	U	10	10	U	10	10	U		
10	4-Methylphenol	10	10	U	10	10	U	10	10	U		
10	Naphthalene	10	10	U	10	10	U	10	10	U		
25	2-Nitroaniline	25	25	U	25	25	U	25	25	U		
25	3-Nitroaniline	25	25	U	25	25	U	25	25	U		
25	4-Nitroaniline	25	25	U	25	25	U	25	25	U		
10	Nitrobenzene	10	10	U	10	10	U	10	10	U		
10	2-Nitrophenol	10	10	U	10	10	U	10	10	U		
25	4-Nitrophenol	25	25	U	25	25	U	25	25	U		
10	N-Nitroso-di-n-propylamine	10	10	U	10	10	U	10	10	U		
10	N-Nitrosodiphenylamine	10	10	U	10	10	U	10	10	U		
10	2,2'-Oxybis(1-Chloropropane)	10	10	U	10	10	U	10	10	U		
25	Pentachlorophenol	25	25	U	25	25	U	25	25	U		
10	Benzo(g,h,i)Perylene	10	10	U	10	10	U	10	10	U		
10	Phenanthrene	10	10	U	10	10	U	10	10	U		
10	Phenol	10	10	U	10	10	U	10	10	U		
10	Pyrene	10	10	U	10	10	U	10	10	U		
10	Benzo(a)Pyrene	10	10	U	10	10	U	10	10	U		
10	1,2,4-Trichlorobenzene	10	10	U	10	10	U	10	10	U		
25	2,4,5-Trichlorophenol	25	25	U	25	25	U	25	25	U		
10	2,4,6-Trichlorophenol	10	10	U	10	10	U	10	10	U		

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UL - Not Detected/Biased Low N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302875

ober 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913

Matrix: Residential Well

Semivolatile Organics

CRCL	Parameter	Sample Point 12330/BQ			Sample Point 71290/BQ			Sample Point 7579A/BQ			Sample Point		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acenaphthene	10	10	U	10	10	U	10	10	U			
10	Acenaphthylene	10	10	U	10	10	U	10	10	U			
10	Anthracene	10	10	U	10	10	U	10	10	U			
10	Benzo(a)Anthracene	10	10	U	10	10	U	10	10	U			
10	4-Bromophenyl-phenylether	10	10	U	10	10	U	10	10	U			
10	Butylbenzylphthalate	10	10	U	10	10	U	10	10	U			
10	Carbazole	10	10	U	10	10	U	10	10	U			
10	4-Chloro-3-Methylphenol	10	10	U	10	10	U	10	10	U			
10	4-Chloroaniline	10	10	U	10	10	U	10	10	U			
10	bis(2-Chloroethoxy)Methane	10	10	U	10	10	U	10	10	U			
10	bis(2-Chloroethyl)Ether	10	10	U	10	10	U	10	10	U			
10	2-Chloronaphthalene	10	10	U	10	10	U	10	10	U			
10	2-Chlorophenol	10	10	U	10	10	U	10	10	U			
10	4-Chlorophenyl-phenylether	10	10	U	10	10	U	10	10	U			
10	Chrysene	10	10	U	10	10	U	10	10	U			
10	Dibenz(a,h)Anthracene	10	10	U	10	10	U	10	10	U			
10	Dibenzofuran	10	10	U	10	10	U	10	10	U			
10	1,2-Dichlorobenzene	10	10	U	10	10	U	10	10	U			
10	1,3-Dichlorobenzene	10	10	U	10	10	U	10	10	U			
10	1,4-Dichlorobenzene	10	10	U	10	10	U	10	10	U			
10	3,3'-Dichlorobenzidine	10	10	U	10	10	U	10	10	U			
10	2,4-Dichlorophenol	10	10	U	10	10	U	10	10	U			
10	Diethylphthalate	10	10	U	10	10	U	10	10	U			
10	2,4-Dimethylphenol	10	10	U	10	10	U	10	10	U			
10	Dimethyl Phthalate	10	10	U	10	10	U	10	10	U			
10	Di-n-butylphthalate	10	10	U	10	10	U	10	10	U			
25	4,6-Dinitro-2-methylphenol	25	25	B	25	25	B	25	25	B			
25	2,4-Dinitrophenol	25	25	U	25	25	U	25	25	U			
10	2,4-Dinitrotoluene	10	10	U	10	10	U	10	10	U			
10	2,6-Dinitrotoluene	10	10	U	10	10	U	10	10	U			
10	Di-n-Octyl Phthalate	10	10	U	10	10	U	10	10	U			
10	bis(2-Ethylhexyl)Phthalate	10	2	B	10	7	B	10	2	B			
10	Fluorene	10	10	U	10	10	U	10	10	U			
10	Benzo(b)Fluoranthene	10	10	U	10	10	U	10	10	U			
10	Benzo(k)Fluoranthene	10	10	U	10	10	U	10	10	U			
10	Fluorene	10	10	U	10	10	U	10	10	U			
10	Hexachlorobenzene	10	10	U	10	10	U	10	10	U			
10	Hexachlorobutadiene	10	10	U	10	10	U	10	10	U			
10	Hexachlorocyclopentadiene	10	10	U	10	10	U	10	10	U			
10	Hexachloroethane	10	10	U	10	10	U	10	10	U			

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CRCL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
UL - Not Detected/Biased Low
UJ - Not Detected/Estimated Data N - Tentative Identification
U - Unusable Data R - Unusable Data
Q - Not Applicable

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AR302876

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913-6.

Matrix: Residential Well

Semi-volatile Organics

CRQL	Parameter	Sample Point 12330/80			Sample Point 71290/80			Sample Point 7579A/80			Sample Point		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Indeno(1,2,3-cd)Pyrene	10	10	U	10	10	U	10	10	U			
10	Isophorone	10	10	U	10	10	U	10	10	U			
10	2-Methylnaphthalene	10	10	U	10	10	U	10	10	U			
10	2-Methylphenol	10	10	U	10	10	U	10	10	U			
10	4-Methylphenol	10	10	U	10	10	U	10	10	U			
10	Naphthalene	10	10	U	10	10	U	10	10	U			
25	2-Nitroaniline	25	25	U	25	25	U	25	25	U			
25	3-Nitroaniline	25	25	U	25	25	U	25	25	U			
25	4-Nitroaniline	25	25	U	25	25	U	25	25	U			
10	Nitrobenzene	10	10	U	10	10	U	10	10	U			
10	2-Nitrophenol	10	10	U	10	10	U	10	10	U			
25	4-Nitrophenol	25	25	U	25	25	U	25	25	U			
10	N-Nitroso-di-n-propylamine	10	10	U	10	10	U	10	10	U			
10	N-Nitrosodiphenylamine	10	10	U	10	10	U	10	10	U			
10	2,2'-Oxybis(1-Chloropropane)	10	10	U	10	10	U	10	10	U			
25	Pentachlorophenol	25	25	U	25	25	U	25	25	U			
10	Benzo(g,h,i)Perylene	10	10	U	10	10	U	10	10	U			
10	Phenanthrene	10	10	U	10	10	U	10	10	U			
10	Phenol	10	10	U	10	10	U	10	10	U			
10	Pyrene	10	10	U	10	10	U	10	10	U			
10	Benzo(a)Pyrene	10	10	U	10	10	U	10	10	U			
10	1,2,4-Trichlorobenzene	10	10	U	10	10	U	10	10	U			
25	2,4,5-Trichlorophenol	25	25	U	25	25	U	25	25	U			
10	2,4,6-Trichlorophenol	10	10	U	10	10	U	10	10	U			

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....

A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification

J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data

B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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AR302877

ember 1993

SUMMARY OF CL-ORGANICS ANALYSES
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Residential Well

Semivolatile Organics
2nd Quarter

CRQL	Parameter	Sample Point 12330-CO Date Sampled: 10/26/93 Dilution Factor: Percent Moisture: NA %			Sample Point 12330-FD Date Sampled: 10/26/93 Dilution Factor: Percent Moisture: NA %			Sample Point 71290-CO Date Sampled: 10/26/93 Dilution Factor: Percent Moisture: NA %			Sample Point 7579A-CO Date Sampled: 10/26/93 Dilution Factor: Percent Moisture: NA %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acenaphthene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Acenaphthylene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Anthracene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Benzo(a)Anthracene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	4-Bromophenyl-phenylether	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Butylbenzylphthalate	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Carbazole	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	4-Chloro-3-Methylphenol	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	4-Chloroaniline	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	bis(2-Chloroethoxy)Methane	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	bis(2-Chloroethyl)ether	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	2-Chloronaphthalene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	2-Chlorophenol	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	4-Chlorophenyl-phenylether	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Chrysene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	DiBenz(a,h)Anthracene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Dibenzofuran	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	1,2-Dichlorobenzene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	1,3-Dichlorobenzene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	1,4-Dichlorobenzene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	3,3'-Dichlorobenzidine	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	2,4-Dichlorophenol	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Diethylphthalate	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	2,4-Dimethylphenol	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Dimethyl Phthalate	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Di-n-butylphthalate	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
25	4,6-Dinitro-2-methylphenol	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U
25	2,4-Dinitrophenol	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U
10	2,4-Dinitrotoluene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	2,6-Dinitrotoluene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Di-n-Octyl Phthalate	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	bis(2-Ethylhexyl)Phthalate	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Fluoranthene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Benzo(b)Fluoranthene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Benzo(k)Fluoranthene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Fluorene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Hexachlorobenzene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Hexachlorobutadiene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Hexachlorocyclopentadiene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Hexachloroethane	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U

Notes:

All units are ug/l
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302878

SUMMARY OF CLP ORGANICS ANALYSES
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Residential Well

Semivolatile Organics
2nd Quarter

CRQL	Parameter	Sample Point 12330-CQ			Sample Point 12330-ED			Sample Point 71290-CQ			Sample Point 7579A-CQ		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Indeno(1,2,3-cd)Pyrene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Isophorone	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	2-Methylnaphthalene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	2-Methylphenol	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	4-Methylphenol	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Naphthalene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
25	2-Nitroaniline	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U
25	3-Nitroaniline	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U
25	4-Nitroaniline	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U
10	Nitrobenzene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	2-Nitrophenol	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
25	4-Nitrophenol	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U
10	N-Nitroso-di-n-propylamine	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	N-Nitrosodiphenylamine	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	2,2'-Oxybis(1-Chloropropane)	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
25	Pentachlorophenol	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U
10	Benzo(g,h,i)Perylene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Phenanthrene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Phenol	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Pyrene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	Benzo(a)Pyrene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
10	1,2,4-Trichlorobenzene	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U
25	2,4,5-Trichlorophenol	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U	25.0	25.0	U
10	2,4,6-Trichlorophenol	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U	10.0	10.0	U

Notes:

All units are ug/l
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

PESTICIDES/PCBs

Phase 1A

AR302880

ber 1993

SUMMARY OF CLP ORGANIC ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Residential Well

Pesticide Organics

CRQL	Parameter	Sample Point 12330/AQ			Sample Point 71290/AQ			Sample Point 7579A/AQ			Sample Point		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
0.05	Aldrin	0.050	0.050	UL	0.050	0.050	R	0.050	0.050	U			
1.0	Aroclor-1016	1.0	1.0	UL	1.0	1.0	R	1.0	1.0	U			
2.0	Aroclor-1221	2.0	2.0	UL	2.0	2.0	R	2.0	2.0	U			
1.0	Aroclor-1232	1.0	1.0	UL	1.0	1.0	R	1.0	1.0	U			
1.0	Aroclor-1242	1.0	1.0	UL	1.0	1.0	R	1.0	1.0	U			
1.0	Aroclor-1248	1.0	1.0	UL	1.0	1.0	R	1.0	1.0	U			
1.0	Aroclor-1254	1.0	1.0	UL	1.0	1.0	R	1.0	1.0	U			
1.0	Aroclor-1260	1.0	1.0	UL	1.0	1.0	R	1.0	1.0	U			
0.05	alpha-BHC	0.050	0.050	UL	0.050	0.050	R	0.050	0.050	U			
0.05	beta-BHC	0.050	0.050	UL	0.050	0.050	R	0.050	0.050	U			
0.05	delta-BHC	0.050	0.050	UL	0.050	0.050	R	0.050	0.050	U			
0.05	gamma-BHC (Lindane)	0.050	0.050	UL	0.050	0.050	R	0.050	0.050	U			
0.05	alpha-Chlordane	0.050	0.050	UL	0.050	0.050	R	0.050	0.050	U			
0.05	gamma-Chlordane	0.050	0.050	UL	0.050	0.050	R	0.050	0.050	U			
0.10	4,4'-DDE	0.10	0.10	UL	0.10	0.10	R	0.10	0.10	U			
0.10	4,4'-DDE	0.10	0.10	UL	0.10	0.10	R	0.10	0.10	U			
0.10	4,4'-DDT	0.10	0.10	UL	0.10	0.10	R	0.10	0.10	U			
0.10	Endosulfan I	0.050	0.050	UL	0.050	0.050	R	0.050	0.050	U			
0.10	Endosulfan II	0.10	0.10	UL	0.10	0.10	R	0.10	0.10	U			
0.10	Endosulfan Sulfate	0.10	0.10	UL	0.10	0.10	R	0.10	0.10	U			
0.10	Endrin	0.10	0.10	UL	0.10	0.10	R	0.10	0.10	U			
0.10	Endrin Aldehyde	0.10	0.10	UL	0.10	0.10	R	0.10	0.10	U			
0.10	Endrin Ketone	0.10	0.10	UL	0.10	0.10	R	0.10	0.10	U			
0.05	Heptachlor	0.050	0.050	UL	0.050	0.050	R	0.050	0.050	U			
0.05	Heptachlor Epoxide	0.050	0.050	UL	0.050	0.050	R	0.050	0.050	U			
0.50	Methoxychlor	0.50	0.50	UL	0.50	0.50	R	0.50	0.50	U			
5.0	Toxaphene	5.0	5.0	UL	5.0	5.0	R	5.0	5.0	U			

Notes:
All units are ug/l
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
UL - Not Detected/Estimated Data
UL - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

AR302881

TOTAL (UNFILTERED) METALS

**Phase 1A
Phase 1B (First Quarter)
Second Quarter**

AR302882

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1A
BERKS COUNTY, PENNSYLVANIA

Matrix: Residential Well

Parameter	Sample Point 12330/AQ				Sample Point 71290/AQ				Sample Point 7579A/AQ				Sample Point			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	200	14.0	18.1	B	200	14.0	29.2	B	200	14.0	26.6	B				
Antimony	60.0	14.0	14.0	U	60.0	14.0	14.0	U	60.0	14.0	14.0	U				
Arsenic	10.0	3.0	3.0	U	10.0	3.0	3.0	U	10.0	3.0	3.0	U				
Barium	200	0.40	20.0	J	200	0.40	23.3	J	200	0.40	0.91	B				
Beryllium	5.0	0.30	0.30	U	5.0	0.30	0.30	U	5.0	0.30	0.30	U				
Cadmium	5.0	1.9	1.9	U	5.0	1.9	1.9	U	5.0	1.9	1.9	U				
Calcium	5000	4.1	68700	J	5000	4.1	70700	J	5000	4.1	54800	J				
Chromium	10.0	3.6	3.6	U	10.0	3.6	3.6	U	10.0	3.6	3.6	U				
Cobalt	50.0	2.0	2.0	U	50.0	2.0	2.0	U	50.0	2.0	2.0	U				
Copper	25.0	1.9	151	J	25.0	1.9	8.6	B	25.0	1.9	3.9	B				
Iron	100	9.2	114	B	100	9.2	80.2	B	100	9.2	32.9	B				
Lead	3.0	1.0	3.2	B	3.0	1.0	1.8	B	3.0	1.0	2.2	B				
Magnesium	5000	12.2	22200	J	5000	12.2	857	J	5000	12.2	11300	J				
Manganese	15.0	0.60	70.0	J	15.0	0.60	3.0	B	15.0	0.60	0.60	U				
Mercury	0.20	0.04	0.04	U	0.20	0.04	0.05	B	0.20	0.04	0.04	U				
Nickel	40.0	7.9	9.3	B	40.0	7.9	7.9	U	40.0	7.9	7.9	U				
Potassium	5000	64.0	3140	J	5000	64.0	466	J	5000	64.0	631	J				
Selenium	5.0	5.0	5.0	U	5.0	5.0	5.0	U	5.0	5.0	5.0	U				
Silver	10.0	2.0	4.8	B	10.0	2.0	4.3	B	10.0	2.0	3.8	B				
Sodium	5000	8.0	10800	J	5000	8.0	37900	J	5000	8.0	7320	J				
Thallium	10.0	2.0	2.0	U	10.0	2.0	2.0	U	10.0	2.0	2.0	U				
Vanadium	50.0	1.8	2.7	J	50.0	1.8	1.8	U	50.0	1.8	4.7	J				
Zinc	20.0	1.2	91.0	J	20.0	1.2	3.4	B	20.0	1.2	5.4	B				
Cyanide	10.0	10.0	10.0	U	10.0	10.0	10.0	U	10.0	10.0	44.5	A				

Notes: All units are ug/l

Sample Quantitation Limit (SOL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers.....

A - Acceptable (Quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification

J - Estimated (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data

K - Biased High (Semi-quantitative) Data UL - Not Detected/Biased Low Q - Not Applicable

L - Biased Low (Semi-quantitative) Data

B - Present in associated blanks (Semi-quantitative) Data

AR302883

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1B
BERKS COUNTY, PENNSYLVANIA

Matrix: Residential Well

Parameter	Sample Point 12330/BQ				Sample Point 71290/BQ				Sample Point 7579A/BQ			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	200	44.0	89.4	B	200	44.0	101	B	200	44.0	97.4	B
Antimony	60.0	35.0	35.0	U	60.0	35.0	35.0	U	60.0	35.0	35.0	U
Arsenic	10.0	4.0	4.0	UJ	10.0	4.0	4.0	UJ	10.0	4.0	4.0	UJ
Barium	200	2.0	22.3	A	200	2.0	16.1	B	200	2.0	2.0	U
Beryllium	5.0	1.0	1.0	U	5.0	1.0	1.0	U	5.0	1.0	1.0	U
Cadmium	5.0	3.0	3.0	U	5.0	3.0	3.0	U	5.0	3.0	3.0	U
Calcium	5000	17.0	83000	A	5000	17.0	51700	A	5000	17.0	56400	A
Chromium	10.0	8.0	8.0	U	10.0	8.0	8.0	U	10.0	8.0	8.0	U
Cobalt	50.0	9.0	9.0	U	50.0	9.0	9.0	U	50.0	9.0	9.0	U
Copper	25.0	4.0	102	A	25.0	4.0	31.1	A	25.0	4.0	14.5	A
Iron	100	25.0	67.5	B	100	25.0	25.0	U	100	25.0	33.8	B
Lead	3.0	2.0	2.0	UL	3.0	2.0	2.0	UL	3.0	2.0	2.0	UL
Magnesium	5000	48.0	27200	A	5000	48.0	2420	A	5000	48.0	11400	A
Manganese	15.0	1.0	29.4	A	15.0	1.0	1.0	U	15.0	1.0	1.0	U
Mercury	0.20	0.20	0.20	U	0.20	0.20	0.20	U	0.20	0.20	0.20	U
Nickel	40.0	18.0	18.0	U	40.0	18.0	41.8	A	40.0	18.0	18.0	U
Potassium	5000	1270	3700	A	5000	1270	1270	U	5000	1270	1360	A
Selenium	5.0	3.0	3.0	UJ	5.0	3.0	3.0	UJ	5.0	3.0	3.0	UJ
Silver	10.0	4.0	4.0	U	10.0	4.0	4.0	U	10.0	4.0	4.0	U
Sodium	5000	123	10700	L	5000	123	27900	L	5000	123	7500	L
Thallium	100	30.0	30.0	UL	10.0	3.0	3.0	UL	10.0	3.0	3.0	UL
Vanadium	50.0	6.0	6.0	U	50.0	6.0	6.0	U	50.0	6.0	6.1	A
Zinc	20.0	4.0	129	A	20.0	4.0	27.5	B	20.0	4.0	14.8	B
Cyanide			Not Analyzed				Not Analyzed				Not Analyzed	

Notes: All units are ug/l

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers.....

A - Acceptable (Quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification

J - Estimated (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data

K - Biased High (Semi-quantitative) Data UL - Not Detected/Biased Low Q - Not Applicable

L - Biased Low (Semi-quantitative) Data

B - Present in associated blanks (Semi-quantitative) Data

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Page

AR302884

December 1993

913-6773

**SUMMARY OF CLP TOTAL INORGANICS ANALYSES
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA**

2nd quarter

Matrix: Residential Well

Parameter	Sample Point 12330-Cq				Sample Point 12330-FD				Sample Point 71290-Cq				Sample Point 7579A-Cq			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	200	38.8	105	B	200	38.8	46.4	B	200	38.8	38.8	U	200	38.8	38.8	U
Antimony	60	51.1	51.1	U	60	51.1	51.1	U	60	51.1	51.1	U	60	51.1	51.1	U
Arsenic	10	5.2	5.2	U	10	5.2	5.2	U	10	5.2	6.0	U	10	5.2	5.2	U
Barium	200	2.3	15.5	B	200	2.3	15.0	B	200	2.3	28.0	A	200	2.3	2.3	U
Beryllium	5	0.4	0.40	U	5	0.4	0.40	U	5	0.4	0.40	U	5	0.4	0.40	U
Cadmium	5	5.0	5.0	U	5	5.0	5.0	U	5	5.0	5.0	U	5	5.0	5.0	U
Calcium	5000	51.9	26300	A	5000	51.9	26200	A	5000	51.9	70300	A	5000	51.9	62700	A
Chromium	10	9.2	9.2	U	10	9.2	9.2	U	10	9.2	9.2	U	10	9.2	9.2	U
Cobalt	50	13.6	13.6	U	50	13.6	13.6	U	50	13.6	13.6	U	50	13.6	13.6	U
Copper	25	11.1	241	U	25	11.1	254	A	25	11.1	11.1	U	25	11.1	11.1	U
Iron	100	10.7	113	B	100	10.7	28.2	B	100	10.7	70.5	B	100	10.7	10.7	UL
Lead	3	2.0	2.0	UL	3	2.0	2.0	UL	3	2.0	2.0	UL	3	2.0	2.0	UL
Magnesium	5000	58.3	8630	A	5000	58.3	8600	A	5000	58.3	2670	A	5000	58.3	12800	A
Manganese	15	1.4	2.7	B	15	1.4	2.4	B	15	1.4	2.9	B	15	1.4	1.4	U
Mercury	0.2	0.20	0.20	U	0.2	0.20	0.20	U	0.2	0.2	0.20	U	0.2	0.2	0.20	U
Nickel	40	14.2	14.2	U	40	14.2	14.2	U	40	14.2	14.2	U	40	14.2	14.2	U
Potassium	5000	1764	4850	A	5000	1764	4820	A	5000	1764	1760	U	5000	1764	1760	U
Selenium	5	3.6	3.6	UL	5	3.6	3.6	UL	5	3.6	3.6	UL	5	3.6	3.6	UL
Silver	10	5.5	5.5	U	10	5.5	5.5	U	10	5.5	5.5	U	10	5.5	5.5	U
Sodium	5000	69.4	8640	A	5000	69.4	8380	A	5000	69.4	34800	A	5000	69.4	8000	A
Thallium	10	4.8	4.8	UL	10	4.8	4.8	UL	10	4.8	4.8	UL	10	4.8	4.8	UL
Vanadium	50	6.8	6.8	U	50	6.8	6.8	U	50	6.8	6.8	U	50	6.8	6.8	U
Zinc	20	5.7	149	A	20	5.7	132	A	20	5.7	10.0	A	20	5.7	5.7	U
Cyanide			Not Analyzed				Not Analyzed				Not Analyzed				Not Analyzed	

Notes: All units are ug/l

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers.....

A - Acceptable (Quantitative) Data

J - Estimated (Semi-quantitative) Data

K - Biased High (Semi-quantitative) Data

L - Biased Low (Semi-quantitative) Data

B - Present in associated blanks (Semi-quantitative) Data

UJ - Not Detected/Estimated Data

U - Not Detected/Quantitative Data

UL - Not Detected/Biased Low

M - Tentative Identification

R - Unusable Data

Q - Not Applicable

AR302885

WET CHEMISTRY

Phase 1A

AR302886

October 1993

913-6773

SUMMARY OF WET CHEMISTRY CONVENTIONAL ANALYSES - PHASE 1A

BERKS COUNTY, PENNSYLVANIA

Matrix: Groundwater - Residential Well

Parameter	Sample Point 12330/AQ			Sample Point 71200/AQ			Sample Point 7579A/AQ			Sample Point		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Alkalinity - CaCO ₃	2.0	186	A	2.0	23.0	A	2.0	131	A			
Ammonia - N	0.10	0.20	A	0.10	0.10	U	0.10	0.10	U			
Biochemical Oxygen Demand	2.0	23.0	J	2.0	2.0	U	2.0	10.0	J			
Chemical Oxygen Demand	5.0	9.0	B	5.0	5.0	U	5.0	6.0	B			
Chloride	2.0	46.0	A	2.0	10.0	A	2.0	34.0	A			
Fluoride	0.10	0.10	A	0.10	0.10	U	0.10	0.10	A			
Hardness - CaCO ₃	2.0	263	A	2.0	180	A	2.0	183	A			
Hexavalent Chromium	0.10	0.10	U	0.10	0.10	U	0.10	0.10	U			
Nitrate/Nitrite - N	0.02	1.04	J	0.02	0.05	B	0.02	3.96	J			
Sulfate	5.0	11.0	J	5.0	310	J	5.0	45.0	J			
Total Dissolved Solids	5.0	384	L	5.0	459	L	5.0	345	L			
Total Inorganic Carbon	1.0	55.0	A	1.0	5.5	B	1.0	30.0	A			
Total Kjeldahl Nitrogen	0.10	0.10	B	0.10	0.20	B	0.10	0.10	B			
Total Organic Carbon	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U			
Total Phosphate - P	0.05	0.12	B	0.05	0.05	U	0.05	0.05	U			
Total Suspended Solids	5.0	5.0	UL	5.0	5.0	UL	5.0	5.0	UL			
Turbidity	0.20	0.90	B	0.20	0.40	B	0.20	0.3	B			

Notes: All units are mg/l except Turbidity which is NTU.

The Reporting Limits (RLs) have been adjusted for percent solids.

The Qual column indicates the Qualifier applied to the result following data validation (see below).

Qualifiers:

A - Acceptable (Quantitative) Data
 J - Estimated (Semiquantitative) Data
 K - Biased High (Semiquantitative) Data
 L - Biased Low (Semiquantitative) Data
 B - Present in associated blanks (Semiquantitative) Data
 UJ - Not Detected/Estimated Data
 U - Not Detected/Quantitative Data
 UL - Not Detected/Biased Low
 R - Unusable Data
 Q - Not Applicable
 N - Tentative Identification
 N* - Tentative Identification
 (result below laboratory MDL)

AR302887

SOILS

AR302888

VOLATILE ORGANIC COMPOUNDS

Phase 1A
Phase 1B
Phase 1C

AR302889

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913

Matrix: Soil

Volatile Organics

CROL	Parameter	Sample Point S1-EL/1A Date Sampled: 09/10/92 Dilution Factor: 1.0 Percent Moisture: 14 %			Sample Point S1-UL/1A Date Sampled: 09/11/92 Dilution Factor: 1.0 Percent Moisture: 17 %			Sample Point S2-EL/1A Date Sampled: 09/10/92 Dilution Factor: 1.0 Percent Moisture: 16 %			Sample Point S2-EL/1D Date Sampled: 09/10/92 Dilution Factor: 1.0 Percent Moisture: 12 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	12	24	B	12	9	B	12	9	B	11	5	B
10	Benzene	12	12	U	12	12	U	12	12	U	11	11	U
10	Bromodichloromethane	12	12	U	12	12	U	12	12	U	11	11	U
10	Bromoform	12	12	U	12	12	U	12	12	U	11	11	U
10	Bromomethane	12	12	U	12	12	U	12	12	U	11	11	U
10	2-Butanone	12	12	J	12	12	J	12	5	J	11	11	U
10	Carbon Disulfide	12	12	U	12	12	U	12	12	U	11	11	U
10	Carbon Tetrachloride	12	12	U	12	12	U	12	12	U	11	11	U
10	Chlorobenzene	12	12	U	12	12	U	12	12	U	11	11	U
10	Chloroethane	12	12	U	12	12	U	12	12	U	11	11	U
10	Chloroform	12	12	U	12	12	U	12	12	U	11	11	U
10	Chloromethane	12	12	U	12	12	U	12	12	U	11	11	U
10	Dibromochloromethane	12	12	U	12	12	U	12	12	U	11	11	U
10	1,1-Dichloroethane	12	12	U	12	12	U	12	12	U	11	11	U
10	1,2-Dichloroethane	12	12	U	12	12	U	12	12	U	11	11	U
10	1,1-Dichloroethene	12	12	U	12	12	U	12	12	U	11	11	U
10	Total 1,2-Dichloroethene	12	12	U	12	12	U	12	12	U	11	11	U
10	1,2-Dichloropropene	12	12	U	12	12	U	12	12	U	11	11	U
10	cis-1,3-Dichloropropene	12	12	U	12	12	U	12	12	U	11	11	U
10	trans-1,3-Dichloropropene	12	12	U	12	12	U	12	12	U	11	11	U
10	Ethylbenzene	12	6	J	12	12	J	12	12	U	11	11	U
10	2-Hexanone	12	12	U	12	12	U	12	12	U	11	11	U
10	4-Methyl-2-Pentanone	12	12	U	12	12	U	12	12	U	11	11	U
10	Methylene Chloride	12	12	U	12	12	U	12	12	U	11	11	U
10	Styrene	12	12	U	12	12	U	12	12	U	11	11	U
10	1,1,2,2-Tetrachloroethane	12	12	U	12	12	U	12	12	U	11	11	U
10	Tetrachloroethene	12	12	U	12	12	U	12	12	U	11	11	U
10	Toluene	12	3	J	12	12	J	12	12	U	11	11	U
10	1,1,1-Trichloroethane	12	12	U	12	12	U	12	12	U	11	11	U
10	1,1,2-Trichloroethane	12	12	U	12	12	U	12	12	U	11	11	U
10	Trichloroethene	12	12	U	12	12	U	12	12	U	11	11	U
10	Vinyl Chloride	12	12	U	12	12	U	12	12	U	11	11	U
10	Total Xylenes	12	19	A	12	12	U	12	12	U	11	11	U

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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Golder Associates

AR302890

Matrix: Soil

Volatile Organics

CROL	Parameter	Sample Point S2-UL/1A Date Sampled: 09/11/92 Dilution Factor: 1.0 Percent Moisture: 27 %			Sample Point S3-EL/1A Date Sampled: 09/10/92 Dilution Factor: 1.0 Percent Moisture: 15 %			Sample Point S3-UL/1A Date Sampled: 09/11/92 Dilution Factor: 1.0 Percent Moisture: 20 %			Sample Point Date Sampled: Dilution Factor: Percent Moisture: %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	14	14	U	12	110	J	12	45	B			
10	Benzene	14	14	U	12	12	U	12	12	U			
10	Bromodichloromethane	14	14	U	12	12	U	12	12	U			
10	Bromoform	14	14	U	12	12	U	12	12	U			
10	Bromomethane	14	14	U	12	12	U	12	12	U			
10	2-Butanone	14	14	U	12	12	A	12	14	A			
10	Carbon Disulfide	14	14	U	12	12	U	12	12	U			
10	Carbon Tetrachloride	14	14	U	12	12	U	12	12	U			
10	Chlorobenzene	14	14	U	12	12	U	12	2	J			
10	Chloroethane	14	14	U	12	12	U	12	12	U			
10	Chloroform	14	14	U	12	12	U	12	12	U			
10	Chloromethane	14	14	U	12	12	U	12	12	U			
10	Dibromochloromethane	14	14	U	12	12	U	12	12	U			
10	1,1-Dichloroethane	14	14	U	12	12	U	12	12	U			
10	1,2-Dichloroethane	14	14	U	12	12	U	12	12	U			
10	1,1-Dichloroethene	14	14	U	12	12	U	12	12	U			
10	Total 1,2-Dichloroethene	14	14	U	12	12	U	12	12	U			
10	1,2-Dichloropropane	14	14	U	12	12	U	12	12	U			
10	cis-1,3-Dichloropropene	14	14	U	12	12	U	12	12	U			
10	trans-1,3-Dichloropropene	14	14	U	12	12	U	12	12	U			
10	Ethylbenzene	14	14	U	12	37	A	12	12	U			
10	2-Hexanone	14	14	U	12	12	U	12	12	U			
10	4-Methyl-2-Pentanone	14	14	U	12	12	U	12	12	U			
10	Methylene Chloride	14	14	U	12	4	J	12	6	B			
10	Styrene	14	14	U	12	12	U	12	12	U			
10	1,1,2,2-Tetrachloroethane	14	14	U	12	12	U	12	12	U			
10	Toluene	14	14	U	12	12	U	12	12	U			
10	1,1,1-Trichloroethane	14	14	U	12	2	J	12	12	U			
10	1,1,2-Trichloroethane	14	14	U	12	12	U	12	12	U			
10	Trichloroethene	14	14	U	12	12	U	12	12	U			
10	Vinyl Chloride	14	14	U	12	12	U	12	12	U			
10	Total Xylenes	14	14	U	12	73	A	12	12	U			

Notes:

All units are ug/kg

Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semiquantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semiquantitative) Data L - Biased Low (Semiquantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semiquantitative Data) UL - Not Detected/Biased Low UL - Not Detected/Biased Low O - Not Applicable

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Collocates

Page

AR302891

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Volatile Organics

CROL	Parameter	Sample Point S18G/18			Sample Point S28G/18			Sample Point S38G/18			Sample Point S4EL/18		
		SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual
10	Acetone	12	12	UJ	12	12	UJ	12	53	B	13	66	B
10	Benzene	12	12	U	12	12	U	12	12	U	13	13	U
10	Bromodichloromethane	12	12	U	12	12	U	12	12	U	13	13	U
10	Bromoform	12	12	U	12	12	U	12	12	U	13	13	U
10	Bromomethane	12	12	U	12	12	U	12	12	U	13	13	U
10	2-Butanone	12	12	U	12	12	U	12	12	U	13	13	U
10	Carbon Disulfide	12	12	U	12	12	U	12	12	U	13	13	U
10	Carbon Tetrachloride	12	12	U	12	12	U	12	12	U	13	13	U
10	Chlorobenzene	12	12	U	12	12	U	12	12	U	13	13	U
10	Chloroethane	12	12	U	12	12	U	12	12	U	13	13	U
10	Chloroform	12	12	U	12	12	U	12	12	U	13	13	U
10	Chloromethane	12	12	U	12	12	U	12	12	U	13	13	U
10	Dibromochloromethane	12	12	U	12	12	U	12	12	U	13	13	U
10	1,1-Dichloroethane	12	12	U	12	12	U	12	12	U	13	13	U
10	1,2-Dichloroethane	12	12	U	12	12	U	12	12	U	13	13	U
10	1,1-Dichloroethene	12	12	U	12	12	U	12	12	U	13	13	U
10	Total 1,2-Dichloroethene	12	12	U	12	12	U	12	12	U	13	13	U
10	1,2-Dichloropropene	12	12	U	12	12	U	12	12	U	13	13	U
10	cis-1,3-Dichloropropene	12	12	U	12	12	U	12	12	U	13	13	U
10	trans-1,3-Dichloropropene	12	12	U	12	12	U	12	12	U	13	13	U
10	Ethylbenzene	12	12	U	12	12	U	12	12	U	13	13	U
10	2-Hexanone	12	12	U	12	12	U	12	12	U	13	13	U
10	4-Methyl-2-Pentanone	12	12	U	12	12	U	12	12	U	13	13	U
10	Methylene Chloride	12	10	B	12	9	B	12	9	B	13	40	B
10	Styrene	12	12	U	12	12	U	12	12	U	13	13	U
10	1,1,2,2-Tetrachloroethane	12	12	U	12	12	U	12	12	U	13	13	U
10	Tetrachloroethene	12	12	U	12	12	U	12	12	U	13	13	U
10	Toluene	12	12	U	12	12	U	12	12	U	13	13	U
10	1,1,1-Trichloroethane	12	12	U	12	12	U	12	12	U	13	13	U
10	1,1,2-Trichloroethane	12	12	U	12	12	U	12	12	U	13	13	U
10	Trichloroethene	12	12	U	12	12	U	12	12	U	13	13	U
10	Vinyl Chloride	12	12	U	12	12	U	12	12	U	13	13	U
10	Total Xylenes	12	12	U	12	12	U	12	12	U	13	13	U

Notes:
All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:
A - Acceptable (Quantitative) Data
K - Biased High (Semi-quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
L - Biased Low (Semi-quantitative) Data
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

AR302892

Matrix: Soil

Volatile Organics

CRQL	Parameter	Sample Point S4EL/FD Date Sampled: 06/29/93 Dilution Factor: 1.0 Percent Moisture: 24 %			Sample Point S4UL/18 Date Sampled: 06/29/93 Dilution Factor: 1.0 Percent Moisture: 13 %			Sample Point SSEL/18 Date Sampled: 06/28/93 Dilution Factor: 1.0 Percent Moisture: 8 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	13	47	B	11	11	UJ	11	20	B
10	Benzene	13	13	U	11	11	U	11	11	U
10	Bromodichloromethane	13	13	U	11	11	U	11	11	U
10	Bromoform	13	13	U	11	11	U	11	11	U
10	Bromomethane	13	13	U	11	11	U	11	11	U
10	2-Butanone	13	13	U	11	11	U	11	11	U
10	Carbon Disulfide	13	13	U	11	11	U	11	11	U
10	Carbon Tetrachloride	13	13	U	11	11	U	11	11	U
10	Chlorobenzene	13	13	U	11	11	U	11	11	U
10	Chloroethane	13	13	U	11	11	U	11	11	U
10	Chloroform	13	13	U	11	11	U	11	11	U
10	Chloromethane	13	13	U	11	11	U	11	11	U
10	Dibromochloromethane	13	13	U	11	11	U	11	11	U
10	1,1-Dichloroethane	13	13	U	11	11	U	11	11	U
10	1,2-Dichloroethane	13	13	U	11	11	U	11	11	U
10	Total 1,2-Dichloroethane	13	13	U	11	11	U	11	11	U
10	1,1-Dichloroethane	13	13	U	11	11	U	11	11	U
10	1,2-Dichloropropane	13	13	U	11	11	U	11	11	U
10	cis-1,3-Dichloropropene	13	13	U	11	11	U	11	11	U
10	trans-1,3-Dichloropropene	13	13	U	11	11	U	11	11	U
10	Ethylbenzene	13	13	U	11	11	U	11	11	U
10	2-Hexanone	13	13	U	11	11	U	11	11	U
10	4-Methyl-2-Pentanone	13	13	U	11	11	U	11	11	U
10	Methylene Chloride	13	31	B	11	160	B	11	12	B
10	Styrene	13	13	U	11	11	U	11	11	U
10	1,1,2,2-Tetrachloroethane	13	13	U	11	11	U	11	11	U
10	Tetrachloroethane	13	13	U	11	11	U	11	11	U
10	Toluene	13	13	U	11	11	U	11	11	U
10	1,1,1-Trichloroethane	13	13	U	11	11	U	11	11	U
10	1,1,2-Trichloroethane	13	13	U	11	11	U	11	11	U
10	Trichloroethene	13	13	U	11	11	U	11	11	U
10	Vinyl Chloride	13	13	U	11	11	U	11	11	U
10	Total Xylenes	13	13	U	11	11	U	11	11	U

Notes:
All units are ug/kg
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
UJ - Not Detected/Estimated Data
UL - Not Detected/Biased Low
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

October 1993

SUMMARY OF CLP ONLY ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Volatile Organics

CRCL	Parameter	Sample Point S6EL/1B Date Sampled: 06/29/93 Dilution Factor: 1.0 Percent Moisture: 5 %			Sample Point Date Sampled: Dilution Factor: Percent Moisture: %			Sample Point Date Sampled: Dilution Factor: Percent Moisture: %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	11	83	B						
10	Benzene	11	11	U						
10	Bromodichloromethane	11	11	U						
10	Bromoform	11	11	U						
10	Bromomethane	11	11	U						
10	2-Butanone	11	11	U						
10	Carbon Disulfide	11	11	U						
10	Carbon Tetrachloride	11	11	U						
10	Chlorobenzene	11	11	U						
10	Chloroethane	11	11	U						
10	Chloroform	11	11	U						
10	Chloromethane	11	11	U						
10	Dibromochloromethane	11	11	U						
10	1,1-Dichloroethane	11	11	U						
10	1,2-Dichloroethane	11	11	U						
10	1,1-Dichloroethene	11	11	U						
10	Total 1,2-Dichloroethene	11	11	U						
10	1,2-Dichloropropane	11	11	U						
10	cis-1,3-Dichloropropene	11	11	U						
10	trans-1,3-Dichloropropene	11	11	U						
10	Ethylbenzene	11	11	U						
10	2-Mexanone	11	11	U						
10	4-Methyl-2-Pentanone	11	11	U						
10	Methylene Chloride	11	11	U						
10	Styrene	11	11	U						
10	1,1,2,2-Tetrachloroethane	11	11	B						
10	Tetrachloroethene	11	11	U						
10	Toluene	11	11	U						
10	1,1,1-Trichloroethane	11	11	U						
10	1,1,2-Trichloroethane	11	11	U						
10	Trichloroethene	11	11	U						
10	Vinyl Chloride	11	11	U						
10	Total Xylenes	11	11	U						

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CRCL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:
A - Acceptable (Quantitative) Data
K - Biased High (Semi-quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

AR302894

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1C
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913-c

Matrix: Soil

Volatile Organics

CROL	Parameter	Sample Point S6-UL-1C			Sample Point S7-EL-1C			Sample Point S8-EL-1C		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	13	52	B	13	98	B	12	16	B
10	Benzene	13	13	U	13	13	U	12	12	U
10	Bromodichloromethane	13	13	U	13	13	U	12	12	U
10	Bromoform	13	13	U	13	13	U	12	12	U
10	Bromomethane	13	13	U	13	13	U	12	12	U
10	2-Butanone	13	13	U	13	13	U	12	12	U
10	Carbon Disulfide	13	13	U	13	13	U	12	12	U
10	Carbon Tetrachloride	13	13	U	13	13	U	12	12	U
10	Chlorobenzene	13	13	U	13	13	U	12	12	U
10	Chloroethane	13	13	U	13	13	U	12	12	U
10	Chloroform	13	13	U	13	13	U	12	12	U
10	Chloromethane	13	13	U	13	13	U	12	12	U
10	Dibromochloromethane	13	13	U	13	13	U	12	12	U
10	1,1-Dichloroethane	13	13	U	13	13	U	12	12	U
10	1,2-Dichloroethane	13	13	U	13	13	U	12	12	U
10	1,1-Dichloroethene	13	13	U	13	13	U	12	12	U
10	Total 1,2-Dichloroethene	13	13	U	13	13	U	12	12	U
10	1,2-Dichloropropane	13	13	U	13	13	U	12	12	U
10	cis-1,3-Dichloropropene	13	13	U	13	13	U	12	12	U
10	trans-1,3-Dichloropropene	13	13	U	13	13	U	12	12	U
10	Ethylbenzene	13	13	U	13	13	U	12	12	U
10	2-Hexanone	13	13	U	13	13	U	12	12	U
10	4-Methyl-2-Pentanone	13	13	U	13	13	U	12	12	U
10	Methylene Chloride	13	21	B	13	36	B	12	19	B
10	Styrene	13	13	U	13	13	U	12	12	U
10	1,1,2,2-Tetrachloroethane	13	13	U	13	13	U	12	12	U
10	Tetrachloroethene	13	13	U	13	13	U	12	12	U
10	Toluene	13	13	U	13	13	U	12	12	U
10	1,1,1-Trichloroethane	13	13	U	13	13	U	12	12	U
10	1,1,2-Trichloroethane	13	13	U	13	13	U	12	12	U
10	Trichloroethene	13	13	U	13	13	U	12	12	U
10	Vinyl Chloride	13	13	U	13	13	U	12	12	U
10	Total Xylenes	13	13	U	13	4	J	12	12	J

Notes:
All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:
A - Acceptable (Quantitative) Data
K - Biased High (Semi-quantitative) Data
J - Estimated (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)

UL - Not Detected/Estimated Data
UJ - Not Detected/Quantitative Data
UL - Not Detected/Biased Low

N - Tentative Identification
R - Unusable Data
Q - Not Applicable

AR302895

February 1994

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1C
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Volatile Organics

CROL	Parameter	Sample Point S8-UL-1C Date Sampled: 12/17/93 Dilution Factor: 1.0 Percent Moisture: 15 %			Sample Point S9-EL-1C Date Sampled: 12/17/93 Dilution Factor: 1.0 Percent Moisture: 19 %			Sample Point S9-EL-FD Date Sampled: 12/17/93 Dilution Factor: 2.0 Percent Moisture: 21 %			Sample Point S10-EL-1C Date Sampled: 12/17/93 Dilution Factor: 1.0 Percent Moisture: 24 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	12	20	B	12	11	B	13	8	B	13	150	B
10	Benzene	12	12	U	12	12	U	13	13	U	13	13	U
10	Bromodichloromethane	12	12	U	12	12	U	13	13	U	13	13	U
10	Bromoform	12	12	U	12	12	U	13	13	U	13	13	U
10	Bromomethane	12	12	U	12	12	U	13	13	U	13	13	U
10	2-Butanone	12	12	U	12	12	U	13	13	U	13	13	U
10	Carbon Disulfide	12	12	U	12	12	U	13	13	U	13	13	U
10	Carbon Tetrachloride	12	12	U	12	12	U	13	13	U	13	13	U
10	Chlorobenzene	12	12	U	12	12	U	13	13	U	13	13	U
10	Chloroethane	12	12	U	12	12	U	13	13	U	13	13	U
10	Chloroform	12	12	U	12	12	U	13	13	U	13	13	U
10	Chloromethane	12	12	U	12	12	U	13	13	U	13	13	U
10	Dibromochloromethane	12	12	U	12	12	U	13	13	U	13	13	U
10	1,1-Dichloroethane	12	12	U	12	12	U	13	13	U	13	13	U
10	1,2-Dichloroethane	12	12	U	12	12	U	13	13	U	13	13	U
10	1,1,1-Trichloroethane	12	12	U	12	12	U	13	13	U	13	13	U
10	Total 1,2-Dichloroethane	12	12	U	12	12	U	13	13	U	13	13	U
10	1,2-Dichloropropane	12	12	U	12	12	U	13	13	U	13	13	U
10	cis-1,3-Dichloropropene	12	12	U	12	12	U	13	13	U	13	13	U
10	trans-1,3-Dichloropropene	12	12	U	12	12	U	13	13	U	13	13	U
10	Ethylbenzene	12	12	U	12	12	U	13	13	U	13	13	U
10	2-Hexanone	12	12	U	12	12	U	13	13	U	13	13	U
10	4-Methyl-2-Pentanone	12	12	U	12	12	U	13	13	U	13	13	U
10	Methylene Chloride	12	18	B	12	18	B	13	14	B	13	32	B
10	Styrene	12	12	U	12	12	U	13	13	U	13	13	U
10	1,1,2,2-Tetrachloroethane	12	12	U	12	12	U	13	13	U	13	13	U
10	Tetrachloroethane	12	12	U	12	12	U	13	13	U	13	13	U
10	Toluene	12	12	U	12	12	U	13	13	U	13	13	U
10	1,1,1-Trichloroethane	12	12	U	12	12	U	13	13	U	13	13	U
10	1,1,2-Trichloroethane	12	12	U	12	12	U	13	13	U	13	13	U
10	Trichloroethene	12	12	U	12	12	U	13	13	U	13	13	U
10	Vinyl Chloride	12	12	U	12	12	U	13	13	U	13	13	U
10	Total Xylenes	12	12	U	12	12	U	13	13	U	13	2	B

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data U - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302896

Matrix: Soil

Volatiles Organics

CRL	Parameter	Sample Point S11-EL-1C			Sample Point			Sample Point			Sample Point		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	12	100	B									
10	Benzene	12	12	U									
10	Bromodichloromethane	12	12	U									
10	Bromoform	12	12	U									
10	Bromomethane	12	12	U									
10	2-Butanone	12	12	U									
10	Carbon Disulfide	12	12	U									
10	Carbon Tetrachloride	12	12	U									
10	Chlorobenzene	12	12	U									
10	Chloroethane	12	12	U									
10	Chloroform	12	12	U									
10	Chloromethane	12	12	U									
10	Dibromochloromethane	12	12	U									
10	1,1-Dichloroethane	12	12	U									
10	1,2-Dichloroethane	12	12	U									
10	1,1-Dichloroethene	12	12	U									
10	Total 1,2-Dichloroethene	12	12	U									
10	1,2-Dichloropropane	12	12	U									
10	cis-1,3-Dichloropropene	12	12	U									
10	trans-1,3-Dichloropropene	12	12	U									
10	Ethylbenzene	12	12	U									
10	2-Hexanone	12	12	U									
10	4-Methyl-2-Pentanone	12	12	U									
10	Methylene Chloride	12	34	B									
10	Styrene	12	12	U									
10	1,1,2,2-Tetrachloroethane	12	12	U									
10	Tetrachloroethane	12	12	U									
10	Toluene	12	12	U									
10	1,1,1-Trichloroethane	12	12	U									
10	1,1,2-Trichloroethane	12	12	U									
10	Trichloroethene	12	12	U									
10	Vinyl Chloride	12	12	U									
10	Total Xylenes	12	12	U									

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CRL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UL - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

SEMI-VOLATILE ORGANIC COMPOUNDS

Phase 1A

Phase 1B

Phase 1C

AR302898

October 1993

SUMMARY OF CLP OR CAS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Semivolatile Organics

CROL	Parameter	Sample Point S1-EL/1A Date Sampled: 09/10/92 Dilution Factor: Percent Moisture: 17 %			Sample Point S1-EL/1A Date Sampled: 09/09/92 Dilution Factor: Percent Moisture: 26 %			Sample Point S2-EL/1A Date Sampled: 09/10/92 Dilution Factor: Percent Moisture: 15 %			Sample Point S2-EL/1A Date Sampled: 09/10/92 Dilution Factor: Percent Moisture: 16 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Acenaphthene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Acenaphthylene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Anthracene	390	46	J	440	440	UJ	380	380	UJ	390	390	UJ
330	Benzo(a)Anthracene	390	140	J	440	440	UJ	380	380	UJ	390	390	UJ
330	4-Bromophenyl-phenylether	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Butylbenzylphthalate	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Carbazole	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	4-Chloro-3-Methylphenol	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	4-Chloroaniline	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	bis(2-Chloroethoxy)Methane	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	bis(2-Chloroethyl)ether	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	2-Chloronaphthalene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	2-Chlorophenol	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	4-Chlorophenyl-phenylether	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Chrysene	390	140	J	440	440	UJ	380	380	UJ	390	390	UJ
330	Dibenz(a,h)Anthracene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Dibenzofuran	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	1,2-Dichlorobenzene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	1,3-Dichlorobenzene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	1,4-Dichlorobenzene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	3,3'-Dichlorobenzidine	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	2,4-Dichlorophenol	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Diethylphthalate	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	2,4-Dimethylphenol	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Dimethyl Phthalate	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Di-n-butylphthalate	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	4,6-Dinitro-2-methylphenol	950	950	UJ	1100	1100	UJ	930	930	UJ	950	950	UJ
800	2,4-Dinitrophenol	950	950	UJ	1100	1100	UJ	930	930	UJ	950	950	UJ
330	2,4-Dinitrotoluene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	2,6-Dinitrotoluene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Di-n-Octyl Phthalate	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	bis(2-Ethylhexyl)Phthalate	390	170	B	440	170	B	380	78	B	530	530	B
330	Fluoranthene	390	330	J	440	59	J	380	380	UJ	390	390	J
330	Benzo(b)Fluoranthene	390	150	J	440	440	UJ	380	380	UJ	390	390	UJ
330	Benzo(k)Fluoranthene	390	68	J	440	440	UJ	380	380	UJ	390	390	UJ
330	Fluorene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Hexachlorobenzene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Hexachlorobutadiene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Hexachlorocyclopentadiene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Hexachloroethane	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low q - Not Applicable

berksorgla.rp1

Golder Associates

AR302899

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Semivolatile Organics

CRQL	Parameter	Sample Point S1-EL/1A Date Sampled: 09/10/92 Dilution Factor: Percent Moisture: 17 %			Sample Point S1-UL/1A Date Sampled: 09/09/92 Dilution Factor: Percent Moisture: 26 %			Sample Point S2-EL/1A Date Sampled: 09/10/92 Dilution Factor: Percent Moisture: 15 %			Sample Point S2-EL/FD Date Sampled: 09/10/92 Dilution Factor: Percent Moisture: 16 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Indeno(1,2,3-cd)Pyrene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Isophorone	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	2-Methylnaphthalene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	2-Methylphenol	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	4-Methylphenol	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Naphthalene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
800	2-Nitroaniline	950	950	UJ	1100	1100	UJ	930	930	UJ	950	950	UJ
800	3-Nitroaniline	950	950	UJ	1100	1100	UJ	930	930	UJ	950	950	UJ
800	4-Nitroaniline	950	950	UJ	1100	1100	UJ	930	930	UJ	950	950	UJ
330	Nitrobenzene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	2-Nitrophenol	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
800	4-Nitrophenol	950	950	UJ	1100	1100	UJ	930	930	UJ	950	950	UJ
330	N-Nitroso-di-n-propylamine	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	N-Nitrosodiphenylamine	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	2,2'-Oxybis(1-Chloropropane)	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
800	Pentachlorophenol	950	950	UJ	1100	1100	UJ	930	930	UJ	950	950	UJ
330	Benzo(g,h,i)Perylene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Phenanthrene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Phenol	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Pyrene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
330	Benzo(a)Pyrene	390	87	J	440	440	J	380	380	UJ	60	60	J
330	1,2,4-Trichlorobenzene	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ
800	2,4,5-Trichlorophenol	950	950	UJ	1100	1100	UJ	930	930	UJ	950	950	UJ
330	2,4,6-Trichlorophenol	390	390	UJ	440	440	UJ	380	380	UJ	390	390	UJ

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low O - Not Applicable

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Semivolatile Organics

CROL	Parameter	Sample Point S2-UL/1A Date Sampled: 09/09/92 Dilution Factor: Percent Moisture: 23 %			Sample Point S3-EL/1A Date Sampled: 09/10/92 Dilution Factor: Percent Moisture: 18 %			Sample Point S3-UL/1A Date Sampled: 09/09/92 Dilution Factor: Percent Moisture: 38 %			Sample Point Date Sampled: Dilution Factor: Percent Moisture: %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Acenaphthene	420	58	J	400	400	UJ	520	520	UJ	520	520	UJ
330	Acenaphthylene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Anthracene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Benzo(a)Anthracene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	4-Bromophenyl-phenylether	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Butylbenzylphthalate	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Carbazole	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	4-Chloro-3-Methylphenol	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	4-Chloroaniline	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	bis(2-Chloroethoxy)Methane	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	bis(2-Chloroethyl)ether	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	2-Chloronaphthalene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	2-Chlorophenol	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	4-Chlorophenyl-phenylether	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Chrysene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Dibenz(a,h)Anthracene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Dibenzofuran	420	50	J	400	400	UJ	520	520	UJ	520	520	UJ
330	1,2-Dichlorobenzene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	1,3-Dichlorobenzene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	1,4-Dichlorobenzene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	3,3'-Dichlorobenzidine	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	2,4-Dichlorophenol	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Diethylphthalate	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Dimethyl Phthalate	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Di-n-butylphthalate	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
800	4,6-Dinitro-2-methylphenol	1000	1000	UJ	970	970	UJ	1300	1300	UJ	1300	1300	UJ
800	2,4-Dinitrophenol	1000	1000	UJ	970	970	UJ	1300	1300	UJ	1300	1300	UJ
330	2,4-Dinitrotoluene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	2,6-Dinitrotoluene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Di-n-Octyl Phthalate	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	bis(2-Ethylhexyl)Phthalate	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Fluoranthene	420	70	B	400	290	B	520	62	B	520	62	B
330	Benzo(b)Fluoranthene	420	91	J	400	400	UJ	520	520	UJ	520	520	UJ
330	Benzo(k)Fluoranthene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Fluorene	420	44	J	400	400	UJ	520	520	UJ	520	520	UJ
330	Hexachlorobenzene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Hexachlorobutadiene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Hexachlorocyclopentadiene	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ
330	Hexachloroethane	420	420	UJ	400	400	UJ	520	520	UJ	520	520	UJ

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers.....
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

AR302901

Matrix: Soil

Semivolatile Organics

CRQL	Parameter	Sample Point S2-UL/1A			Sample Point S3-EL/1A			Sample Point S3-UL/1A			Sample Point Date Sampled: 09/09/92 Dilution Factor: Percent Moisture: 23 %			Sample Point Date Sampled: 09/10/92 Dilution Factor: Percent Moisture: 18 %			Sample Point Date Sampled: 09/09/92 Dilution Factor: Percent Moisture: 38 %			Sample Point Date Sampled: Dilution Factor: Percent Moisture: %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Indeno(1,2,3-cd)Pyrene	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	Isophorene	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	2-Methylnaphthalene	420	95	J	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	2-Methylphenol	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	4-Methylphenol	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	Naphthalene	420	130	J	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
800	2-Nitroaniline	1000	1000	UJ	970	970	UJ	1300	1300	UJ	970	970	UJ	1300	1300	UJ	1300	1300	UJ			
800	3-Nitroaniline	1000	1000	UJ	970	970	UJ	1300	1300	UJ	970	970	UJ	1300	1300	UJ	1300	1300	UJ			
800	4-Nitroaniline	1000	1000	UJ	970	970	UJ	1300	1300	UJ	970	970	UJ	1300	1300	UJ	1300	1300	UJ			
330	Nitrobenzene	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	2-Nitrophenol	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
800	4-Nitrophenol	1000	1000	UJ	970	970	UJ	1300	1300	UJ	970	970	UJ	1300	1300	UJ	1300	1300	UJ			
330	N-Nitroso-di-n-propylamine	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	N-Nitrosodiphenylamine	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	2,2'-Oxybis(1-Chloropropane)	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
800	Pentachlorophenol	1000	1000	UJ	970	970	UJ	1300	1300	UJ	970	970	UJ	1300	1300	UJ	1300	1300	UJ			
330	Benzo(g,h,i)Perylene	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	Phenanthrene	420	160	J	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	Phenol	420	120	J	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	Pyrene	420	52	J	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	Benzo(a)Pyrene	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
330	1,2,4-Trichlorobenzene	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			
800	2,4,5-Trichlorophenol	1000	1000	UJ	970	970	UJ	1300	1300	UJ	970	970	UJ	1300	1300	UJ	1300	1300	UJ			
330	2,4,6-Trichlorophenol	420	420	UJ	400	400	UJ	520	520	UJ	400	400	UJ	520	520	UJ	520	520	UJ			

Notes:

All units are ug/kg

Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data UL - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) Q - Not Applicable

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Semi-volatile Organics

CRQL	Parameter	Sample Point S18G/1B Date Sampled: 06/28/93 Dilution Factor: 1.0 Percent Moisture: 17 %			Sample Point S28G/1B Date Sampled: 06/28/93 Dilution Factor: 1.0 Percent Moisture: 17 %			Sample Point S38G/1B Date Sampled: 06/28/93 Dilution Factor: 1.0 Percent Moisture: 15 %			Sample Point S4EL/1B Date Sampled: 06/29/93 Dilution Factor: 1.0 Percent Moisture: 23 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Acenaphthene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Acenaphthylene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Anthracene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Benzo(a)Anthracene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	4-Bromophenyl-phenylether	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Butylbenzylphthalate	400	400	U	390	44	J	390	390	U	420	420	UJ
330	Carbazole	400	400	U	390	390	U	390	390	U	420	420	UJ
330	4-Chloro-3-Methylphenol	400	400	U	390	390	U	390	390	U	420	420	UJ
330	4-Chloroaniline	400	400	U	390	390	U	390	390	U	420	420	UJ
330	bis(2-Chloroethoxy)Methane	400	400	U	390	390	U	390	390	U	420	420	UJ
330	bis(2-Chloroethyl)ether	400	400	U	390	390	U	390	390	U	420	420	UJ
330	2-Chloronaphthalene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	2-Chlorophenol	400	400	U	390	390	U	390	390	U	420	420	UJ
330	4-Chlorophenyl-phenylether	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Chrysene	400	400	U	390	47	J	390	390	U	420	420	UJ
330	Dibenz(a,h)Anthracene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Dibenzofuran	400	400	U	390	390	U	390	390	U	420	420	UJ
330	1,2-Dichlorobenzene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	1,3-Dichlorobenzene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	1,4-Dichlorobenzene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	3,3'-Dichlorobenzidine	400	400	U	390	390	U	390	390	U	420	420	UJ
330	2,4-Dichlorophenol	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Diethylphthalate	400	400	U	390	390	U	390	390	U	420	420	UJ
330	2,4-Dimethylphenol	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Dimethyl Phthalate	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Di-n-butylphthalate	400	400	U	390	390	U	390	390	U	420	420	UJ
800	6,6-Dinitro-2-methylphenol	960	960	U	950	950	U	940	940	U	1000	1000	UJ
800	2,4-Dinitrophenol	960	960	U	950	950	U	940	940	U	1000	1000	UJ
330	2,4-Dinitrotoluene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	2,6-Dinitrotoluene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Di-n-Octyl Phthalate	400	400	U	390	390	U	390	390	U	420	420	UJ
330	bis(2-Ethylhexyl)Phthalate	400	180	B	390	61	B	390	120	B	420	420	UJ
330	Fluoranthene	400	400	U	390	68	J	390	390	U	420	420	UJ
330	Benzo(b)Fluoranthene	400	400	U	390	70	JN	390	390	U	420	420	UJ
330	Benzo(k)Fluoranthene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Fluorene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Hexachlorobenzene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Hexachlorobutadiene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Hexachlorocyclopentadiene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Hexachloroethane	400	400	U	390	390	U	390	390	U	420	420	UJ

Notes:

All units are ug/kg
 Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
 The Qual column indicates the qualifier following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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AR302903

Matrix: Soil

Semi-volatile Organics

CROL	Parameter	Sample Point S18G/18 Date Sampled: 06/28/93 Dilution Factor: 1.0 Percent Moisture: 17 %			Sample Point S28G/18 Date Sampled: 06/28/93 Dilution Factor: 1.0 Percent Moisture: 17 %			Sample Point S38G/18 Date Sampled: 06/28/93 Dilution Factor: 1.0 Percent Moisture: 15 %			Sample Point S4EL/18 Date Sampled: 06/29/93 Dilution Factor: 1.0 Percent Moisture: 23 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Indeno(1,2,3-cd)Pyrene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Isophorone	400	400	U	390	390	U	390	390	U	420	420	UJ
330	2-Methylnaphthalene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	2-Methylphenol	400	400	U	390	390	U	390	390	U	420	420	UJ
330	4-Methylphenol	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Naphthalene	400	400	U	390	390	U	390	390	U	420	420	UJ
800	2-Nitroaniline	960	960	U	950	950	U	940	940	U	1000	1000	UJ
800	3-Nitroaniline	960	960	U	950	950	U	940	940	U	1000	1000	UJ
800	4-Nitroaniline	960	960	U	950	950	U	940	940	U	1000	1000	UJ
330	Nitrobenzene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	2-Nitrophenol	400	400	U	390	390	U	390	390	U	420	420	UJ
800	4-Nitrophenol	960	960	U	950	950	U	940	940	U	1000	1000	UJ
330	N-Nitroso-di-n-propylamine	400	400	U	390	390	U	390	390	U	420	420	UJ
330	N-Nitrosodiphenylamine	400	400	U	390	390	U	390	390	U	420	420	UJ
330	2,2'-Oxybis(1-Chloropropane)	400	400	U	390	390	U	390	390	U	420	420	UJ
800	Pentachlorophenol	960	960	U	950	950	U	940	940	U	1000	1000	UJ
330	Benzo(g,h,i)Perylene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Phenanthrene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Phenol	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Pyrene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	Benzo(a)Pyrene	400	400	U	390	390	U	390	390	U	420	420	UJ
330	1,2,4-Trichlorobenzene	400	400	U	390	390	U	390	390	U	420	420	UJ
800	2,4,5-Trichlorophenol	960	960	U	950	950	U	940	940	U	1000	1000	UJ
330	2,4,6-Trichlorophenol	400	400	U	390	390	U	390	390	U	420	420	UJ

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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AR302904

SUMMARY OF CLP ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Semivolatile Organics

CROL	Parameter	Sample Point S4EL/1B			Sample Point S4WL/1B			Sample Point S5WL/1B		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Acenaphthene	430	430	UJ	380	380	UJ	360	360	U
330	Acenaphthylene	430	430	UJ	380	380	UJ	360	360	U
330	Anthracene	430	430	UJ	380	380	UJ	360	360	U
330	Benzo(a)Anthracene	430	430	UJ	380	380	UJ	360	360	U
330	4-Bromophenyl-phenylether	430	430	UJ	380	380	UJ	360	360	U
330	Butylbenzylphthalate	430	57	J	380	63	J	360	360	U
330	Carbazole	430	430	UJ	380	380	UJ	360	360	U
330	4-Chloro-3-Methylphenol	430	430	UJ	380	380	UJ	360	360	U
330	4-Chloroaniline	430	430	UJ	380	380	UJ	360	360	U
330	bis(2-Chloroethoxy)Methane	430	430	UJ	380	380	UJ	360	360	U
330	bis(2-Chloroethyl)ether	430	430	UJ	380	380	UJ	360	360	U
330	2-Chloronaphthalene	430	430	UJ	380	380	UJ	360	360	U
330	2-Chlorophenol	430	430	UJ	380	380	UJ	360	360	U
330	4-Chlorophenyl-phenylether	430	430	UJ	380	380	UJ	360	360	U
330	Chrysene	430	430	UJ	380	380	UJ	360	360	U
330	Dibenz(a,h)Anthracene	430	430	UJ	380	380	UJ	360	360	U
330	Dibenzofuran	430	430	UJ	380	380	UJ	360	360	U
330	1,2-Dichlorobenzene	430	430	UJ	380	380	UJ	360	360	U
330	1,3-Dichlorobenzene	430	430	UJ	380	380	UJ	360	360	U
330	1,4-Dichlorobenzene	430	430	UJ	380	380	UJ	360	360	U
330	3,3'-Dichlorobenzidine	430	430	UJ	380	380	UJ	360	360	U
330	2,4-Dichlorophenol	430	430	UJ	380	380	UJ	360	360	U
330	Diethylphthalate	430	400	B	380	380	UJ	360	360	U
330	2,4-Dimethylphenol	430	430	UJ	380	380	UJ	360	360	U
330	Dimethyl Phthalate	430	430	UJ	380	380	UJ	360	360	U
330	Di-n-butylphthalate	430	430	UJ	380	380	UJ	360	360	U
800	4,6-Dinitro-2-methylphenol	1000	1000	UJ	910	910	UJ	860	860	U
800	2,4-Dinitrophenol	1000	1000	UJ	910	910	UJ	860	860	U
330	2,4-Dinitrotoluene	430	430	UJ	380	380	UJ	360	360	U
330	2,6-Dinitrotoluene	430	430	UJ	380	380	UJ	360	360	U
330	Di-n-Octyl Phthalate	430	430	UJ	380	54	J	360	360	U
330	bis(2-Ethylhexyl)Phthalate	430	120	B	380	120	B	360	41	B
330	Fluoranthene	430	430	UJ	380	380	UJ	360	360	U
330	Benzo(b)Fluoranthene	430	430	UJ	380	380	UJ	360	360	U
330	Benzo(k)Fluoranthene	430	430	UJ	380	380	UJ	360	360	U
330	Fluorene	430	430	UJ	380	380	UJ	360	360	U
330	Hexachlorobenzene	430	430	UJ	380	380	UJ	360	360	U
330	Hexachlorobutadiene	430	430	UJ	380	380	UJ	360	360	U
330	Hexachlorocyclopentadiene	430	430	UJ	380	380	UJ	360	360	U
330	Hexachloroethane	430	430	UJ	380	380	UJ	360	360	U

Notes:

All units are ug/kg
 Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
 The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data
 J - Estimated (Semi-quantitative) Data
 B - Present in associated blanks (Semi-quantitative Data)
 K - Biased High (Semi-quantitative) Data
 L - Biased Low (Semi-quantitative) Data
 UL - Not Detected/Biased Low
 UJ - Not Detected/Estimated Data
 U - Not Detected/Quantitative Data
 N - Tentative Identification
 R - Unusable Data
 Q - Not Applicable

AR302905

Matrix: Soil

Semi-volatile Organics

CQL	Parameter	Sample Point S4EL/FD			Sample Point S4UL/1B			Sample Point S5EL/1B		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Indeno(1,2,3-cd)Pyrene	430	430	UJ	360	380	UJ	360	360	U
330	Isophorone	430	430	UJ	360	380	UJ	360	360	U
330	2-Methylnaphthalene	430	430	UJ	360	380	UJ	360	360	U
330	2-Methylphenol	430	430	UJ	360	380	UJ	360	360	U
330	4-Methylphenol	430	430	UJ	360	380	UJ	360	360	U
330	Naphthalene	430	430	UJ	360	380	UJ	360	360	U
800	2-Nitroaniline	1000	1000	UJ	910	910	UJ	860	860	U
800	3-Nitroaniline	1000	1000	UJ	910	910	UJ	860	860	U
800	4-Nitroaniline	1000	1000	UJ	910	910	UJ	860	860	U
330	Nitrobenzene	430	430	UJ	360	380	UJ	360	360	U
330	2-Nitrophenol	430	430	UJ	360	380	UJ	360	360	UJ
800	4-Nitrophenol	1000	1000	UJ	910	910	UJ	860	860	U
330	N-Nitroso-di-n-propylamine	430	430	UJ	360	380	UJ	360	360	U
330	N-Nitrosodiphenylamine	430	430	UJ	360	380	UJ	360	360	U
330	2,2'-Oxybis(1-Chloropropane)	430	430	UJ	360	380	UJ	360	360	U
800	Pentachlorophenol	1000	1000	UJ	910	910	UJ	860	110	U
330	Benzo(g,h,i)Perylene	430	430	UJ	360	380	UJ	360	360	U
330	Phenanthrene	430	430	UJ	360	380	UJ	360	360	U
330	Phenol	430	430	UJ	360	380	UJ	360	360	U
330	Pyrene	430	430	UJ	360	380	UJ	360	360	U
330	Benzo(a)Pyrene	430	430	UJ	360	380	UJ	360	360	U
330	1,2,4-Trichlorobenzene	430	430	UJ	360	380	UJ	360	360	U
800	2,4,5-Trichlorophenol	1000	1000	UJ	910	910	UJ	860	360	U
330	2,4,6-Trichlorophenol	430	430	UJ	360	380	UJ	360	360	U

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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AR302906

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Semivolatile Organics

CROL	Parameter	Sample Point S6EL/1B			Sample Point			Sample Point			Sample Point		
		SOL	Result	Qual	Date Sampled: 06/29/93 Dilution Factor: 1.0 Percent Moisture: 5 %	SOL	Result	Qual	Date Sampled: Dilution Factor: Percent Moisture:	SOL	Result	Qual	Date Sampled: Dilution Factor: Percent Moisture:
330	Acenaphthene	340	340	UJ									
330	Acenaphthylene	340	340	UJ									
330	Anthracene	340	340	UJ									
330	Benzo(a)Anthracene	340	340	UJ									
330	4-Bromophenyl-phenylether	340	340	UJ									
330	Butylbenzylphthalate	340	340	UJ									
330	Carbazole	340	340	UJ									
330	4-Chloro-3-Methylphenol	340	340	UJ									
330	4-Chloroaniline	340	340	UJ									
330	bis(2-Chloroethoxy)Methane	340	340	UJ									
330	bis(2-Chloroethyl)ether	340	340	UJ									
330	2-Chloronaphthalene	340	340	UJ									
330	2-Chlorophenol	340	340	UJ									
330	4-Chlorophenyl-phenylether	340	340	UJ									
330	Chrysene	340	340	UJ									
330	Dibenz(a,h)Anthracene	340	340	UJ									
330	Dibenzofuran	340	340	UJ									
330	1,2-Dichlorobenzene	340	340	UJ									
330	1,3-Dichlorobenzene	340	340	UJ									
330	1,4-Dichlorobenzene	340	340	UJ									
330	3,3'-Dichlorobenzidine	340	340	UJ									
330	2,4-Dichlorophenol	340	340	UJ									
330	Diethylphthalate	340	340	UJ									
330	2,4-Dimethylphenol	340	340	UJ									
330	Dimethyl Phthalate	340	340	UJ									
330	Di-n-butylphthalate	340	340	UJ									
800	4,6-Dinitro-2-methylphenol	830	830	UJ									
800	2,4-Dinitrophenol	830	830	UJ									
330	2,4-Dinitrotoluene	340	340	UJ									
330	2,6-Dinitrotoluene	340	340	UJ									
330	Di-n-Octyl Phthalate	340	340	UJ									
330	bis(2-Ethylhexyl)Phthalate	340	340	UJ									
330	Fluoranthene	340	340	UJ									
330	Benzo(b)Fluoranthene	340	340	UJ									
330	Benzo(k)Fluoranthene	340	340	UJ									
330	Fluorene	340	340	UJ									
330	Hexachlorobenzene	340	340	UJ									
330	Hexachlorobutadiene	340	340	UJ									
330	Hexachlorocyclopentadiene	340	340	UJ									
330	Hexachloroethane	340	340	UJ									

Notes:

All units are ug/kg

Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

berks390.rpt

Golder Associates.

AR302907

Matrix: Soil

Semi-volatile Organics

CRQL	Parameter	Sample Point S6EL/1B			Sample Point			Sample Point			Sample Point			
		Date Sampled: 06/29/93	Dilution Factor: 1.0	Percent Moisture: 5 %	Date Sampled: Dilution Factor: Percent Moisture:	%	SQL	Result	Qual	Date Sampled: Dilution Factor: Percent Moisture:	%	SQL	Result	Qual
330	Indeno(1,2,3-cd)Pyrene	340					340							
330	Isophorone	340					340							
330	2-Methylnaphthalene	340					340							
330	2-Methylphenol	340					340							
330	4-Methylphenol	340					340							
330	Naphthalene	340					340							
800	2-Nitroaniline	830					830							
800	3-Nitroaniline	830					830							
330	4-Nitroaniline	340					340							
330	Nitrobenzene	340					340							
330	2-Nitrophenol	340					340							
800	4-Nitrophenol	830					830							
330	N-Nitroso-di-n-propylamine	340					340							
330	N-Nitrosodiphenylamine	340					340							
330	2,2'-Oxybis(1-Chloropropane)	830					830							
800	Pentachlorophenol	340					340							
330	Benzo(g,h,i)Perylene	340					340							
330	Phenanthrene	340					340							
330	Pyrene	340					340							
330	Benzo(a)Pyrene	340					340							
330	1,2,4-Trichlorobenzene	340					340							
800	2,4,5-Trichlorophenol	830					830							
330	2,4,6-Trichlorophenol	340					340							

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low UL - Not Detected/Biased Low Q - Not Applicable

January 1996

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1C
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Semivolatile Organics

CROL	Parameter	Sample Point S6-UL-1C			Sample Point S7-EL-1C			Sample Point S7-UL-1C			Sample Point S8-EL-1C		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Acenaphthene	420	420	U	420	420	U	400	400	U	390	390	U
330	Acenaphthylene	420	420	U	420	420	U	400	400	U	390	390	U
330	Anthracene	420	420	U	420	420	U	400	400	U	390	390	U
330	Benzo(a)Anthracene	420	420	U	420	420	U	400	400	U	390	390	U
330	4-Bromophenyl-phenylether	420	420	U	420	420	U	400	400	U	390	390	U
330	Butylbenzylphthalate	420	420	U	420	420	U	400	400	U	390	390	U
330	Carbazole	420	420	U	420	420	U	400	400	U	390	390	U
330	4-Chloro-3-Methylphenol	420	420	U	420	420	U	400	400	U	390	390	U
330	6-Chloroaniline	420	420	U	420	420	U	400	400	U	390	390	U
330	bis(2-Chloroethoxy)Methane	420	420	U	420	420	U	400	400	U	390	390	U
330	bis(2-Chloroethyl)ether	420	420	U	420	420	U	400	400	U	390	390	U
330	2-Chloronaphthalene	420	420	U	420	420	U	400	400	U	390	390	U
330	2-Chlorophenol	420	420	U	420	420	U	400	400	U	390	390	U
330	4-Chlorophenyl-phenylether	420	420	U	420	420	U	400	400	U	390	390	U
330	Chrysene	420	420	U	420	420	U	400	400	U	390	390	U
330	Dibenz(a,h)Anthracene	420	420	U	420	420	U	400	400	U	390	390	U
330	Dibenzofuran	420	420	U	420	420	U	400	400	U	390	390	U
330	1,2-Dichlorobenzene	420	420	U	420	420	U	400	400	U	390	390	U
330	1,3-Dichlorobenzene	420	420	U	420	420	U	400	400	U	390	390	U
330	1,4-Dichlorobenzene	420	420	U	420	420	U	400	400	U	390	390	U
330	3,3'-Dichlorobenzidine	420	420	U	420	420	U	400	400	U	390	390	U
330	2,4-Dichlorophenol	420	420	U	420	420	U	400	400	U	390	390	U
330	Diethylphthalate	420	420	U	420	420	U	400	400	U	390	390	U
330	Dimethyl Phthalate	420	420	U	420	420	U	400	400	U	390	390	U
330	Di-n-butylphthalate	420	52	B	418	42	B	400	70	B	390	66	B
800	4,6-Dinitro-2-methylphenol	1000	1000	U	1000	1000	U	970	970	U	950	950	U
800	2,4-Dinitrophenol	1000	1000	U	1000	1000	U	970	970	U	950	950	U
330	2,4-Dinitrotoluene	420	420	U	420	420	U	400	400	U	390	390	U
330	2,6-Dinitrotoluene	420	420	U	420	420	U	400	400	U	390	390	U
330	Di-n-Octyl Phthalate	420	420	U	420	420	U	400	400	U	390	390	U
330	bis(2-Ethylhexyl)Phthalate	420	61	B	420	420	U	400	130	B	390	390	U
330	Fluoranthene	420	46	J	420	420	U	400	46	J	390	390	U
330	Benzo(b)Fluoranthene	420	420	U	420	420	U	400	400	U	390	390	U
330	Benzo(k)Fluoranthene	420	420	U	420	420	U	400	400	U	390	390	U
330	Fluorene	420	420	U	420	420	U	400	400	U	390	390	U
330	Hexachlorobenzene	420	420	U	420	420	U	400	400	U	390	390	U
330	Hexachlorobutadiene	420	420	U	420	420	U	400	400	U	390	390	U

Notes:

All units are ug/kg
 Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
 The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low a - Not Applicable

AR302909

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1C
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Semi-volatile Organics

CROL	Parameter	Sample Point S6-UL-1C Date Sampled: 12/17/93 Dilution Factor: 1.0 Percent Moisture: 21 %			Sample Point S7-EL-1C Date Sampled: 12/17/93 Dilution Factor: 1.0 Percent Moisture: 21 %			Sample Point S7-UL-1C Date Sampled: 12/17/93 Dilution Factor: 1.0 Percent Moisture: 18 %			Sample Point S8-EL-1C Date Sampled: 12/17/93 Dilution Factor: 1.0 Percent Moisture: 16 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Hexachlorocyclopentadiene	420	420	U	420	420	U	400	400	U	390	390	U
330	Hexachloroethane	420	420	U	420	420	U	400	400	U	390	390	U
330	Indeno(1,2,3-cd)Pyrene	420	420	U	420	420	U	400	400	U	390	390	U
330	Isophorene	420	420	U	420	420	U	400	400	U	390	390	U
330	2-Methylnaphthalene	420	420	U	420	420	U	400	400	U	390	390	U
330	2-Methylphenol	420	420	U	420	420	U	400	400	U	390	390	U
330	4-Methylphenol	420	420	U	420	420	U	400	400	U	390	390	U
330	Naphthalene	420	420	U	420	420	U	400	400	U	390	390	U
800	2-Nitroaniline	1000	1000	U	1000	1000	U	970	970	U	950	950	U
800	3-Nitroaniline	1000	1000	U	1000	1000	U	970	970	U	950	950	U
800	4-Nitroaniline	1000	1000	U	1000	1000	U	970	970	U	950	950	U
330	Nitrobenzene	420	420	U	420	420	U	400	400	U	390	390	U
330	2-Nitrophenol	420	420	U	420	420	U	400	400	U	390	390	U
800	4-Nitrophenol	1000	1000	U	1000	1000	U	970	970	U	950	950	U
330	N-Nitroso-di-n-propylamine	420	420	U	420	420	U	400	400	U	390	390	U
330	N-Nitrosodiphenylamine	420	420	U	420	420	U	400	400	U	390	390	U
330	2,2'-Oxybis(1-Chloropropane)	420	420	U	420	420	U	400	400	U	390	390	U
800	Pentachlorophenol	1000	1000	U	1000	1000	U	970	970	U	950	950	U
330	Benzo(g,h,i)perylene	420	420	U	420	420	U	400	400	U	390	390	U
330	Phenanthrene	420	57	J	420	420	U	400	400	U	390	390	U
330	Pyrene	420	420	U	420	420	U	400	400	U	390	390	U
330	Benzo(a)Pyrene	420	420	U	420	420	U	400	400	U	390	390	U
330	1,2,4-Trichlorobenzene	420	420	U	420	420	U	400	400	U	390	390	U
800	2,4,5-Trichlorophenol	1000	1000	U	1000	1000	U	970	970	U	950	950	U
330	2,4,6-Trichlorophenol	420	420	U	420	420	U	400	400	U	390	390	U

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:

A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data U - Not Detected/Estimated Data M - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302910

January 1994

SUMMARY OF CLP ANALYSES - PHASE 1C
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Semivolatile Organics

CROL	Parameter	Sample Point S8-UL-1C Date Sampled: 12/17/93 Dilution Factor: 1.0 Percent Moisture: 15 %			Sample Point S9-EL-1C Date Sampled: 12/17/93 Dilution Factor: 1.0 Percent Moisture: 19 %			Sample Point S9-EL-FD Date Sampled: 12/17/93 Dilution Factor: 2.0 Percent Moisture: 21 %			Sample Point S10-EL-1C Date Sampled: 12/17/93 Dilution Factor: 1.0 Percent Moisture: 24 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Acenaphthene	380	380	U	410	400	J	830	360	J	430	430	U
330	Acenaphthylene	380	380	U	410	410	U	830	830	U	430	430	U
330	Anthracene	380	380	UJ	410	640	A	830	670	J	430	430	U
330	Benzo(a)Anthracene	380	380	UJ	410	1500	A	830	2200	A	430	430	U
330	4-Bromophenyl-phenylether	380	380	U	410	410	U	830	830	U	430	430	U
330	Butylbenzylphthalate	380	380	UJ	410	410	U	830	830	U	430	430	U
330	Carbazole	380	380	UJ	410	360	J	830	360	J	430	430	U
330	4-Chloro-3-Methylphenol	380	380	U	410	410	U	830	830	U	430	430	U
330	4-Chloroaniline	380	380	U	410	410	U	830	830	U	430	430	U
330	bis(2-Chloroethoxy)Methane	380	380	U	410	410	U	830	830	U	430	430	U
330	bis(2-Chloroethyl)Ether	380	380	U	410	410	U	830	830	U	430	430	U
330	2-Chloronaphthalene	380	380	U	410	410	U	830	830	U	430	430	U
330	2-Chlorophenol	380	380	U	410	410	U	830	830	U	430	430	U
330	4-Chlorophenyl-phenylether	380	380	U	410	410	U	830	830	U	430	430	U
330	Chrysene	380	380	UJ	410	1300	A	830	1700	A	430	430	U
330	Dibenz(a,h)Anthracene	380	380	UJ	410	190	JN	830	320	J	430	430	U
330	Dibenzofuran	380	380	U	410	280	J	830	240	J	430	430	U
330	1,2-Dichlorobenzene	380	380	U	410	410	U	830	830	U	430	430	U
330	1,3-Dichlorobenzene	380	380	U	410	410	U	830	830	U	430	430	U
330	1,4-Dichlorobenzene	380	380	U	410	410	U	830	830	U	430	430	U
330	3,3'-Dichlorobenzidine	380	380	UJ	410	410	U	830	830	U	430	430	U
330	2,4-Dichlorophenol	380	380	U	410	410	U	830	830	U	430	430	U
330	Diethylphthalate	380	380	U	410	410	U	830	830	U	430	430	U
330	Dimethyl Phthalate	380	380	U	410	410	U	830	830	U	430	430	U
330	Di-n-butylphthalate	380	74	B	410	54	B	830	830	U	430	430	U
800	4,6-Dinitro-2-methylphenol	930	930	U	980	980	U	2000	2000	U	1000	1000	B
800	2,4-Dinitrophenol	930	930	U	980	980	U	2000	2000	U	1000	1000	U
330	2,4-Dinitrotoluene	380	380	U	410	410	U	830	830	U	430	430	U
330	2,6-Dinitrotoluene	380	380	U	410	410	U	830	830	U	430	430	U
330	Di-n-Octyl Phthalate	380	380	UJ	410	410	U	830	830	U	430	430	U
330	bis(2-Ethylhexyl)Phthalate	380	73	B	410	170	B	830	830	A	430	430	U
330	Fluoranthene	380	380	UJ	410	2600	A	830	3700	JN	430	430	U
330	Benzo(b)Fluoranthene	380	380	UJ	410	1700	JN	830	2500	JN	430	430	U
330	Benzo(k)Fluoranthene	380	380	UJ	410	1700	JN	830	2500	JN	430	430	U
330	Fluorene	380	380	U	410	470	A	830	450	J	430	430	U
330	Hexachlorobenzene	380	380	U	410	410	U	830	830	U	430	430	U
330	Hexachlorobutadiene	380	380	U	410	410	U	830	830	U	430	430	U

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

AR302911

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1C
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Semi-volatile Organics

CROL	Parameter	Sample Point S8-UL-1C			Sample Point S9-EL-1C			Sample Point S9-EL-1D			Sample Point S10-EL-1C		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Hexachlorocyclopentadiene	380	380	U	410	410	U	830	830	U	430	430	U
330	Hexachloroethane	380	380	U	410	410	U	830	830	U	430	430	U
330	Indeno(1,2,3-cd)pyrene	380	380	U	410	580	J	830	1100	JM	430	430	U
330	Isophorone	380	380	U	410	410	U	830	830	U	430	430	U
330	2-Methylnaphthalene	380	380	U	410	150	J	830	89	J	430	430	U
330	2-Methylphenol	380	380	U	410	410	U	830	830	U	430	430	U
330	4-Methylphenol	380	380	U	410	410	U	830	830	U	430	430	U
330	Naphthalene	380	380	U	410	450	A	830	350	J	430	430	U
800	2-Nitroaniline	930	930	U	980	980	U	2000	2000	U	1000	1000	U
800	3-Nitroaniline	930	930	U	980	980	U	2000	2000	U	1000	1000	U
800	4-Nitroaniline	930	930	U	980	980	U	2000	2000	U	1000	1000	U
330	Nitrobenzene	380	380	U	410	410	U	830	830	U	430	430	U
330	2-Nitrophenol	380	380	U	410	410	U	830	830	U	430	430	U
800	4-Nitrophenol	930	930	U	980	980	U	2000	2000	U	1000	1000	U
330	N-Nitroso-di-n-propylamine	380	380	U	410	410	U	830	830	U	430	430	U
330	N-Nitrosodiphenylamine	380	380	U	410	410	U	830	830	U	430	430	U
330	2,2'-Oxybis(1-Chloropropane)	380	380	U	410	410	U	830	830	U	430	430	U
800	Pentachlorophenol	930	930	U	980	980	U	2000	2000	U	1000	1000	U
330	Benzo(g,h,i)perylene	380	380	U	410	630	J	830	1100	JM	430	430	U
330	Phenanthrene	380	380	U	410	2500	A	830	3300	A	430	430	U
330	Phenol	380	380	U	410	410	U	830	830	U	430	430	U
330	Pyrene	380	380	U	410	2000	J	830	3400	J	430	430	U
330	Benzo(a)Pyrene	380	380	U	410	910	A	830	1500	A	430	430	U
330	1,2,4-Trichlorobenzene	380	380	U	410	410	U	830	830	U	430	430	U
800	2,4,5-Trichlorophenol	930	930	U	980	980	U	2000	2000	U	1000	1000	U
330	2,4,6-Trichlorophenol	380	380	U	410	410	U	830	830	U	430	430	U

Notes:

All units are ug/kg
 Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
 The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low O - Not Applicable

AR302912

January 1994

SUMMARY OF CLP ON ⁹CS ANALYSES - PHASE 1C
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Semivolatile Organics

CRQL	Parameter	Sample Point S11-EL-1C			Sample Point			Sample Point			Sample Point		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Acenaphthene	390	390	U									
330	Acenaphthylene	390	390	U									
330	Anthracene	390	390	U									
330	Benzo(a)Anthracene	390	390	U									
330	4-Bromophenyl-phenylether	390	390	U									
330	Butylbenzylphthalate	390	390	U									
330	Carbazole	390	390	U									
330	4-Chloro-3-Methylphenol	390	390	U									
330	4-Chloroaniline	390	390	U									
330	bis(2-Chloroethoxy)Methane	390	390	U									
330	bis(2-Chloroethyl)ether	390	390	U									
330	2-Chlorophenol	390	390	U									
330	4-Chlorophenyl-phenylether	390	390	U									
330	Chrysene	390	390	U									
330	Dibenz(a,h)Anthracene	390	390	U									
330	Dibenzofuran	390	390	U									
330	1,2-Dichlorobenzene	390	390	U									
330	1,3-Dichlorobenzene	390	390	U									
330	1,4-Dichlorobenzene	390	390	U									
330	3,3'-Dichlorobenzidine	390	390	U									
330	2,4-Dichlorophenol	390	390	U									
330	Diethylphthalate	390	390	U									
330	Dimethyl Phthalate	390	390	U									
330	Di-n-butylphthalate	390	390	U									
800	4,6-Dinitro-2-methylphenol	950	950	U									
800	2,4-Dinitrophenol	950	950	U									
330	2,6-Dinitrotoluene	390	390	U									
330	2,4-Dinitrotoluene	390	390	U									
330	Di-n-Octyl Phthalate	390	390	U									
330	bis(2-Ethylhexyl)Phthalate	390	390	U									
330	Fluoranthene	390	390	U									
330	Benzo(b)Fluoranthene	390	390	U									
330	Benzo(k)Fluoranthene	390	390	U									
330	Fluorene	390	390	U									
330	Hexachlorobenzene	390	390	U									
330	Hexachlorobutadiene	390	390	U									

Notes:

All units are ug/kg

Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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Golder Associates

Page 5

AR302913

Semivolatile Organics

Notes:
All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:	K - Biased High (Semi)quantitative) Data	UJ - Not Detected/Estimated Data	W - Tentative Identification
A - Acceptable (Quantitative) Data	L - Biased Low (Semi)quantitative) Data	UJ - Not Detected/Quantitative Data	R - Unusable Data
J - Estimated (Semi)quantitative) Data		UL - Not Detected/Biased Low	Q - Not Applicable
B - Present in associated blanks (Semi)quantitative Data)			

AR302914

PESTICIDES/PCBs

Phase 1A

AR302915

ober 1993

SUMMARY OF CLP ORG...CS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Pesticide Organics

CRQL	Parameter	Sample Point S1-EL/1A Date Sampled: 09/10/92 Dilution Factor: 1.0 Percent Moisture: 17 %			Sample Point S1-EL/1A Date Sampled: 09/09/92 Dilution Factor: 1.0 Percent Moisture: 26 %			Sample Point S2-EL/1A Date Sampled: 09/10/92 Dilution Factor: 1.0 Percent Moisture: 15 %			Sample Point S2-EL/FD Date Sampled: 09/10/92 Dilution Factor: 1.0 Percent Moisture: 16 %		
		SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual
1.7	Aldrin	2.0	2.0	UL	2.3	2.3	UL	2.0	2.0	UL	2.0	2.0	UL
33.0	Aroclor-1016	40	40	UL	44	44	UL	38	38	UL	39	39	UL
67.0	Aroclor-1221	81	81	UL	90	90	UL	78	78	UL	80	80	UL
33.0	Aroclor-1232	40	40	UL	44	44	UL	38	38	UL	39	39	UL
33.0	Aroclor-1242	40	40	UL	44	44	UL	38	38	UL	39	39	UL
33.0	Aroclor-1248	40	40	UL	44	44	UL	38	38	UL	39	39	UL
33.0	Aroclor-1254	40	40	UL	44	44	UL	38	38	UL	39	39	UL
33.0	Aroclor-1260	40	40	UL	44	44	UL	38	38	UL	39	39	UL
1.7	alpha-BHC	2.0	2.0	UL	2.3	2.3	UL	2.0	2.0	UL	2.0	2.0	UL
1.7	beta-BHC	2.0	2.0	UL	2.3	2.3	UL	2.0	2.0	UL	2.0	2.0	UL
1.7	delta-BHC	2.0	2.0	UL	2.3	2.3	UL	2.0	2.0	UL	2.0	2.0	UL
1.7	gamma-BHC (Lindane)	2.0	2.0	UL	2.3	2.3	UL	2.0	2.0	UL	2.0	2.0	UL
1.7	alpha-Chlordane	2.0	2.0	UL	2.3	2.3	UL	2.0	2.0	UL	2.0	2.0	UL
1.7	gamma-Chlordane	2.0	2.0	UL	2.3	2.3	UL	2.0	2.0	UL	2.0	2.0	UL
3.3	4,4'-DDD	4.0	4.0	UL	4.4	4.4	UL	3.8	3.8	UL	3.9	3.9	UL
3.3	4,4'-DDE	4.0	4.0	UL	4.4	4.4	UL	3.8	3.8	UL	3.9	3.9	UL
3.3	4,4'-DDT	4.0	4.0	UL	4.4	4.4	UL	3.8	3.8	UL	3.9	3.9	UL
3.3	Dieldrin	4.0	4.0	UL	4.4	4.4	UL	3.8	3.8	UL	3.9	3.9	UL
1.7	Endosulfan I	2.0	2.0	UL	2.3	2.3	UL	2.0	2.0	UL	2.0	2.0	UL
3.3	Endosulfan II	4.0	4.0	UL	4.4	4.4	UL	3.8	3.8	UL	3.9	3.9	UL
3.3	Endosulfan Sulfate	4.0	4.0	UL	4.4	4.4	UL	3.8	3.8	UL	3.9	3.9	UL
3.3	Endrin	4.0	4.0	UL	4.4	4.4	UL	3.8	3.8	UL	3.9	3.9	UL
3.3	Endrin Aldehyde	4.0	4.0	UL	4.4	4.4	UL	3.8	3.8	UL	3.9	3.9	UL
3.3	Endrin Ketone	4.0	4.0	UL	4.4	4.4	UL	3.8	3.8	UL	3.9	3.9	UL
-1.7	Heptachlor	2.0	2.0	UL	2.3	2.3	UL	2.0	2.0	UL	2.0	2.0	UL
1.7	Heptachlor Epoxide	2.0	2.0	UL	2.3	2.3	UL	2.0	2.0	UL	2.0	2.0	UL
17.0	Methoxychlor	20	20	UL	23	23	UL	20	20	UL	20	20	UL
170.0	Toxaphene	200	200	UL	230	230	UL	200	200	UL	200	200	UL

Notes:

All units are ug/kg
Sample Quantitation Limit (SOL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302916

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Pesticide Organics

CRQL	Parameter	Sample Point S2-WL/1A			Sample Point S3-EL/1A			Sample Point S3-WL/1A			Sample Point	
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	Date Sampled: Dilution Factor: Percent Moisture:	Result SQL
1.7	Aldrin	2.2	2.2	UL	2.1	2.1	UL	2.7	2.7	UL	09/09/92 1.0 38	2.7
33.0	Aroclor-1016	42	42	UL	40	40	UL	53	53	UL		53
67.0	Aroclor-1221	86	86	UL	82	82	UL	110	110	UL		110
33.0	Aroclor-1232	42	42	UL	40	40	UL	53	53	UL		53
33.0	Aroclor-1242	42	42	UL	40	40	UL	53	53	UL		53
33.0	Aroclor-1248	42	270	UL	40	40	UL	53	53	UL		53
33.0	Aroclor-1254	42	42	UL	40	40	UL	53	53	UL		53
33.0	Aroclor-1260	42	42	UL	40	40	UL	53	53	UL		53
1.7	alpha-BHC	2.2	2.2	UL	2.1	2.1	UL	2.7	2.7	UL		2.7
1.7	beta-BHC	2.2	2.2	UL	2.1	2.1	UL	2.7	2.7	UL		2.7
1.7	delta-BHC	2.2	2.2	UL	2.1	2.1	UL	2.7	2.7	UL		2.7
1.7	gamma-BHC (Lindene)	2.2	2.2	UL	2.1	2.1	UL	2.7	2.7	UL		2.7
1.7	alpha-Chlordane	2.2	2.2	UL	2.1	2.1	UL	2.7	2.7	UL		2.7
1.7	gamma-Chlordane	2.2	2.2	UL	2.1	2.1	UL	2.7	2.7	UL		2.7
3.3	4,4'-DDD	4.2	4.2	UL	4.0	4.0	UL	5.3	5.3	UL		5.3
3.3	4,4'-DDE	4.2	4.2	UL	4.0	4.0	UL	5.3	5.3	UL		5.3
3.3	4,4'-DDT	4.2	4.2	UL	4.0	4.0	UL	5.3	5.3	UL		5.3
3.3	Dieldrin	4.2	4.2	UL	4.0	4.0	UL	5.3	5.3	UL		5.3
1.7	Endosulfan I	2.2	2.2	UL	2.1	2.1	UL	2.7	2.7	UL		2.7
3.3	Endosulfan II	4.2	4.2	UL	4.0	4.0	UL	5.3	5.3	UL		5.3
3.3	Endosulfan Sulfate	4.2	4.2	UL	4.0	4.0	UL	5.3	5.3	UL		5.3
3.3	Endrin	4.2	4.2	UL	4.0	4.0	UL	5.3	5.3	UL		5.3
3.3	Endrin Aldehyde	4.2	4.2	UL	4.0	4.0	UL	5.3	5.3	UL		5.3
3.3	Endrin Ketone	4.2	4.2	UL	4.0	4.0	UL	5.3	5.3	UL		5.3
1.7	Heptachlor	2.2	2.2	UL	2.1	2.1	UL	2.7	2.7	UL		2.7
1.7	Heptachlor Epoxide	2.2	2.2	UL	2.1	2.1	UL	2.7	2.7	UL		2.7
17.0	Methoxychlor	22	22	UL	21	21	UL	27	27	UL		27
170.0	Toxaphene	220	220	UL	210	210	UL	270	270	UL		270

Notes:
All units are ug/kg
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:
A - Acceptable (Quantitative) Data
K - Biased High (Semi-quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

METALS

Phase 1A
Phase 1B
Phase 1C

AR302918

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1A
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Parameter	Sample Point S1-EL/1A Date Sampled: 09/10/92 Dilution Factor: Percent Solids: 83.3 %				Sample Point S1-M/1A Date Sampled: 09/09/92 Dilution Factor: Percent Solids: 74.3 %				Sample Point S2-EL/1A Date Sampled: 09/10/92 Dilution Factor: Percent Solids: 85.3 %				Sample Point S2-EL/FD Date Sampled: 09/10/92 Dilution Factor: Percent Solids: 84.2 %			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	42.5	3.0	20000	J	53.8	3.8	17900	J	42.3	2.9	13400	J	34.9	2.5	10900	J
Antimony	12.8	3.0	3.0	UL	16.2	3.8	4.3	L	12.7	3.0	3.0	UL	10.5	2.4	2.4	UL
Arsenic	1.9	0.56	2.6	B	1.8	0.55	3.6	B	2.3	0.69	4.0	B	1.8	0.55	6.2	B
Barium	42.5	0.08	40.5	J	53.8	0.11	53.6	J	42.3	0.08	43.8	J	34.9	0.07	52.9	J
Beryllium	1.1	0.06	0.96	A	1.4	0.08	2.0	A	1.1	0.06	1.1	A	0.87	0.05	0.97	A
Cadmium	1.1	0.40	5.6	A	1.4	0.51	5.4	A	1.1	0.40	6.6	A	0.87	0.33	5.7	A
Calcium	1062	0.87	7050	J	1346	1.1	7500	J	1056	0.87	25300	J	873	0.72	12700	J
Chromium	2.1	0.76	54.7	A	2.7	0.97	33.1	A	2.1	0.76	18.8	L	1.8	0.63	17.4	L
Cobalt	10.6	0.42	18.4	A	13.5	0.54	19.5	A	10.6	0.42	26.9	A	8.7	0.35	23.6	A
Copper	5.3	0.40	53.0	A	6.7	0.51	10.4	A	5.3	0.40	75.7	A	4.4	0.33	47.3	A
Iron	21.2	2.0	32300	J	26.9	2.5	32000	J	21.1	1.9	41100	J	17.5	1.61	33900	A
Lead	0.56	0.19	9.4	L	0.55	0.18	5.3	L	0.69	0.23	17.8	L	0.55	0.20	19.8	L
Magnesium	1062	2.6	8380	J	1346	3.3	14100	J	1056	2.6	20600	J	873	2.1	20300	J
Manganese	3.2	0.13	472	J	4.0	0.16	720	J	3.2	0.13	861	J	2.6	0.10	1090	J
Mercury	0.11	0.02	0.05	A	0.12	0.02	0.14	A	0.11	0.02	0.03	A	0.10	0.02	0.02	A
Nickel	8.5	1.7	27.4	A	10.8	2.1	938	A	8.5	1.7	236	A	6.7	1.4	23.0	A
Potassium	1062	13.6	912	A	1346	17.2	938	A	1056	13.5	236	A	873	11.2	297	A
Selenium	0.94	0.94	0.94	U	0.92	0.92	0.92	U	1.1	1.1	1.1	U	0.92	0.92	0.92	U
Silver	2.1	0.42	0.42	U	2.7	0.54	0.54	U	2.1	0.42	0.42	U	1.7	0.35	0.55	U
Sodium	1062	1.7	376	A	1346	2.2	269	B	1056	1.7	177	U	873	1.4	143	B
Thallium	1.9	0.38	0.38	UL	1.8	0.37	0.37	UL	2.3	0.46	0.46	UL	1.8	0.37	0.37	U
Vanadium	10.6	0.38	68.4	J	13.5	0.48	47.0	J	10.6	0.38	28.7	J	8.7	0.31	22.7	J
Zinc	4.3	0.25	86.2	J	5.4	0.32	101	J	4.2	0.25	186	J	3.5	0.21	191	J
Cyanide	1.2	1.2	1.2	U	1.5	1.5	1.5	U	1.3	1.3	1.3	U	1.4	1.4	1.4	U

Notes: All units are mg/kg

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers.....

A - Acceptable (Quantitative) Data
 J - Estimated (Semiquantitative) Data
 K - Biased High (Semiquantitative) Data
 L - Biased Low (Semiquantitative) Data
 B - Present in associated blanks (Semiquantitative) Data

.....

UJ - Not Detected/Estimated Data
 U - Not Detected/Quantitative Data
 UL - Not Detected/Biased Low

.....

N - Tentative Identification
 R - Unusable Data
 Q - Not Applicable

AR302919

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1A
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Parameter	Sample Point S2-UL/1A				Sample Point S3-EL/1A				Sample Point S3-UL/1A				Sample Point Date Sampled: Dilution Factor: Percent Solids: %			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	46.2	3.2	5430	J	45.2	3.2	21300	J	53.4	3.7	26000	J				
Antimony	13.9	3.2	4.1	L	13.6	3.2	3.2	UL	16.0	3.7	3.7	UL				
Arsenic	2.2	0.67	11.5	A	2.3	0.70	3.5	B	2.8	0.74	6.1	B				
Barium	46.2	0.09	147	J	45.2	0.09	70.4	J	53.4	0.11	145	J				
Beryllium	1.2	0.07	0.39	A	1.1	0.07	1.1	A	1.3	0.08	1.6	A				
Cadmium	1.2	0.44	15.3	R	1.1	0.43	5.5	A	1.3	0.51	9.1	A				
Calcium	1155	0.95	4170	J	1131	0.93	2150	J	1335	1.1	4850	J				
Chromium	2.3	0.83	886	A	2.3	0.81	58.3	A	2.7	0.96	47.2	A				
Cobalt	11.5	0.46	55.4	K	11.3	0.45	16.0	A	13.4	0.53	17.4	A				
Copper	5.8	0.44	247	K	5.7	0.43	48.3	J	6.7	0.51	34.7	J				
Iron	23.1	2.1	200000	J	22.6	2.1	34200	J	26.7	2.5	56700	J				
Lead	0.67	0.22	176.7	L	0.70	0.23	7.2	L	0.74	0.25	17.1	L				
Magnesium	1155	2.8	2800	J	1131	2.8	5520	J	1335	3.3	10800	J				
Manganese	3.5	0.14	6030	J	3.4	0.14	293	J	4.0	0.16	469	J				
Mercury	0.13	0.03	0.18	A	0.11	0.02	0.04	A	0.15	0.03	0.26	A				
Nickel	9.2	1.8	771	A	9.0	1.8	31.3	A	10.7	2.1	27.8	A				
Potassium	1155	14.8	507	A	1131	14.5	914	A	1335	17.1	1520	A				
Selenium	1.1	1.1	66.2	A	1.2	1.2	1.2	U	1.2	1.2	1.2	U				
Silver	2.3	0.46	0.46	U	2.3	0.45	0.45	U	2.7	0.53	0.67	A				
Sodium	1155	1.9	315	B	1131	1.8	184	B	1335	2.1	584	A				
Thallium	2.2	0.45	0.45	UL	2.3	0.47	0.47	UL	2.5	0.49	0.49	UL				
Vanadium	11.5	0.42	54.2	J	11.3	0.41	99.1	J	13.4	0.48	67.1	J				
Zinc	4.6	0.28	332	J	4.5	0.27	69.0	J	5.3	0.32	171	J				
Cyanide	1.4	1.4	1.4	U	1.4	1.4	1.4	U	1.9	1.9	1.9	U				

Notes: All units are mg/kg

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers:

A - Acceptable (Quantitative) Data UL - Not Detected/Estimated Data M - Tentative Identification
 J - Estimated (Semiquantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 K - Biased High (Semiquantitative) Data UL - Not Detected/Biased Low Q - Not Applicable
 L - Biased Low (Semiquantitative) Data
 B - Present in associated blanks (Semiquantitative) Data

AR302920

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1B
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Parameter	Sample Point S18G/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 82.7%				Sample Point S28G/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 82.6%				Sample Point S38G/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 84.9%				Sample Point S4EL/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 77.2%			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	48.4	10.2	26600	J	48.4	10.2	19200	J	47.1	9.9	26000	J	51.8	10.9	12800	J
Antimony	14.5	10.9	10.9	R	14.5	10.9	10.9	R	14.1	10.6	10.6	R	15.5	11.7	11.7	R
Arsenic	2.4	0.97	4.5	L	2.4	0.97	4.4	L	2.4	0.94	4.2	L	2.6	1.0	7.6	L
Barium	48.4	0.48	112	A	48.4	0.48	95.4	A	47.1	0.47	151	A	51.8	0.52	43.9	A
Beryllium	1.2	0.97	1.5	A	1.2	0.97	0.97	U	1.2	0.94	1.5	A	1.3	1.0	1.0	U
Cadmium	1.2	1.2	1.2	UL	1.2	1.2	1.2	UL	1.2	1.2	1.2	UL	1.3	1.3	1.3	UL
Calcium	1209	26.8	2720	J	1211	26.9	3630	J	1178	26.2	5740	J	1295	28.8	3850	J
Chromium	2.4	2.4	91.8	A	2.4	2.4	51.4	A	2.4	2.4	2.4	U	2.6	2.6	31.7	A
Cobalt	12.1	2.20	34.8	A	12.1	1.5	16.1	A	11.8	2.1	28.9	L	13.0	2.3	24.9	A
Copper	6.1	3.6	60.4	J	6.1	3.6	31.8	J	5.9	3.5	408	J	6.5	3.9	15.0	A
Iron	24.2	3.1	43600	K	24.2	3.2	26100	K	23.6	3.1	65900	A	25.9	3.4	24200	A
Lead	3.6	2.4	32.0	K	0.73	6.1	37.4	K	0.71	5.9	31.2	J	3.9	2.6	35.8	K
Magnesium	1209	89.0	2200	J	1211	89.1	3550	J	1178	86.7	3500	J	1295	95.3	4680	J
Manganese	3.6	0.97	1350	L	3.6	0.97	712	L	3.5	0.94	1160	L	3.9	1.0	675	L
Mercury	0.12	0.12	0.12	U	0.12	0.12	0.12	U	0.12	0.12	0.12	U	0.13	0.13	0.13	U
Nickel	9.7	8.5	37.3	A	9.7	8.5	22.4	U	9.4	8.2	11.2	A	10.4	9.1	20.8	A
Potassium	1209	552	619	A	1211	553	906	A	1178	538	3130	A	1295	591	1040	A
Selenium	1.2	0.73	0.73	UJ	1.2	0.73	0.73	UJ	1.2	0.71	0.71	UJ	1.3	0.78	0.78	UJ
Silver	2.4	0.97	0.97	UL	2.4	0.97	0.97	UL	2.4	0.94	0.94	UL	2.6	1.0	1.0	UL
Sodium	1209	26.4	170	B	1211	26.4	203	B	1178	25.7	233	B	1295	28.2	259	B
Thallium	2.4	0.73	0.73	U	2.4	0.73	0.73	U	2.4	0.71	0.71	UL	2.6	0.78	0.78	UL
Vanadium	12.1	2.4	152	J	12.1	2.4	67.6	J	11.8	2.4	71.1	J	13.0	2.6	72.1	J
Zinc	4.8	1.2	95.9	J	4.8	1.2	102	J	4.7	1.2	151	J	5.2	1.3	69.5	J
Cyanide			Not Analyzed				Not Analyzed				Not Analyzed				Not Analyzed	

Notes: All units are mg/kg

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers.....

A - Acceptable (Quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification

J - Estimated (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data

K - Biased High (Semi-quantitative) Data UL - Not Detected/Biased Low Q - Not Applicable

L - Biased Low (Semi-quantitative) Data

B - Present in associated blanks (Semi-quantitative) Data

AR302921

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1B
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Parameter	Sample Point S4EL/FD				Sample Point S4UL/1B				Sample Point S5EL/1B				Sample Point S5UL/1B			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	44.2	9.3	21800	J	46.1	9.7	16300	J	43.4	9.1	21100	J	43.7	9.2	21800	J
Antimony	13.3	9.9	9.9	R	13.8	10.4	10.4	R	13.0	9.8	9.8	R	13.1	9.8	9.8	R
Arsenic	2.2	0.88	8.5	L	11.5	4.6	23.6	L	2.2	0.87	2.9	L	2.2	0.87	2.9	L
Barium	44.2	0.44	68.6	A	46.1	0.46	933	A	43.4	0.43	62.8	A	43.7	0.44	75.8	A
Beryllium	1.1	0.88	0.89	A	1.2	0.92	1.9	A	1.1	0.87	1.0	A	1.1	0.87	1.2	A
Cadmium	1.1	1.1	1.1	UL	1.2	1.2	1.2	UL	1.1	1.1	1.1	UL	1.1	1.1	1.1	UL
Calcium	1105	24.5	13800	J	1153	25.6	3720	J	1085	24.1	2040	J	1092	24.2	4240	J
Chromium	2.2	2.2	24.9	A	2.3	2.3	28.7	A	2.2	2.2	48.7	A	2.2	2.2	67.6	A
Cobalt	11.1	2.0	22.2	A	11.5	2.08	10.9	A	10.9	2.0	21.0	A	10.9	2.0	15.2	A
Copper	5.5	3.3	143	J	5.8	3.5	32.8	J	5.4	3.3	37.2	J	5.5	3.3	45.2	J
Iron	22.1	2.9	35600	K	23.1	3.0	28700	K	21.7	2.8	29800	K	21.8	2.8	33900	K
Lead	3.3	2.2	30.6	K	3.5	2.3	25.5	K	0.65	0.43	7.2	K	1.3	0.87	12.7	K
Magnesium	1105	81.3	40500	L	1153	84.9	7760	J	1085	79.8	4630	J	1092	80.4	3800	J
Manganese	3.3	0.88	1010	L	3.5	0.92	472	L	3.3	0.87	595	L	3.3	0.87	539	L
Mercury	0.11	0.11	0.11	U	0.11	0.12	0.13	A	0.11	0.11	0.11	U	0.11	0.11	0.11	U
Nickel	8.8	7.7	22.2	A	9.2	8.1	24.9	A	8.7	7.6	23.5	A	8.7	7.6	38.7	A
Potassium	1105	505	1880	A	1153	527	973	A	1085	495	728	A	1092	498	1280	A
Selenium	1.1	0.66	0.66	UJ	1.2	0.69	0.69	UJ	1.1	0.65	0.65	UJ	1.1	0.66	0.66	UJ
Silver	2.2	0.88	2310	UL	2.3	0.92	0.92	UL	2.2	0.87	0.87	UL	2.2	0.87	0.87	UL
Sodium	1105	24.1	2310	A	1153	25.1	196	B	1085	23.6	233	B	1092	23.8	184	B
Thallium	2.2	0.66	0.66	U	2.3	0.69	0.69	U	2.2	0.65	0.65	UJ	2.2	0.66	0.66	U
Vanadium	11.1	2.2	31.5	J	11.5	2.3	44.3	J	10.9	2.2	85.3	J	10.9	2.2	83.0	J
Zinc	4.4	1.1	193	J	4.6	1.2	125	J	4.3	1.1	81.5	J	4.4	1.1	85.0	J
Cyanide			Not Analyzed				Not Analyzed				Not Analyzed				Not Analyzed	

Notes: All units are mg/kg

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers:

A - Acceptable (Quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
J - Estimated (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
K - Biased High (Semi-quantitative) Data UL - Not Detected/Biased Low Q - Not Applicable
L - Biased Low (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative) Data

AR302922

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Associates

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1B
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Parameter	Sample Point S6EL/1B			Sample Point			Sample Point			Sample Point		
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	42.1	8.8	20500	J								
Antimony	12.6	9.5	9.5	R								
Arsenic	2.1	0.84	1.6	L								
Barium	42.1	0.42	114	A								
Beryllium	1.1	0.84	0.84	U								
Cadmium	1.1	1.1	1.1	UL								
Calcium	1052	23.3	16200	J								
Chromium	2.1	2.1	26.4	A								
Cobalt	10.6	1.9	19.9	A								
Copper	5.3	3.2	133	J								
Iron	21.0	2.7	38100	A								
Lead	0.63	0.42	6.4	K								
Magnesium	1052	77.4	37500	J								
Manganese	3.2	0.84	1030	L								
Mercury	0.11	0.11	0.11	U								
Nickel	8.4	7.4	27.7	A								
Potassium	1052	480	2140	A								
Selenium	1.1	0.63	0.63	UJ								
Silver	2.1	0.84	0.84	UL								
Sodium	1052	22.9	2130	A								
Thallium	2.1	0.63	0.63	U								
Vanadium	10.5	2.1	31.5	J								
Zinc	4.2	1.1	218	J								
Cyanide			Not Analyzed									

Notes: All units are mg/kg

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers.....

A - Acceptable (Quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semiquantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 K - Biased High (Semiquantitative) Data UL - Not Detected/Biased Low Q - Not Applicable
 L - Biased Low (Semiquantitative) Data
 B - Present in associated blanks (Semiquantitative) Data

AR302923

February 1994

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1C
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1C
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Parameter	Sample Point S6-UL-1C			Sample Point S7-EL-1C			Sample Point S7-UL-1C			Sample Point S8-EL-1C		
	CRDL	IDL	Qual	CRDL	IDL	Qual	CRDL	IDL	Qual	CRDL	IDL	Qual
Aluminum	50.6	9.4	J	50.5	9.4	J	48.9	9.1	J	47.4	8.8	J
Antimony	15.2	8.8	U	15.2	8.8	U	14.7	8.5	U	14.2	8.2	U
Arsenic	12.4	4.2	A	2.5	0.85	A	2.4	0.82	A	2.4	0.81	J
Barium	50.6	0.96	A	50.5	0.96	A	48.9	0.93	A	47.4	0.90	A
Beryllium	1.3	1.1	A	1.3	1.1	A	1.2	1.0	U	1.2	1.0	U
Cadmium	1.3	1.2	A	1.3	1.2	U	1.2	1.2	U	1.2	1.1	U
Calcium	1266	15.1	J	1263	15.1	J	1222	14.6	J	1185	14.1	J
Chromium	2.5	1.7	A	2.5	1.7	A	2.4	1.6	A	2.4	1.6	A
Cobalt	12.7	1.9	A	12.6	1.8	A	12.2	1.8	A	11.9	1.7	A
Copper	6.3	3.1	L	6.3	3.1	L	6.1	3.0	L	5.9	2.9	L
Iron	25.3	2.4	J	25.3	2.4	J	24.5	2.3	J	23.7	2.2	J
Lead	1.5	0.99	K	1.5	1.0	K	1.5	0.97	K	0.71	0.47	K
Magnesium	1266	36.8	A	1263	36.7	A	1222	35.6	A	1185	34.5	A
Manganese	3.8	0.68	J	3.8	0.68	J	3.7	0.66	J	3.6	0.64	J
Mercury	0.11	0.11	U	0.11	0.11	U	0.10	0.10	U	0.11	0.11	U
Nickel	10.1	9.3	A	10.1	9.2	A	9.8	9.0	A	9.5	8.7	A
Potassium	1266	472	B	1263	471	B	1222	456	B	1185	442	B
Selenium	1.2	0.89	UJ	1.3	0.90	UJ	1.2	0.87	UJ	1.2	0.85	UJ
Silver	2.5	1.3	UL	2.5	1.3	UL	2.4	1.2	UL	2.4	1.2	UL
Sodium	1266	13.2	B	1263	13.2	B	1222	12.7	B	1185	12.4	B
Thallium	2.5	0.67	U	2.5	0.68	U	2.4	0.65	U	2.4	0.64	U
Vanadium	12.7	1.8	A	12.6	1.8	A	12.2	1.7	A	11.9	1.7	A
Zinc	5.1	0.71	K	5.1	0.71	K	4.9	0.68	K	4.7	0.66	K
Cyanide	0.13	0.00	Not Analyzed	0.13	0.00	Not Analyzed	0.12	0.00	Not Analyzed	0.12	0.00	Not Analyzed

Notes: All units are mg/kg

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers:

A - Acceptable (Quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data UL - Not Detected/Quantitative Data R - Unusable Data
K - Biased High (Semi-quantitative) Data UL - Not Detected/Biased Low Q - Not Applicable
L - Biased Low (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative) Data

AR302924

February 1994

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1C
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1C
BERKS COUNTY, PENNSYLVANIA

Matrix: Soil

Parameter	Sample Point S8-UL-1C				Sample Point S9-EL-1C				Sample Point S9-EL-FD				Sample Point S10-EL-1C			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	47.3	8.8	17400.00	J	49.5	9.2	18800.00	J	50.7	9.4	23200.00	J	52.4	9.7	32200.00	J
Antimony	14.2	8.2	8.20	U	14.9	8.6	8.60	U	15.2	8.8	8.80	U	15.7	9.1	9.10	U
Arsenic	2.3	0.79	3.90	J	5.0	1.7	5.80	A	5.1	1.7	6.60	A	2.6	0.89	2.80	A
Barium	47.3	0.90	38.90	A	49.5	0.94	53.60	A	50.7	0.96	61.80	A	52.4	0.99	77.40	A
Beryllium	1.2	0.99	0.99	U	1.2	1.0	1.10	U	1.3	1.1	1.10	A	1.3	1.1	1.40	A
Cadmium	1.2	1.1	1.10	U	1.2	1.2	1.20	U	1.3	1.2	1.20	U	1.3	1.3	1.30	U
Calcium	1182	14.1	4080.00	J	1238	14.8	18800.00	J	1267	15.1	22400.00	J	1309	15.6	28500.00	J
Chromium	2.4	1.6	1180.00	A	2.5	1.6	33.60	A	2.5	1.7	42.10	A	2.6	1.7	76.30	A
Cobalt	11.8	1.7	37.00	A	12.4	1.8	16.80	A	12.7	1.9	19.00	A	13.1	1.9	24.10	A
Copper	5.9	2.9	142.00	L	6.2	3.0	121.00	L	6.3	3.1	74.80	L	6.5	3.2	51.80	L
Iron	23.6	2.2	39600.00	J	24.8	2.3	29400.00	J	25.4	2.4	36600.00	J	26.2	2.5	36600.00	J
Lead	0.71	0.47	48.40	A	7.4	5.0	54.40	K	7.6	5.1	46.80	K	0.79	0.52	9.00	K
Magnesium	1182	34.4	3640.00	A	1238	36.0	23400.00	A	1267	36.9	26000.00	A	1309	38.1	6000.00	A
Manganese	3.6	0.64	482.00	J	3.7	0.67	801.00	J	3.8	0.68	920.00	J	3.9	0.71	757.00	J
Mercury	0.12	0.12	0.12	U	0.12	0.12	0.12	U	0.12	0.12	0.12	U	0.12	0.12	0.12	U
Nickel	9.5	8.7	555.00	A	9.9	9.1	25.20	A	10.1	9.3	26.90	A	10.5	9.6	34.60	A
Potassium	1182	441	1010.00	B	1238	462	1020.00	B	1267	473	897.00	B	1309	488	1530.00	B
Selenium	1.2	0.83	1.60	L	1.2	0.89	0.89	UJ	1.3	0.91	0.91	UJ	6.5	4.7	4.70	UJ
Silver	2.4	1.2	1.20	UL	2.5	1.2	1.20	UL	2.5	1.3	1.30	UL	2.6	1.3	1.30	UL
Sodium	1182	12.3	174.00	B	1238	12.9	203.00	B	1267	13.2	218.00	B	1309	13.6	186.00	B
Thallium	2.3	0.63	0.63	U	2.5	0.67	0.67	U	2.5	0.68	0.68	U	2.6	0.71	0.71	U
Vanadium	11.8	1.7	60.80	A	12.4	1.7	38.00	A	12.7	1.8	47.80	A	13.1	1.8	109.00	A
Zinc	4.7	0.66	102.00	K	5.0	0.69	150.00	K	5.1	0.71	162.00	K	5.2	0.73	58.70	K
Cyanide	0.12	0.00	Not Analyzed		0.12	0.00	Not Analyzed		0.13	0.00	Not Analyzed		0.13	0.00	Not Analyzed	

Notes: All units are mg/kg

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers.....

A - Acceptable (Quantitative) Data
 J - Estimated (Semi-quantitative) Data
 K - Biased High (Semi-quantitative) Data
 L - Biased Low (Semi-quantitative) Data
 B - Present in associated blanks (Semi-quantitative) Data
 UJ - Not Detected/Estimated Data
 U - Not Detected/Quantitative Data
 UL - Not Detected/Biased Low
 N - Tentative Identification
 R - Unusable Data
 Q - Not Applicable

AR302925

February 1996

913-6773

**SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1C
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1C
BERKS COUNTY, PENNSYLVANIA**

Matrix: Soil

Parameter	Sample Point S11-EL-1C			Sample Point			Sample Point			Sample Point		
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	48.0	8.9	19300.00	J								
Antimony	14.4	8.3	8.30	U								
Arsenic	2.4	0.82	3.20	A								
Barium	48.0	0.91	55.00	A								
Beryllium	1.2	1.0	1.00	U								
Cadmium	1.2	1.2	1.20	U								
Calcium	1199	14.3	3750.00	J								
Chromium	2.4	1.6	40.40	A								
Cobalt	12.0	1.8	14.50	A								
Copper	6.0	2.9	32.70	L								
Iron	24.0	2.3	21800.00	J								
Lead	1.4	0.96	14.90	K								
Magnesium	1199	34.9	5700.00	A								
Manganese	3.6	0.65	584.00	J								
Mercury	0.12	0.12	0.12	U								
Nickel	9.6	8.8	25.50	A								
Potassium	1199	447	603.00	B								
Selenium	6.0	4.3	4.30	UJ								
Silver	2.4	1.2	1.20	UL								
Sodium	1199	12.5	282.00	B								
Thallium	2.4	0.65	0.65	U								
Vanadium	12.0	1.7	51.20	A								
Zinc	4.8	0.67	59.30	K								
Cyanide	0.12	0.00	Not Analyzed									

Notes: All units are mg/kg

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers:

A - Acceptable (Quantitative) Data
 J - Estimated (Semi-quantitative) Data
 K - Biased High (Semi-quantitative) Data
 L - Biased Low (Semi-quantitative) Data
 B - Present in associated blanks (Semi-quantitative) Data
 UJ - Not Detected/Estimated Data
 U - Not Detected/Quantitative Data
 UL - Not Detected/Biased Low
 W - Tentative Identification
 R - Unusable Data
 Q - Not Applicable

AR302926

LEACHATE LAGOON AND SEEPS

AR302927

VOLATILE ORGANIC COMPOUNDS

Phase 1A

Phase 1B

AR302928

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913

Matrix: Leachate

Volatiles Organics

CRQL	Parameter	Sample Point L1-EL/1A Date Sampled: 09/02/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1-EL/FD Date Sampled: 11/10/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1-EL/RA Date Sampled: 11/10/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1-UL/1A Date Sampled: 09/02/92 Dilution Factor: 1.0 Percent Moisture: NA %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	10	19	L	10	16	J	10	10	U	10	29	B
10	Benzene	10	10	L	10	7	J	10	7	J	10	10	U
10	Bromodichloromethane	10	10	R	10	10	U	10	10	U	10	10	U
10	Bromoform	10	10	R	10	10	U	10	10	U	10	10	U
10	Bromomethane	10	10	R	10	10	U	10	10	U	10	10	U
10	2-Butanone	10	10	R	10	10	U	10	10	U	10	10	U
10	Carbon Disulfide	10	10	R	10	10	U	10	10	U	10	10	U
10	Carbon Tetrachloride	10	10	R	10	10	U	10	10	U	10	10	U
10	Chlorobenzene	10	18	L	10	15	L	10	14	L	10	10	U
10	Chloroethane	10	10	R	10	10	U	10	10	U	10	10	U
10	Chloroform	10	10	R	10	10	U	10	10	U	10	10	U
10	Chloromethane	10	10	R	10	10	U	10	10	U	10	10	U
10	Dibromochloromethane	10	10	R	10	10	U	10	10	U	10	10	U
10	1,1-Dichloroethane	10	10	R	10	10	U	10	10	U	10	10	U
10	1,1-Dichloroethene	10	10	R	10	10	U	10	10	U	10	10	U
10	Total 1,2-Dichloroethene	10	10	R	10	10	U	10	10	U	10	10	U
10	1,2-Dichloropropane	10	10	R	10	10	U	10	10	U	10	10	U
10	cis-1,3-Dichloropropene	10	10	R	10	10	U	10	10	U	10	10	U
10	trans-1,3-Dichloropropene	10	10	R	10	10	U	10	10	U	10	10	U
10	Ethylbenzene	10	9	R	10	7	J	10	10	U	10	10	U
10	2-Hexanone	10	10	L	10	10	U	10	10	U	10	10	U
10	4-Methyl-2-Pentanone	10	10	R	10	10	U	10	10	U	10	10	U
10	Methylene Chloride	10	10	R	10	10	U	10	10	U	10	10	U
10	Styrene	10	10	R	10	10	U	10	10	U	10	5	B
10	1,1,2,2-Tetrachloroethane	10	10	R	10	10	U	10	10	U	10	10	U
10	Tetrachloroethene	10	10	R	10	10	U	10	10	U	10	10	U
10	Toluene	10	1	L	10	1	J	10	2	J	10	10	U
10	1,1,1-Trichloroethane	10	10	R	10	10	U	10	10	U	10	10	U
10	1,1,2-Trichloroethane	10	10	R	10	10	U	10	10	U	10	10	U
10	Trichloroethene	10	10	R	10	10	U	10	10	U	10	10	U
10	Vinyl Chloride	10	10	R	10	10	U	10	10	U	10	10	U
10	Total Xylenes	10	55	L	10	41	A	10	40	A	10	10	U

Notes:

All units are ug/l
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Leachate

Volatiles Organics

CLOL	Parameter	Sample Point L1M1/1A			Sample Point L1M1/10			Sample Point L2-EL/1A			Sample Point L2-UL/1A		
		SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual
10	Acetone	25	62	B	25	69	B	10	14	B	10	10	U
10	Benzene	25	13	J	25	29	J	10	8	J	10	10	U
10	Bromodichloromethane	25	25	U	25	25	U	10	10	U	10	10	U
10	Bromoforn	25	25	U	25	25	U	10	10	U	10	10	U
10	Bromomethane	25	25	U	25	25	U	10	10	U	10	10	U
10	2-Butanone	25	160	J	25	220	J	10	10	U	10	10	U
10	Carbon Disulfide	25	25	U	25	25	U	10	10	U	10	10	U
10	Carbon Tetrachloride	25	25	U	25	25	U	10	10	U	10	10	U
10	Chlorobenzene	25	3	J	25	17	J	10	9	J	10	10	U
10	Chloroethane	25	25	U	25	25	U	10	10	U	10	10	U
10	Chloroform	25	25	U	25	25	U	10	10	U	10	10	U
10	Chloromethane	25	25	U	25	25	U	10	10	U	10	10	U
10	Dibromochloromethane	25	25	U	25	25	U	10	10	U	10	10	U
10	1,1-Dichloroethane	25	25	U	25	25	U	10	10	U	10	10	U
10	1,2-Dichloroethane	25	25	U	25	12	J	10	10	U	10	10	U
10	Total 1,2-Dichloroethane	25	69	A	25	81	A	10	10	U	10	10	U
10	1,2-Dichloropropane	25	25	U	25	25	U	10	10	U	10	10	U
10	cis-1,3-Dichloropropene	25	25	U	25	25	U	10	10	U	10	10	U
10	trans-1,3-Dichloropropene	25	25	U	25	25	U	10	10	U	10	10	U
10	Ethylbenzene	25	75	A	25	83	A	10	87	A	10	10	U
10	2-Hexanone	25	25	U	25	25	U	10	10	U	10	10	U
10	4-Methyl-2-Pentanone	25	25	U	25	25	U	10	10	U	10	10	U
10	Methylene Chloride	25	27	U	25	34	U	10	10	U	10	10	U
10	Styrene	25	25	U	25	25	U	10	10	U	10	10	U
10	1,1,2,2-Tetrachloroethane	25	25	U	25	25	U	10	10	U	10	10	U
10	Tetrachloroethane	25	9	J	25	8	J	10	10	U	10	10	U
10	Toluene	25	330	J	25	410	J	10	5	J	10	1	J
10	1,1,1-Trichloroethane	25	25	U	25	25	U	10	10	U	10	10	U
10	1,1,2-Trichloroethane	25	25	U	25	25	U	10	10	U	10	10	U
10	Trichloroethene	25	9	J	25	24	J	10	10	U	10	10	U
10	Vinyl Chloride	25	8	J	25	6	J	10	10	U	10	10	U
10	Total Xylenes	25	230	A	25	250	A	10	150	A	10	10	U

Notes:
All units are ug/L
Sample Quantitation Limit (SOL) is CLOL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation. (see below).

Qualifiers:
A - Acceptable (Quantitative) Data
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913-01

Matrix: Leachate

Volatile Organics

CROL	Parameter	Sample Point L2-UL/FP			Sample Point L3-EL/1A			Sample Point L3-UL/1A			Sample Point Date Sampled: Dilution Factor: Percent Moisture:		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	10	10	U	10	10	U	10	13	B			
10	Benzene	10	10	U	10	10	U	10	10	U			
10	Bromodichloromethane	10	10	U	10	10	U	10	10	U			
10	Bromoform	10	10	U	10	10	U	10	10	U			
10	Bromomethane	10	10	U	10	10	U	10	10	U			
10	2-Butanone	10	10	U	10	10	U	10	10	U			
10	Carbon Disulfide	10	10	U	10	10	U	10	10	U			
10	Carbon Tetrachloride	10	10	U	10	10	U	10	10	U			
10	Chlorobenzene	10	2	J	10	10	U	10	10	U			
10	Chloroethane	10	15	A	10	10	U	10	10	U			
10	Chloroform	10	10	U	10	10	U	10	10	U			
10	Chloromethane	10	10	U	10	10	U	10	10	U			
10	Dibromochloromethane	10	10	U	10	10	U	10	10	U			
10	1,1-Dichloroethane	10	10	U	10	10	U	10	10	U			
10	1,2-Dichloroethane	10	10	U	10	10	U	10	10	U			
10	1,1-Dichloroethene	10	10	U	10	10	U	10	10	U			
10	Total 1,2-Dichloroethene	10	10	U	10	10	U	10	10	U			
10	1,2-Dichloropropane	10	10	U	10	10	U	10	10	U			
10	cis-1,3-Dichloropropene	10	10	U	10	10	U	10	10	U			
10	trans-1,3-Dichloropropene	10	10	U	10	10	U	10	10	U			
10	Ethylbenzene	10	10	U	10	10	U	10	10	U			
10	2-Hexanone	10	10	U	10	10	U	10	10	U			
10	4-Methyl-2-Pentanone	10	10	U	10	10	U	10	10	U			
10	Methylene Chloride	10	10	U	10	10	U	10	10	U			
10	Styrene	10	10	U	10	9	B	10	10	U			
10	1,1,2,2-Tetrachloroethane	10	10	U	10	10	U	10	10	U			
10	Tetrachloroethene	10	10	U	10	10	U	10	10	U			
10	Toluene	10	1	J	10	10	U	10	10	U			
10	1,1,1-Trichloroethane	10	10	U	10	10	U	10	10	U			
10	1,1,2-Trichloroethane	10	10	U	10	10	U	10	10	U			
10	Trichloroethene	10	10	U	10	10	U	10	10	U			
10	Vinyl Chloride	10	10	U	10	10	U	10	10	U			
10	Total xylenes	10	10	U	10	10	U	10	10	U			

Notes:

All units are ug/l
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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SUMMARY OF CLP ORG. ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Leachate

Volatile Organics

CRCL	Parameter	Sample Point L24H1/18 Date Sampled: 06/29/93 Dilution Factor: 2.0 Percent Moisture: NA			Sample Point Date Sampled: Dilution Factor: Percent Moisture:			Sample Point Date Sampled: Dilution Factor: Percent Moisture:		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	20	100	J						
10	Benzene	20	14	J						
10	Bromodichloromethane	20	20	U						
10	Bromoform	20	20	U						
10	Bromomethane	20	20	U						
10	2-Butanone	20	160	U						
10	Carbon Disulfide	20	20	A						
10	Carbon Tetrachloride	20	20	U						
10	Chlorobenzene	20	3	J						
10	Chloroethane	20	20	U						
10	Chloroform	20	20	U						
10	Chloromethane	20	20	UJ						
10	Dibromochloromethane	20	20	U						
10	1,1-Dichloroethane	20	4	J						
10	1,2-Dichloroethane	20	20	U						
10	Total 1,2-Dichloroethane	20	45	A						
10	1,2-Dichloropropane	20	20	U						
10	cis-1,3-Dichloropropene	20	20	U						
10	trans-1,3-Dichloropropene	20	20	U						
10	Ethylbenzene	20	54	U						
10	4-Methyl-2-Pentanone	20	28	A						
10	2-Hexanone	20	20	A						
10	Methylene Chloride	20	27	U						
10	Styrene	20	20	B						
10	1,1,2,2-Tetrachloroethane	20	20	U						
10	Tetrachloroethane	20	3	U						
10	Toluene	20	240	J						
10	1,1,1-Trichloroethane	20	20	A						
10	1,1,2-Trichloroethane	20	20	U						
10	Trichloroethene	20	6	U						
10	Vinyl Chloride	20	11	J						
10	Total Xylenes	20	150	A						

Notes:

All units are ug/l
Sample quantitation limit (SQL) is CRCL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

SEMI-VOLATILE ORGANIC COMPOUNDS .

Phase 1A
Phase 1B

AR302933

SUMMARY OF CLP ORG. ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Leachate

Semivolatile Organics

CROL	Parameter	Sample Point L1-EL/1A Date Sampled: 09/02/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1-EL/RE Date Sampled: 09/02/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1-WL/1A Date Sampled: 10/01/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1WL/1A Date Sampled: 09/01/92 Dilution Factor: 1.0 Percent Moisture: NA %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acenaphthene	10	10	U	10	10	U	10	10	U	10	10	U
10	Acenaphthylene	10	10	U	10	10	U	10	10	U	10	10	U
10	Anthracene	10	10	U	10	10	U	10	10	U	10	10	U
10	Benzo(a)Anthracene	10	10	UJ	10	10	UJ	10	10	U	10	10	U
10	4-Bromophenyl-phenylether	10	10	U	10	10	U	10	10	U	10	10	U
10	Butylbenzylphthalate	10	10	UJ	10	10	UJ	10	10	U	10	10	U
10	Carbazole	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Chloro-3-Methylphenol	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Chloroaniline	10	10	U	10	2	J	10	10	U	10	10	U
10	bis(2-Chloroethoxy)Methane	10	10	U	10	10	U	10	10	U	10	10	U
10	bis(2-Chloroethyl)ether	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Chloronaphthalene	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Chlorophenol	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Chlorophenyl-phenylether	10	10	U	10	10	U	10	10	U	10	10	U
10	Chrysene	10	10	UJ	10	10	UJ	10	10	U	10	10	U
10	Dibenz(a,h)Anthracene	10	10	UJ	10	10	UJ	10	10	U	10	10	U
10	Dibenzofuran	10	10	U	10	10	U	10	10	U	10	10	U
10	1,2-Dichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,3-Dichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,4-Dichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	3,3-Dichlorobenzidine	10	9	J	10	8	J	10	10	U	10	10	U
10	2,4-Dichlorophenol	10	10	UJ	10	10	UJ	10	10	U	10	10	U
10	Diethylphthalate	10	10	U	10	10	U	10	10	U	10	10	U
10	2,4-Dimethylphenol	10	10	U	10	10	U	10	10	U	10	10	U
10	Dimethyl Phthalate	10	10	U	10	10	U	10	10	U	10	10	U
10	Di-n-butylphthalate	10	10	U	10	10	U	10	10	U	10	10	U
25	4,6-Dinitro-2-methylphenol	25	25	U	25	25	U	25	25	U	25	25	U
25	2,4-Dinitrophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	2,4-Dinitrotoluene	10	10	U	10	10	U	10	10	U	10	10	U
10	2,6-Dinitrotoluene	10	10	U	10	10	U	10	10	U	10	10	U
10	Di-n-Octyl Phthalate	10	10	UJ	10	10	UJ	10	10	U	10	10	U
10	bis(2-Ethylhexyl)Phthalate	10	10	UJ	10	10	UJ	10	10	U	10	10	U
10	Fluoranthene	10	10	UJ	10	10	UJ	10	10	U	10	10	U
10	Benzo(b)Fluoranthene	10	10	UJ	10	10	UJ	10	10	U	10	10	U
10	Benzo(k)Fluoranthene	10	10	UJ	10	10	UJ	10	10	U	10	10	U
10	Fluorene	10	10	U	10	10	U	10	10	U	10	10	U
10	Hexachlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	Hexachlorobutadiene	10	10	U	10	10	U	10	10	U	10	10	U
10	Hexachlorocyclopentadiene	10	10	U	10	10	U	10	10	U	10	10	U
10	Hexachloroethane	10	10	U	10	10	U	10	10	U	10	10	U

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:
A - Acceptable (Quantitative) Data
K - Biased High (Semi-quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)

UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low

N - Tentative Identification
R - Unusable Data
Q - Not Applicable

AR302934

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913-67.-

Matrix: Leachate

Semivolatile Organics

CROL	Parameter	Sample Point L1-EL/1A Date Sampled: 09/02/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1-EL/RE Date Sampled: 09/02/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1-UL/1A Date Sampled: 10/01/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1LM/1A Date Sampled: 09/01/92 Dilution Factor: 1.0 Percent Moisture: NA %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Indeno(1,2,3-cd)Pyrene	10	10	UJ	10	10	UJ	10	10	U	10	10	U
10	Isophorone	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Methylnaphthalene	10	2	J	10	2	J	10	2	J	10	2	J
10	2-Methylphenol	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Methylphenol	10	1	J	10	13	A	10	11	A	10	10	U
10	Naphthalene	10	13	A	10	25	U	10	25	U	10	25	U
25	2-Nitroaniline	25	25	U	25	25	U	25	25	U	25	25	U
25	3-Nitroaniline	25	25	U	25	25	U	25	25	U	25	25	U
10	4-Nitroaniline	10	10	U	10	10	U	10	10	U	10	10	U
10	Nitrobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Nitrophenol	10	25	U	10	25	U	10	25	U	10	25	U
10	4-Nitrophenol	10	10	U	10	10	U	10	10	U	10	10	U
10	N-Nitroso-di-n-propylamine	10	10	U	10	10	U	10	10	U	10	10	U
10	N-Nitrosodiphenylamine	10	10	U	10	10	U	10	10	U	10	10	U
10	2,2'-Oxybis(1-Chloropropane)	10	10	U	10	10	U	10	10	U	10	10	U
25	Pentachlorophenol	25	25	UJ	25	25	UJ	25	25	UJ	25	25	UJ
10	Benzo(g,h,i)Perylene	10	10	U	10	10	U	10	10	U	10	10	U
10	Phenanthrene	10	10	U	10	10	U	10	10	U	10	10	U
10	Phenol	10	10	UJ	10	10	UJ	10	10	UJ	10	10	UJ
10	Pyrene	10	10	UJ	10	10	UJ	10	10	UJ	10	10	UJ
10	Benzo(a)Pyrene	10	10	UJ	10	10	UJ	10	10	UJ	10	10	UJ
10	1,2,4-Trichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
25	2,4,5-Trichlorophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	2,4,6-Trichlorophenol	10	10	U	10	10	U	10	10	U	10	10	U

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)

K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low

N - Tentative Identification
R - Unusable Data
Q - Not Applicable

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AR302935

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Leachate

Semivolatile Organics

CROL	Parameter	Sample Point L1/LM1/FR			Sample Point L1/LM1/FR			Sample Point			Sample Point		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acenaphthene	10	10	U	10	10	U	10	10	U	10	10	U
10	Acenaphthylene	10	10	U	10	10	U	10	10	U	10	10	U
10	Anthracene	10	10	U	10	10	U	10	10	U	10	10	U
10	Benzo(a)Anthracene	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Bromophenyl-phenylether	10	10	U	10	10	U	10	10	U	10	10	U
10	Butylbenzylphthalate	10	10	U	10	10	U	10	10	U	10	10	U
10	Carbazole	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Chloro-3-Methylphenol	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Chloroaniline	10	10	U	10	10	U	10	10	U	10	10	U
10	bis(2-Chloroethoxy)Methane	10	10	U	10	10	U	10	10	U	10	10	U
10	bis(2-Chloroethyl)ether	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Chlorophthalene	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Chlorophenol	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Chlorophenyl-phenylether	10	10	U	10	10	U	10	10	U	10	10	U
10	Chrysene	10	10	U	10	10	U	10	10	U	10	10	U
10	Dibenz(a,h)Anthracene	10	10	U	10	10	U	10	10	U	10	10	U
10	Dibenzofuran	10	10	U	10	10	U	10	10	U	10	10	U
10	1,2-Dichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,3-Dichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,4-Dichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	3,3'-Dichlorobenzidine	10	10	U	10	10	U	10	10	U	10	10	U
10	2,4-Dichlorophenol	10	10	U	10	10	U	10	10	U	10	10	U
10	Diethylphthalate	10	10	U	10	10	U	10	10	U	10	10	U
10	Dimethyl Phthalate	10	10	U	10	10	U	10	10	U	10	10	U
10	Di-n-butylphthalate	10	10	U	10	10	U	10	10	U	10	10	U
25	4,6-Dinitro-2-methylphenol	25	25	U	25	25	U	25	25	U	25	25	U
25	2,4-Dinitrophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	2,4-Dinitrotoluene	10	10	U	10	10	U	10	10	U	10	10	U
10	2,6-Dinitrotoluene	10	10	U	10	10	U	10	10	U	10	10	U
10	Di-n-Octyl Phthalate	10	10	U	10	10	U	10	10	U	10	10	U
10	bis(2-Ethylhexyl)Phthalate	10	10	U	10	10	U	10	10	U	10	10	U
10	Fluoranthene	10	10	U	10	10	U	10	10	U	10	10	U
10	Benzo(b)Fluoranthene	10	10	U	10	10	U	10	10	U	10	10	U
10	Benzo(k)Fluoranthene	10	10	U	10	10	U	10	10	U	10	10	U
10	Fluorene	10	10	U	10	10	U	10	10	U	10	10	U
10	Hexachlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	Hexachlorobutadiene	10	10	U	10	10	U	10	10	U	10	10	U
10	Hexachlorocyclopentadiene	10	10	U	10	10	U	10	10	U	10	10	U
10	Hexachloroethene	10	10	U	10	10	U	10	10	U	10	10	U

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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Matrix: Leachate

Semi-volatile Organics

CROL	Parameter	Sample Point L1M1/FD Date Sampled: 09/01/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1M1/FR Date Sampled: 09/01/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point Date Sampled: Dilution Factor: Percent Moisture: %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Indeno(1,2,3-cd)Pyrene	10	10	UJ	10	10	UJ			
10	Isophorone	10	1	J	10	1	J			
10	2-Methylnaphthalene	10	10	J	10	10	J			
10	2-Methylphenol	10	2	J	10	2	J			
10	4-Methylphenol	10	1	J	10	1	J			
10	Naphthalene	10	10	J	10	10	J			
25	2-Nitroaniline	25	25	U	25	25	U			
25	3-Nitroaniline	25	25	U	25	25	U			
25	4-Nitroaniline	25	25	U	25	25	U			
10	Nitrobenzene	10	10	U	10	10	U			
10	2-Nitrophenol	10	10	U	10	10	U			
25	4-Nitrophenol	25	25	U	25	25	U			
10	N-Nitroso-di-n-propylamine	10	10	U	10	10	U			
10	N-Nitrosodiphenylamine	10	10	U	10	10	U			
10	2,2'-Oxybis(1-Chloropropane)	10	10	U	10	10	U			
25	Pentachlorophenol	25	25	U	25	25	U			
10	Benzo(g,h,i)Perylene	10	10	UJ	10	10	UJ			
10	Phenanthrene	10	10	U	10	10	U			
10	Phenol	10	10	U	10	10	U			
10	Pyrene	10	10	U	10	10	U			
10	Benzo(a)Pyrene	10	10	U	10	10	U			
10	1,2,4-Trichlorobenzene	10	10	UJ	10	10	UJ			
25	2,4,5-Trichlorophenol	25	25	U	25	25	U			
10	2,4,6-Trichlorophenol	10	10	U	10	10	U			

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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AR302937

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Leachate

Semivolatile Organics

CRQL	Parameter	Sample Point L2LN1/1B Date Sampled: 06/29/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L2LN1/DL Date Sampled: 06/29/93 Dilution Factor: 3.0 Percent Moisture: NA %			Sample Point Date Sampled: Dilution Factor: Percent Moisture: %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acenaphthene	10	10	U	30	30	U			
10	Acenaphthylene	10	10	U	30	30	U			
10	Anthracene	10	10	U	30	30	U			
10	Benzo(a)Anthracene	10	10	U	30	30	U			
10	4-Bromophenyl-phenylether	10	10	U	30	30	U			
10	Butylbenzylphthalate	10	10	U	30	30	U			
10	Carbazole	10	10	U	30	30	U			
10	4-Chloro-3-Methylphenol	10	10	U	30	30	U			
10	4-Chloroaniline	10	10	U	30	30	U			
10	bis(2-Chloroethoxy)Methane	10	10	U	30	30	U			
10	bis(2-Chloroethyl)ether	10	10	U	30	30	U			
10	2-Chloronaphthalene	10	10	U	30	30	U			
10	2-Chlorophenol	10	10	U	30	30	U			
10	4-Chlorophenyl-phenylether	10	10	U	30	30	U			
10	Chrysene	10	10	U	30	30	U			
10	Dibenz(a,h)Anthracene	10	10	U	30	30	U			
10	Dibenzofuran	10	10	U	30	30	U			
10	1,2-Dichlorobenzene	10	3	J	30	30	U			
10	1,3-Dichlorobenzene	10	10	U	30	30	U			
10	1,4-Dichlorobenzene	10	8	J	30	7	J			
10	3,3'-Dichlorobenzidine	10	10	U	30	30	U			
10	2,4-Dichlorophenol	10	10	U	30	30	U			
10	Diethylphthalate	10	4	U	30	4	B			
10	2,4-Dimethylphenol	10	1	J	30	30	U			
10	Dimethyl Phthalate	10	10	U	30	30	U			
10	Di-n-butylphthalate	10	10	U	30	30	U			
25	4,6-Dinitro-2-methylphenol	25	25	U	75	75	U			
25	2,4-Dinitrophenol	25	25	U	75	75	U			
10	2,6-Dinitrotoluene	10	10	U	30	30	U			
10	Di-n-Octyl Phthalate	10	10	U	30	30	U			
10	bis(2-Ethylhexyl)Phthalate	10	11	B	30	11	B			
10	Fluoranthene	10	10	U	30	30	U			
10	Benzo(b)Fluoranthene	10	10	U	30	30	U			
10	Benzo(k)Fluoranthene	10	10	U	30	30	U			
10	Fluorene	10	10	U	30	30	U			
10	Hexachlorobenzene	10	10	U	30	30	U			
10	Hexachlorobutadiene	10	10	U	30	30	U			
10	Hexachlorocyclopentadiene	10	10	U	30	30	U			
10	Hexachloroethane	10	10	U	30	30	U			

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302938

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913-61

Matrix: Leachate

Semi-volatile Organics

CRCL	Parameter	Sample Point L2LM/1B			Sample Point L2LM/1B			Sample Point L2LM/1B			Sample Point L2LM/1B			Sample Point L2LM/1B			Sample Point L2LM/1B		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Indeno(1,2,3-cd)Pyrene	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
10	Isophorone	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
10	2-Methylnaphthalene	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
10	2-Methylphenol	10	2	J	30	30	J	30	30	J	30	30	J	30	30	J	30	30	J
10	4-Methylphenol	10	180	J	30	160	J	30	160	J	30	160	J	30	160	J	30	160	J
10	Naphthalene	10	3	J	30	3	J	30	3	J	30	3	J	30	3	J	30	3	J
25	2-Nitroaniline	25	25	U	75	75	U	75	75	U	75	75	U	75	75	U	75	75	U
25	3-Nitroaniline	25	25	U	75	75	U	75	75	U	75	75	U	75	75	U	75	75	U
25	4-Nitroaniline	25	25	U	75	75	U	75	75	U	75	75	U	75	75	U	75	75	U
10	Nitrobenzene	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
10	2-Nitrophenol	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
10	4-Nitrophenol	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
25	N-Nitroso-di-n-propylamine	25	25	U	75	75	U	75	75	U	75	75	U	75	75	U	75	75	U
10	N-Nitrosodiphenylamine	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
10	N-Nitrosodiphenylamine	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
10	2,2'-Oxybis(1-Chloropropane)	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
25	Pentachlorophenol	25	25	U	75	75	U	75	75	U	75	75	U	75	75	U	75	75	U
10	Benzo(g,h,i)perylene	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
10	Phenanthrene	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
10	Phenol	10	30	A	30	30	A	30	30	A	30	30	A	30	30	A	30	30	A
10	Pyrene	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
10	Benzo(a)Pyrene	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
10	1,2,4-Trichlorobenzene	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U
25	2,4,5-Trichlorophenol	25	25	U	75	75	U	75	75	U	75	75	U	75	75	U	75	75	U
10	2,4,6-Trichlorophenol	10	10	U	30	30	U	30	30	U	30	30	U	30	30	U	30	30	U

Notes:

All units are ug/l
Sample Quantitation Limit (SQL) is CRCL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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PESTICIDES/PCBs

Phase 1A

AR302940

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Leachate

Pesticide Organics

CRQL	Parameter	Sample Point L1-EL/1A Date Sampled: 10/01/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1-WL/1A Date Sampled: 09/02/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1-LN1/1A Date Sampled: 09/01/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point L1-LN1/FD Date Sampled: 09/01/92 Dilution Factor: 1.0 Percent Moisture: NA %		
		SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual
0.05	Aldrin	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL
1.0	Aroclor-1016	1.0	1.0	UL	1.0	1.0	UL	1.0	1.0	UL	1.0	1.0	UL
2.0	Aroclor-1221	2.0	2.0	UL	2.0	2.0	UL	2.0	2.0	UL	2.0	2.0	UL
1.0	Aroclor-1232	1.0	1.0	UL	1.0	1.0	UL	1.0	1.0	UL	1.0	1.0	UL
1.0	Aroclor-1242	1.0	1.0	UL	1.0	1.0	UL	1.0	1.0	UL	1.0	1.0	UL
1.0	Aroclor-1248	1.0	1.0	UL	1.0	1.0	UL	1.0	1.0	UL	1.0	1.0	UL
1.0	Aroclor-1254	1.0	1.0	UL	1.0	1.0	UL	1.0	1.0	UL	1.0	1.0	UL
1.0	Aroclor-1260	1.0	1.0	UL	1.0	1.0	UL	1.0	1.0	UL	1.0	1.0	UL
0.05	alpha-BHC	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL
0.05	beta-BHC	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL
0.05	delta-BHC	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL
0.05	gamma-BHC (Lindane)	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL
0.05	alpha-Chlordane	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL
0.05	gamma-Chlordane	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL
0.10	4,4'-DDB	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL
0.10	4,4'-DDE	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL
0.10	4,4'-DDT	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL
0.10	Dieldrin	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL
0.05	Endosulfan I	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL
0.10	Endosulfan II	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL
0.10	Endosulfan Sulfate	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL
0.10	Endrin	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL
0.10	Endrin Aldehyde	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL
0.10	Endrin Ketone	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL	0.10	0.10	UL
0.05	Heptachlor	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL
0.05	Heptachlor Epoxide	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL	0.050	0.050	UL
0.50	Methoxychlor	0.50	0.50	UL	0.50	0.50	UL	0.50	0.50	UL	0.50	0.50	UL
5.0	Toxaphene	5.0	5.0	UL	5.0	5.0	UL	5.0	5.0	UL	5.0	5.0	UL

Notes:

All units are ug/l
 Sample Quantitation Limit (SOL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
 The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302941

TOTAL (UNFILTERED) METALS

Phase 1A

Phase 1B

AR302942

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1A
BERKS COUNTY, PENNSYLVANIA

Matrix: Leachate

Parameter	Sample Point L1-EL/1A				Sample Point L1-LM1/1A				Sample Point L1-LM1/1A				Sample Point L1-LM1/1A				Sample Point L1-LM1/1A			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	200	14.0	410	A	200	14.0	26.5	B	200	14.0	38.3	B	200	14.0	4040	A	200	14.0	4040	A
Antimony	60.0	14.0	14.0	U	60.0	14.0	14.0	U	60.0	14.0	14.0	U	60.0	14.0	14.0	U	60.0	14.0	14.0	U
Arsenic	10.0	3.0	16.6	K	10.0	3.0	3.0	U	10.0	3.0	3.0	U	10.0	3.0	9.1	K	10.0	3.0	9.1	K
Barium	200	0.40	453	J	200	0.40	404	J	200	0.40	363	J	200	0.40	266	J	200	0.40	266	J
Beryllium	5.0	0.30	0.30	U	5.0	0.30	0.30	U	5.0	0.30	0.30	U	5.0	0.30	0.30	U	5.0	0.30	0.30	U
Cadmium	5.0	1.9	3.4	L	5.0	1.9	1.9	U	5.0	1.9	1.9	U	5.0	1.9	2.2	L	5.0	1.9	2.2	L
Calcium	5000	4.1	121000	J	5000	4.1	129000	J	5000	4.1	119000	J	5000	4.1	46000	J	5000	4.1	46000	J
Chromium	10.0	3.6	24.9	L	10.0	3.6	3.6	U	10.0	3.6	3.6	U	10.0	3.6	12.6	L	10.0	3.6	12.6	L
Cobalt	50.0	2.0	31.3	A	50.0	2.0	4.6	B	50.0	2.0	3.2	B	50.0	2.0	7.4	B	50.0	2.0	7.4	B
Copper	25.0	1.9	4.2	A	25.0	1.9	1.9	U	25.0	1.9	1.9	U	25.0	1.9	20.2	A	25.0	1.9	20.2	A
Iron	100	9.2	24700	J	100	9.2	9900	J	100	9.2	9320	J	100	9.2	10500	J	100	9.2	10500	J
Lead	3.0	1.0	17.4	J	3.0	1.0	1.0	U	3.0	1.0	1.0	U	3.0	1.0	15.6	J	3.0	1.0	15.6	J
Magnesium	5000	12.2	153000	J	5000	12.2	66600	J	5000	12.2	59800	J	5000	12.2	23200	J	5000	12.2	23200	J
Manganese	15.0	0.60	880	J	15.0	0.60	4650	J	15.0	0.60	4250	J	15.0	0.60	2260	J	15.0	0.60	2260	J
Mercury	0.2	0.04	0.19	B	0.2	0.04	0.24	B	0.2	0.04	0.20	B	0.2	0.04	0.24	B	0.2	0.04	0.24	B
Nickel	40.0	7.9	99.7	A	40.0	7.9	26.0	B	40.0	7.9	32.1	B	40.0	7.9	29.9	B	40.0	7.9	29.9	B
Potassium	5000	64.0	345000	J	5000	64.0	30100	J	5000	64.0	26500	J	5000	64.0	49000	J	5000	64.0	49000	J
Selenium	5.0	5.0	5.0	U	5.0	5.0	5.0	U	5.0	5.0	5.0	U	5.0	5.0	5.0	U	5.0	5.0	5.0	U
Silver	10.0	2.0	2.0	U	10.0	2.0	2.0	U	10.0	2.0	2.0	U	10.0	2.0	2.0	U	10.0	2.0	2.0	U
Sodium	5000	8.0	954000	J	5000	8.0	214000	J	5000	8.0	188000	J	5000	8.0	132000	J	5000	8.0	132000	J
Thallium	10.0	2.0	2.0	U	10.0	2.0	2.0	U	10.0	2.0	10.0	U	10.0	2.0	2.0	U	10.0	2.0	2.0	U
Vanadium	50.0	1.8	7.9	A	50.0	1.8	1.8	U	50.0	1.8	1.8	U	50.0	1.8	20.3	A	50.0	1.8	20.3	A
Zinc	20.0	1.2	213	A	20.0	1.2	10.2	B	20.0	1.2	8.8	B	20.0	1.2	97.4	A	20.0	1.2	97.4	A
Cyanide	10.0	10.0	10.0	U	10.0	10.0	10.0	U	10.0	10.0	10.0	U	10.0	10.0	10.0	U	10.0	10.0	10.0	U

Notes: All units are ug/l

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers.....

A - Acceptable (Quantitative) Data

J - Estimated (Semi-quantitative) Data

K - Biased High (Semi-quantitative) Data

L - Biased Low (Semi-quantitative) Data

B - Present in associated blanks (Semi-quantitative) Data

UJ - Not Detected/Estimated Data

U - Not Detected/Quantitative Data

UL - Not Detected/Biased Low

N - Tentative Identification

R - Unusable Data

Q - Not Applicable

AR302943

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1B
BERKS COUNTY, PENNSYLVANIA

Matrix: Leachate

Parameter	Sample Point L2LNI/1B			Sample Point			Sample Point			Sample Point		
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	200	44.0	117	B								
Antimony	60.0	35.0	35.0	U								
Arsenic	10.0	4.0	4.0	UJ								
Barium	200	2.0	623	A								
Beryllium	5.0	1.0	1.0	U								
Cadmium	5.0	3.0	3.0	U								
Calcium	5000	17.0	173000	A								
Chromium	10.0	8.0	13.8	A								
Cobalt	50.0	9.0	11.8	A								
Copper	25.0	4.0	4.0	U								
Iron	100	25.0	35400	J								
Lead	3.0	2.0	2.0	UL								
Magnesium	5000	48.0	86500	A								
Manganese	15.0	1.0	5830	A								
Mercury	0.20	0.20	0.20	U								
Nickel	40.0	18.0	31.1	A								
Potassium	5000	1270	38500	A								
Selenium	5.0	3.0	3.0	UJ								
Silver	10.0	4.0	4.0	U								
Sodium	5000	123	275000	A								
Thallium	10.0	3.0	3.0	UL								
Vanadium	50.0	6.0	6.0	U								
Zinc	20.0	4.0	84.6	B								
Cyanide			Not Analyzed									

Notes: All units are ug/l
Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).
The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers.....
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative) Data
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

AR302944

WET CHEMISTRY

Phase 1A

AR302945

October 1993

913-6773

SUMMARY OF WET CHEMISTRY CONVENTIONAL ANALYSES - PHASE 1A

BERKS COUNTY, PENNSYLVANIA

Matrix: Leachate

Parameter	Sample Point L1LN1/1A			Sample Point L1LN1/1D			Sample Point			Sample Point		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Alkalinity - CaCO3	2.0	646	A	2.0	677	A						
Ammonia - N	0.10	39.4	A	0.10	39.0	A						
Biochemical Oxygen Demand	2.0	11.0	A	2.0	14.0	A						
Chemical Oxygen Demand	5.0	143	A	5.0	110	A						
Chloride	2.0	457	A	2.0	434	A						
Fluoride	0.10	0.20	A	0.10	0.10	A						
Hardness - CaCO3	2.0	596	A	2.0	543	A						
Hexavalent Chromium	0.10	0.10	U	0.10	0.10	U						
Nitrate/Nitrite - N	0.02	0.19	B	0.02	0.05	B						
Sulfate	5.0	11.0	A	5.0	11.0	A						
Total Dissolved Solids	5.0	7170	J	5.0	1530	J						
Total Inorganic Carbon	1.0	190	A	1.0	170	A						
Total Kjeldahl Nitrogen	0.10	43.9	A	0.10	38.2	A						
Total Organic Carbon	1.0	39.0	A	1.0	34.0	A						
Total Phosphate - P	0.11	0.31	J	0.11	0.11	J						
Total Suspended Solids	5.0	55.0	L	5.0	41.0	L						
Turbidity	0.20	173	A	0.20	167	A						

Notes: All units are mg/l except Turbidity which is NTU.
The Reporting Limits (RLs) have been adjusted for percent solids.
The Qual column indicates the Qualifier applied to the result following data validation (see below).

Qualifiers.....

A - Acceptable (Quantitative) Data	UJ - Not Detected/Estimated Data	R - Unusable Data
J - Estimated (Semi-quantitative) Data	U - Not Detected/Quantitative Data	Q - Not Applicable
K - Biased High (Semi-quantitative) Data	UL - Not Detected/Biased Low	N - Tentative Identification
L - Biased Low (Semi-quantitative) Data		N* - Tentative Identification
B - Present in associated blanks (Semi-quantitative) Data		(result below laboratory MDL)

AR302946

SURFACE WATER

AR302947

VOLATILE ORGANIC COMPOUNDS

Phase 1A
Phase 1B

AR302948

October 1993

913

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Volatiles Organics

CRCL	Parameter	Sample Point SV-06/1A Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SV-07/1A Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SV-08/1A Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: NA %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	10	10	U	10	10	U	10	10	U
10	Benzene	10	10	U	10	10	U	10	10	U
10	Bromodichloromethane	10	10	U	10	10	U	10	10	U
10	Bromoform	10	10	U	10	10	U	10	10	U
10	Bromomethane	10	10	U	10	10	U	10	10	U
10	2-Butanone	10	10	U	10	10	U	10	10	U
10	Carbon Disulfide	10	10	U	10	10	U	10	10	U
10	Carbon Tetrachloride	10	10	U	10	10	U	10	10	U
10	Chlorobenzene	10	10	U	10	10	U	10	10	U
10	Chloroethene	10	10	U	10	10	U	10	10	U
10	Chloroform	10	10	U	10	10	U	10	10	U
10	Chloromethane	10	10	U	10	10	U	10	10	U
10	Dibromochloromethane	10	10	U	10	10	U	10	10	U
10	1,1-Dichloroethane	10	10	U	10	10	U	10	10	U
10	1,2-Dichloroethane	10	10	U	10	10	U	10	10	U
10	1,1-Dichloroethene	10	10	U	10	10	U	10	10	U
10	Total 1,2-Dichloroethene	10	10	U	10	10	U	10	10	U
10	1,2-Dichloropropane	10	10	U	10	10	U	10	10	U
10	cis-1,3-Dichloropropene	10	10	U	10	10	U	10	10	U
10	trans-1,3-Dichloropropene	10	10	U	10	10	U	10	10	U
10	Ethylbenzene	10	10	U	10	10	U	10	10	U
10	2-Hexanone	10	10	U	10	10	U	10	10	U
10	4-Methyl-2-Pentanone	10	10	U	10	10	U	10	10	U
10	Methylene Chloride	10	10	U	10	10	U	10	10	U
10	Styrene	10	2	B	10	4	B	10	4	B
10	1,1,2,2-Tetrachloroethane	10	10	U	10	10	U	10	10	U
10	Tetrachloroethene	10	10	U	10	10	U	10	10	U
10	Toluene	10	10	U	10	10	U	10	10	U
10	1,1,1-Trichloroethane	10	10	U	10	10	U	10	10	U
10	1,1,2-Trichloroethane	10	10	U	10	10	U	10	10	U
10	Trichloroethene	10	10	U	10	10	U	10	10	U
10	Vinyl Chloride	10	10	U	10	10	U	10	10	U
10	Total Xylenes	10	10	U	10	10	U	10	10	U

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CRCL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data Unusable Data.
B - Present in associated blanks (Semi-quantitative Data)
UL - Not Detected/Biased Low Q - Not Applicable

AR302949

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water.

Volatile Organics

CRQL	Parameter	Sample Point SU01/1B Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU03/1B Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU04/1B Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU09/1B Date Sampled: 06/22/93 Dilution Factor: 1.0 Percent Moisture: NA %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	10	10	U	10	10	U	10	10	U	10	10	U
10	Benzene	10	10	U	10	10	U	10	10	U	10	10	U
10	Bromochloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	Bromoform	10	10	U	10	10	U	10	10	U	10	10	U
10	Bromomethane	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Butanone	10	10	U	10	10	U	10	10	U	10	10	U
10	Carbon Disulfide	10	10	U	10	10	U	10	10	U	10	10	U
10	Carbon Tetrachloride	10	10	U	10	10	U	10	10	U	10	10	U
10	Chlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	Chloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	Chloroform	10	10	U	10	10	U	10	10	U	10	10	U
10	Chloromethane	10	10	U	10	10	U	10	10	U	10	10	U
10	Dibromochloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	1,1-Dichloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	1,2-Dichloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	1,1-Dichloroethene	10	10	U	10	10	U	10	10	U	10	10	U
10	Total 1,2-Dichloroethene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,2-Dichloropropane	10	10	U	10	10	U	10	10	U	10	10	U
10	cis-1,3-Dichloropropene	10	10	U	10	10	U	10	10	U	10	10	U
10	trans-1,3-Dichloropropene	10	10	U	10	10	U	10	10	U	10	10	U
10	Ethylbenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Methyl-2-Pentanol	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Hexanone	10	10	U	10	10	U	10	10	U	10	10	U
10	Methylene Chloride	10	10	U	10	10	U	10	10	U	10	10	U
10	Styrene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,1,2,2-Tetrachloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	Tetrachloroethene	10	10	U	10	10	U	10	10	U	10	10	U
10	Toluene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,1,1-Trichloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	1,1,2-Trichloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	Trichloroethene	10	10	U	10	10	U	10	10	U	10	10	U
10	Vinyl Chloride	10	10	U	10	10	U	10	10	U	10	10	U
10	Total Xylenes	10	10	U	10	10	U	10	10	U	10	10	U

Notes:
All units are ug/l
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
UL - Not Detected/Biased Low
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

ber 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913

Matrix: Surface Water

Volatile Organics

CRQL	Parameter	Sample Point SV10/18			Sample Point SV10/18			Sample Point SV11/18			Sample Point SV12/18		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	10	10	U	10	10	U	10	10	U	10	10	U
10	Benzene	10	10	U	10	10	U	10	10	U	10	10	U
10	Bromodichloromethane	10	10	U	10	10	U	10	10	U	10	10	U
10	Bromoform	10	10	U	10	10	U	10	10	U	10	10	U
10	Bromomethane	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Butanone	10	10	U	10	10	U	10	10	U	10	10	U
10	Carbon Disulfide	10	10	U	10	10	U	10	10	U	10	10	U
10	Carbon Tetrachloride	10	10	U	10	10	U	10	10	U	10	10	U
10	Chlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	Chloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	Chloroform	10	10	U	10	10	U	10	10	U	10	10	U
10	Chloromethane	10	10	U	10	10	U	10	10	U	10	10	U
10	Dibromochloromethane	10	10	U	10	10	U	10	10	U	10	10	U
10	1,1-Dichloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	1,2-Dichloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	1,1-Dichloroethene	10	10	U	10	10	U	10	10	U	10	10	U
10	Total 1,2-Dichloroethene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,2-Dichloropropene	10	10	U	10	10	U	10	10	U	10	10	U
10	cis-1,3-Dichloropropene	10	10	U	10	10	U	10	10	U	10	10	U
10	trans-1,3-Dichloropropene	10	10	U	10	10	U	10	10	U	10	10	U
10	Ethylbenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Methyl-2-Pentanone	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Hexanone	10	10	U	10	10	U	10	10	U	10	10	U
10	Methylene Chloride	10	10	U	10	10	U	10	10	U	10	10	U
10	Styrene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,1,2,2-Tetrachloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	Tetrachloroethene	10	10	U	10	10	U	10	10	U	10	10	U
10	Toluene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,1,1-Trichloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	1,1,2-Trichloroethane	10	10	U	10	10	U	10	10	U	10	10	U
10	Trichloroethene	10	10	U	10	10	U	10	10	U	10	10	U
10	Vinyl Chloride	10	10	U	10	10	U	10	10	U	10	10	U
10	Total Xylenes	10	10	U	10	10	U	10	10	U	10	10	U

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data W - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

berks390.rpt

Golder Associates

AR302951

Matrix: Surface Water

Volatile Organics

CRQL	Parameter	Sample Point SU13/18			Sample Point			Sample Point			Sample Point		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	10	10	U									
10	Benzene	10	10	U									
10	Bromodichloromethane	10	10	U									
10	Bromoform	10	10	U									
10	Bromomethane	10	10	U									
10	2-Butanone	10	10	U									
10	Carbon Disulfide	10	10	U									
10	Carbon Tetrachloride	10	10	U									
10	Chlorobenzene	10	10	U									
10	Chloroethane	10	10	U									
10	Chloroform	10	10	U									
10	Chloromethane	10	10	U									
10	Dibromochloromethane	10	10	U									
10	1,1-Dichloroethane	10	10	U									
10	1,2-Dichloroethane	10	10	U									
10	1,1-Dichloroethene	10	10	U									
10	Total 1,2-Dichloroethene	10	10	U									
10	1,2-Dichloropropane	10	10	U									
10	cis-1,3-Dichloropropene	10	10	U									
10	trans-1,3-Dichloropropene	10	10	U									
10	Ethylbenzene	10	10	U									
10	4-Methyl-2-Pentanone	10	10	U									
10	2-Hexanone	10	10	U									
10	Methylene Chloride	10	1	B									
10	Styrene	10	10	U									
10	1,1,2,2-Tetrachloroethane	10	10	U									
10	Tetrachloroethene	10	10	U									
10	Toluene	10	10	U									
10	1,1,1-Trichloroethane	10	10	U									
10	1,1,2-Trichloroethane	10	10	U									
10	Trichloroethene	10	10	U									
10	Vinyl Chloride	10	10	U									
10	Total Xylenes	10	10	U									

Notes:

All units are ug/l
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

SEMI-VOLATILE ORGANIC COMPOUNDS

Phase 1A
Phase 1B

AR302953

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Semivolatile Organics

CROL	Parameter	Sample Point SU-06/1A Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU-07/1A Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU-08/1A Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point Date Sampled: Dilution Factor: Percent Moisture:		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acenaphthene	10	10	U	10	10	U	10	10	U			
10	Acenaphthylene	10	10	U	10	10	U	10	10	U			
10	Anthracene	10	10	U	10	10	U	10	10	U			
10	Benzo(a)Anthracene	10	10	U	10	10	U	10	10	U			
10	4-Bromophenyl-phenylether	10	10	U	10	10	U	10	10	U			
10	Butylbenzylphthalate	10	10	U	10	10	U	10	10	U			
10	Carbazole	10	10	U	10	10	U	10	10	U			
10	4-Chloro-3-Methylphenol	10	10	U	10	10	U	10	10	U			
10	4-Chloroaniline	10	10	U	10	10	U	10	10	U			
10	bis(2-Chloroethyl)ether	10	10	U	10	10	U	10	10	U			
10	2-Chloronaphthalene	10	10	U	10	10	U	10	10	U			
10	2-Chlorophenol	10	10	U	10	10	U	10	10	U			
10	4-Chlorophenyl-phenylether	10	10	U	10	10	U	10	10	U			
10	Chrysene	10	10	U	10	10	U	10	10	U			
10	Dibenz(a,h)Anthracene	10	10	U	10	10	U	10	10	U			
10	Dibenzofuran	10	10	U	10	10	U	10	10	U			
10	1,2-Dichlorobenzene	10	10	U	10	10	U	10	10	U			
10	1,3-Dichlorobenzene	10	10	U	10	10	U	10	10	U			
10	1,4-Dichlorobenzene	10	10	U	10	10	U	10	10	U			
10	3,3'-Dichlorobenzidine	10	10	U	10	10	U	10	10	U			
10	2,4-Dichlorophenol	10	10	U	10	10	U	10	10	U			
10	Diethylphthalate	10	10	U	10	10	U	10	10	U			
10	2,4-Dimethylphenol	10	10	U	10	10	U	10	10	U			
10	Dimethyl Phthalate	10	10	U	10	10	U	10	10	U			
25	Di-n-butylphthalate	25	25	U	25	25	U	25	25	U			
25	4,6-Dinitro-2-methylphenol	25	25	U	25	25	U	25	25	U			
10	2,4-Dinitrophenol	10	10	U	10	10	U	10	10	U			
10	2,6-Dinitrotoluene	10	10	U	10	10	U	10	10	U			
10	Di-n-Octyl Phthalate	10	10	U	10	10	U	10	10	U			
10	bis(2-Ethylhexyl)Phthalate	10	10	U	10	10	U	10	10	U			
10	Fluoranthene	10	10	U	10	10	U	10	10	U			
10	Benzo(b)Fluoranthene	10	10	U	10	10	U	10	10	U			
10	Benzo(k)Fluoranthene	10	10	U	10	10	U	10	10	U			
10	Fluorene	10	10	U	10	10	U	10	10	U			
10	Hexachlorobenzene	10	10	U	10	10	U	10	10	U			
10	Hexachlorobutadiene	10	10	U	10	10	U	10	10	U			
10	Hexachlorocyclopentadiene	10	10	U	10	10	U	10	10	U			
10	Hexachloroethane	10	10	U	10	10	U	10	10	U			

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302954

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

913-6.

Matrix: Surface Water

Semi-volatile organics

CROL	Parameter	Sample Point SU-06/1A Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU-07/1A Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU-08/1A Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point Date Sampled: Dilution Factor: Percent Moisture: %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Indeno(1,2,3-cd)Pyrene	10	10	U	10	10	U	10	10	U	10	10	U
10	Isophorone	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Methylnaphthalene	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Methylphenol	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Methylphenol	10	10	U	10	10	U	10	10	U	10	10	U
10	Naphthalene	10	10	U	10	10	U	10	10	U	10	10	U
25	2-Nitroaniline	25	25	U	25	25	UJ	25	25	U	25	25	U
25	3-Nitroaniline	25	25	U	25	25	U	25	25	U	25	25	U
25	4-Nitroaniline	25	25	U	25	25	U	25	25	U	25	25	U
10	Nitrobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Nitrophenol	10	10	U	10	10	U	10	10	U	10	10	U
25	4-Nitrophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	N-Nitroso-di-n-propylamine	10	10	U	10	10	U	10	10	U	10	10	U
10	N-Nitrosodiphenylamine	10	10	U	10	10	U	10	10	U	10	10	U
10	2,2'-Oxybis(1-Chloropropane)	10	10	U	10	10	UJ	10	10	U	10	10	U
25	Pentachlorophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	Benzo(g,h,i)Perylene	10	10	U	10	10	U	10	10	U	10	10	U
10	Phenanthrene	10	10	U	10	10	U	10	10	U	10	10	U
10	Phenol	10	10	U	10	10	U	10	10	U	10	10	U
10	Pyrene	10	10	U	10	10	U	10	10	U	10	10	U
10	Benzo(a)Pyrene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,2,4-Trichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
25	2,4,5-Trichlorophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	2,4,6-Trichlorophenol	10	10	U	10	10	U	10	10	U	10	10	U

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low O - Not Applicable

/s/georgia.rpi

Gold Associates

Page

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October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Semi-volatile Organics

CRQL	Parameter -	Sample Point SW01/1B			Sample Point SW03/1B			Sample Point SW04/1B			Sample Point SW09/1B		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acenaphthene	10	10	U	10	10	U	10	10	U	10	10	U
10	Acenaphthylene	10	10	U	10	10	U	10	10	U	10	10	U
10	Anthracene	10	10	U	10	10	U	10	10	U	10	10	U
10	Benzo(a)Anthracene	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Bromophenyl-phenylether	10	10	U	10	10	U	10	10	U	10	10	U
10	Butylbenzylphthalate	10	10	U	10	10	U	10	10	U	10	10	U
10	Carbazole	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Chloro-3-Methylphenol	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Chloroaniline	10	10	U	10	10	U	10	10	U	10	10	U
10	bis(2-Chloroethoxy)Methane	10	10	U	10	10	U	10	10	U	10	10	U
10	bis(2-Chloroethyl)ether	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Chloronaphthalene	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Chlorophenol	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Chlorophenyl-phenylether	10	10	U	10	10	U	10	10	U	10	10	U
10	Chrysene	10	10	U	10	10	U	10	10	U	10	10	U
10	Dibenz(a,h)Anthracene	10	10	U	10	10	U	10	10	U	10	10	U
10	Dibenzofuran	10	10	U	10	10	U	10	10	U	10	10	U
10	1,2-Dichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,3-Dichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,4-Dichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	3,3'-Dichlorobenzidine	10	10	U	10	10	U	10	10	U	10	10	U
10	2,4-Dichlorophenol	10	10	U	10	10	U	10	10	U	10	10	U
10	Diethylphthalate	10	10	U	10	10	U	10	10	U	10	10	U
10	2,4-Dimethylphenol	10	10	U	10	10	U	10	10	U	10	10	U
10	Dimethyl Phthalate	10	10	U	10	10	U	10	10	U	10	10	U
10	Di-n-butylphthalate	10	10	U	10	10	U	10	10	U	10	10	U
25	4,6-Dinitro-2-methylphenol	25	25	U	25	25	U	25	25	U	25	25	U
25	2,4-Dinitrophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	2,4-Dinitrotoluene	10	10	U	10	10	U	10	10	U	10	10	U
10	2,6-Dinitrotoluene	10	10	U	10	10	U	10	10	U	10	10	U
10	Di-n-Octyl Phthalate	10	10	U	10	10	U	10	10	U	10	10	U
10	bis(2-Ethylhexyl)Phthalate	10	10	U	10	10	U	10	10	U	10	10	U
10	Fluoranthene	10	10	U	10	10	U	10	10	U	10	10	U
10	Benzo(b)Fluoranthene	10	10	U	10	10	U	10	10	U	10	10	U
10	Benzo(k)Fluoranthene	10	10	U	10	10	U	10	10	U	10	10	U
10	Fluorene	10	10	U	10	10	U	10	10	U	10	10	U
10	Hexachlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	Hexachlorobutadiene	10	10	U	10	10	U	10	10	U	10	10	U
10	Hexachlorocyclopentadiene	10	10	U	10	10	U	10	10	U	10	10	U
10	Hexachloroethane	10	10	U	10	10	U	10	10	U	10	10	U

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
 The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:
 A - Acceptable (Quantitative) Data
 J - Estimated (Semi-quantitative) Data
 B - Present in associated blanks (Semi-quantitative Data)

Qualifiers:
 K - Biased High (Semi-quantitative) Data
 L - Biased Low (Semi-quantitative) Data
 UL - Not Detected/Biased Low
 UJ - Not Detected/Estimated Data
 N - Tentative Identification
 R - Unusable Data
 Q - Not Applicable

AR302956

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Semivolatile Organics

CRQL	Parameter	Sample Point SU01/18 Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU03/18 Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU04/18 Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU09/18 Date Sampled: 06/22/93 Dilution Factor: 1.0 Percent Moisture: NA %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Indeno(1,2,3-cd)Pyrene	10	10	U	10	10	U	10	10	U	10	10	U
10	Isophorone	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Methylnaphthalene	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Methylphenol	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Methylphenol	10	10	U	10	10	U	10	10	U	10	10	U
10	Naphthalene	10	10	U	10	10	U	10	10	U	10	10	U
25	2-Nitroaniline	25	25	U	25	25	U	25	25	U	25	25	U
25	3-Nitroaniline	25	25	U	25	25	U	25	25	U	25	25	U
25	4-Nitroaniline	25	25	U	25	25	U	25	25	U	25	25	U
10	Nitrobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Nitrophenol	10	10	U	10	10	U	10	10	U	10	10	U
25	4-Nitrophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	N-Nitroso-di-n-propylamine	10	10	U	10	10	U	10	10	U	10	10	U
10	N-Nitrosodiphenylamine	10	10	U	10	10	U	10	10	U	10	10	U
10	2,2'-Oxybis(1-Chloropropane)	10	10	U	10	10	U	10	10	U	10	10	U
25	Pentachlorophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	Benzo(g,h,i)Perylene	10	10	U	10	10	U	10	10	U	10	10	U
10	Phenanthrene	10	10	U	10	10	U	10	10	U	10	10	U
10	Pyrene	10	1	U	10	10	U	10	10	U	10	10	U
10	Benzo(a)Pyrene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,2,4-Trichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
25	2,4,5-Trichlorophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	2,4,6-Trichlorophenol	10	10	U	10	10	U	10	10	U	10	10	U

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302957

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SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Semi-volatile Organics

CROL	Parameter	Sample Point SW10/1B Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SW10/FD Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SW11/1B Date Sampled: 06/22/93 Dilution Factor: 1.0 Percent Moisture: NA %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acenaphthene	10	10	U	10	10	U	10	10	U
10	Acenaphthylene	10	10	U	10	10	U	10	10	U
10	Anthracene	10	10	U	10	10	U	10	10	U
10	Benzo(a)Anthracene	10	10	U	10	10	U	10	10	U
10	4-Bromophenyl-phenylether	10	10	U	10	10	U	10	10	U
10	Butylbenzylphthalate	10	10	U	10	10	U	10	10	U
10	Carbazole	10	10	U	10	10	U	10	10	U
10	4-Chloro-3-Methylphenol	10	10	U	10	10	U	10	10	U
10	4-Chloroaniline	10	10	U	10	10	U	10	10	U
10	bis(2-Chloroethoxy)Methane	10	10	U	10	10	U	10	10	U
10	bis(2-Chloroethyl)ether	10	10	U	10	10	U	10	10	U
10	2-Chloronaphthalene	10	10	U	10	10	U	10	10	U
10	2-Chlorophenol	10	10	U	10	10	U	10	10	U
10	4-Chlorophenyl-phenylether	10	10	U	10	10	U	10	10	U
10	Chrysene	10	10	U	10	10	U	10	10	U
10	Dibenz(a,h)Anthracene	10	10	U	10	10	U	10	10	U
10	Dibenzofuran	10	10	U	10	10	U	10	10	U
10	1,2-Dichlorobenzene	10	10	U	10	10	U	10	10	U
10	1,3-Dichlorobenzene	10	10	U	10	10	U	10	10	U
10	1,4-Dichlorobenzene	10	10	U	10	10	U	10	10	U
10	3,3'-Dichlorobenzidine	10	10	U	10	10	U	10	10	U
10	2,4-Dichlorophenol	10	10	U	10	10	U	10	10	U
10	Diethylphthalate	10	10	U	10	10	U	10	10	U
10	2,4-Dimethylphenol	10	10	U	10	10	U	10	10	U
10	Dimethyl Phthalate	10	10	U	10	10	U	10	10	U
10	Di-n-butylphthalate	10	10	U	10	10	U	10	10	U
25	4,6-Dinitro-2-methylphenol	25	2	B	25	2	B	25	2	B
25	2,4-Dinitrophenol	25	25	U	25	25	U	25	25	U
10	2,4-Dinitrotoluene	10	10	U	10	10	U	10	10	U
10	2,6-Dinitrotoluene	10	10	U	10	10	U	10	10	U
10	Di-n-Octyl Phthalate	10	10	U	10	10	U	10	10	U
10	bis(2-Ethylhexyl)Phthalate	10	2	B	10	2	B	10	1	B
10	Benzo(b)Fluoranthene	10	10	U	10	10	U	10	10	U
10	Fluoranthene	10	10	U	10	10	U	10	10	U
10	Benzo(k)Fluoranthene	10	10	U	10	10	U	10	10	U
10	Fluorene	10	10	U	10	10	U	10	10	U
10	Hexachlorobenzene	10	10	U	10	10	U	10	10	U
10	Hexachlorobutadiene	10	10	U	10	10	U	10	10	U
10	Hexachlorocyclopentadiene	10	10	U	10	10	U	10	10	U
10	Hexachloroethane	10	10	U	10	10	U	10	10	U

Notes:

All units are ug/l
 Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
 The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data UL - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low q - Not Applicable

AR302958

Matrix: Surface Water

Semivolatile Organics

CRQL	Parameter	Sample Point SU10/18 Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU10/18 Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU11/18 Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA %			Sample Point SU12/18 Date Sampled: 06/22/93 Dilution Factor: 1.0 Percent Moisture: NA %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Indeno(1,2,3-cd)Pyrene	10	10	U	10	10	U	10	10	U	10	10	U
10	Isophorone	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Methylnaphthalene	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Methylphenol	10	10	U	10	10	U	10	10	U	10	10	U
10	4-Methylphenol	10	10	U	10	10	U	10	10	U	10	10	U
10	Naphthalene	10	10	U	10	10	U	10	10	U	10	10	U
25	2-Nitroaniline	25	25	U	25	25	U	25	25	U	25	25	U
25	3-Nitroaniline	25	25	U	25	25	U	25	25	U	25	25	U
25	4-Nitroaniline	25	25	U	25	25	U	25	25	U	25	25	U
10	Nitrobenzene	10	10	U	10	10	U	10	10	U	10	10	U
10	2-Nitrophenol	10	10	U	10	10	U	10	10	U	10	10	U
25	4-Nitrophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	N-Nitroso-di-n-propylamine	10	10	U	10	10	U	10	10	U	10	10	U
10	N-Nitrosodiphenylamine	10	10	U	10	10	U	10	10	U	10	10	U
10	2,2'-Oxybis(1-Chloropropane)	10	10	U	10	10	U	10	10	U	10	10	U
25	Pentachlorophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	Benzo(g,h,i)Perylene	10	10	U	10	10	U	10	10	U	10	10	U
10	Phenanthrene	10	10	U	10	10	U	10	10	U	10	10	U
10	Pyrene	10	10	U	10	10	U	10	10	U	10	10	U
10	Benzo(a)Pyrene	10	10	U	10	10	U	10	10	U	10	10	U
10	1,2,4-Trichlorobenzene	10	10	U	10	10	U	10	10	U	10	10	U
25	2,4,5-Trichlorophenol	25	25	U	25	25	U	25	25	U	25	25	U
10	2,4,6-Trichlorophenol	10	10	U	10	10	U	10	10	U	10	10	U

Notes:
All units are ug/l
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
M - Tentative Identification
N - Unusable Data
R - Not Applicable
Q - Not Applicable

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Semivolatile Organics

CRQL	Parameter	Sample Point SV13/1B Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA			Sample Point Date Sampled: Dilution Factor: Percent Moisture:			Sample Point Date Sampled: Dilution Factor: Percent Moisture:			Sample Point Date Sampled: Dilution Factor: Percent Moisture:		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acenaphthene	10	10	U									
10	Acenaphthylene	10	10	U									
10	Anthracene	10	10	U									
10	Benzo(a)Anthracene	10	10	U									
10	4-Bromophenyl-phenylether	10	10	U									
10	Butylbenzylphthalate	10	10	U									
10	Carbazole	10	10	U									
10	4-Chloro-3-Methylphenol	10	10	U									
10	4-Chloroaniline	10	10	U									
10	bis(2-Chloroethoxy)Methane	10	10	U									
10	bis(2-Chloroethyl)ether	10	10	U									
10	2-Chloronaphthalene	10	10	U									
10	2-Chlorophenol	10	10	U									
10	4-Chlorophenyl-phenylether	10	10	U									
10	Chrysene	10	10	U									
10	Dibenz(a,h)Anthracene	10	10	U									
10	Dibenzofuran	10	10	U									
10	1,2-Dichlorobenzene	10	10	U									
10	1,3-Dichlorobenzene	10	10	U									
10	1,4-Dichlorobenzene	10	10	U									
10	3,3'-Dichlorobenzidine	10	10	U									
10	2,4-Dichlorophenol	10	10	U									
10	Diethylphthalate	10	10	U									
10	2,4-Dimethylphenol	10	10	U									
10	Dimethyl Phthalate	10	10	U									
10	Di-n-butylphthalate	10	10	U									
25	4,6-Dinitro-2-methylphenol	25	25	U									
25	2,4-Dinitrophenol	25	25	U									
10	2,6-Dinitrotoluene	10	10	U									
10	2,4-Dinitrotoluene	10	10	U									
10	Di-n-Octyl Phthalate	10	10	U									
10	bis(2-Ethylhexyl)Phthalate	10	1	B									
10	Fluorene	10	10	U									
10	Benzo(b)Fluoranthene	10	10	U									
10	Benzo(k)Fluoranthene	10	10	U									
10	Fluorene	10	10	U									
10	Hexachlorobenzene	10	10	U									
10	Hexachlorobutadiene	10	10	U									
10	Hexachlorocyclopentadiene	10	10	U									
10	Hexachloroethane	10	10	U									

Notes:

All units are ug/l
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302960

Matrix: Surface Water

Semi-volatile Organics

CRQL	Parameter	Sample Point SW13/18 Date Sampled: 06/23/93 Dilution Factor: 1.0 Percent Moisture: NA			Sample Point Date Sampled: Dilution Factor: Percent Moisture:			Sample Point Date Sampled: Dilution Factor: Percent Moisture:			Sample Point Date Sampled: Dilution Factor: Percent Moisture:		
		SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual	SOL	Result	Qual
10	Indeno(1,2,3-cd)Pyrene	10	10	U									
10	Isophorone	10	10	U									
10	2-Methylnaphthalene	10	10	U									
10	2-Methylphenol	10	10	U									
10	4-Methylphenol	10	10	U									
10	Naphthalene	10	10	U									
25	2-Nitroaniline	25	25	U									
25	3-Nitroaniline	25	25	U									
25	4-Nitroaniline	25	25	U									
10	Nitrobenzene	10	10	U									
10	2-Nitrophenol	10	10	U									
25	4-Nitrophenol	25	25	U									
10	N-Nitroso-di-n-propylamine	10	10	U									
10	N-Nitrosodiphenylamine	10	10	U									
10	2,2'-Oxybis(1-Chloropropane)	10	10	U									
25	Pentachlorophenol	25	25	U									
10	Benzo(g,h,i)Perylene	10	10	U									
10	Phenanthrene	10	10	U									
10	Phenol	10	10	U									
10	Pyrene	10	10	U									
10	Benzo(a)pyrene	10	10	U									
10	1,2,4-Trichlorobenzene	10	10	U									
25	2,4,5-Trichlorophenol	25	25	U									
10	2,4,6-Trichlorophenol	10	10	U									

Notes:

All units are ug/l

Sample Quantitation Limit (SOL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low UL - Not Detected/Biased Low Q - Not Applicable

PESTICIDES/PCBs

Phase 1A

AR302962

ober 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Pesticide Organics

CROL	Parameter	Sample Point SU-06/1A			Sample Point SU-07/1A			Sample Point SU-08/1A			Sample Point Date Sampled: Dilution Factor: 1.0 Percent Moisture: %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
0.05	Aldrin	0.050	0.050	UL	0.050	0.050	U	0.050	0.050	UL	0.050	0.050	UL
1.0	Aroclor-1016	1.0	1.0	UL	1.0	1.0	U	1.0	1.0	UL	1.0	1.0	UL
2.0	Aroclor-1221	2.0	2.0	UL	2.0	2.0	U	2.0	2.0	UL	2.0	2.0	UL
1.0	Aroclor-1232	1.0	1.0	UL	1.0	1.0	U	1.0	1.0	UL	1.0	1.0	UL
1.0	Aroclor-1242	1.0	1.0	UL	1.0	1.0	U	1.0	1.0	UL	1.0	1.0	UL
1.0	Aroclor-1248	1.0	1.0	UL	1.0	1.0	U	1.0	1.0	UL	1.0	1.0	UL
1.0	Aroclor-1254	1.0	1.0	UL	1.0	1.0	U	1.0	1.0	UL	1.0	1.0	UL
1.0	Aroclor-1260	1.0	1.0	UL	1.0	1.0	U	1.0	1.0	UL	1.0	1.0	UL
0.05	alpha-BHC	0.050	0.050	UL	0.050	0.050	U	0.050	0.050	UL	0.050	0.050	UL
0.05	beta-BHC	0.050	0.050	UL	0.050	0.050	U	0.050	0.050	UL	0.050	0.050	UL
0.05	delta-BHC	0.050	0.050	UL	0.050	0.050	U	0.050	0.050	UL	0.050	0.050	UL
0.05	gamma-BHC (Lindene)	0.050	0.050	UL	0.050	0.050	U	0.050	0.050	UL	0.050	0.050	UL
0.05	alpha-Chlordane	0.050	0.050	UL	0.050	0.050	U	0.050	0.050	UL	0.050	0.050	UL
0.05	gamma-Chlordane	0.050	0.050	UL	0.050	0.050	U	0.050	0.050	UL	0.050	0.050	UL
0.10	4,4'-DDE	0.10	0.10	UL	0.10	0.10	U	0.10	0.10	UL	0.10	0.10	UL
0.10	4,4'-DDE	0.10	0.10	UL	0.10	0.10	U	0.10	0.10	UL	0.10	0.10	UL
0.10	4,4'-DDT	0.10	0.10	UL	0.10	0.10	U	0.10	0.10	UL	0.10	0.10	UL
0.10	Dieldrin	0.10	0.10	UL	0.10	0.10	U	0.10	0.10	UL	0.10	0.10	UL
0.05	Endosulfan I	0.050	0.050	UL	0.050	0.050	U	0.050	0.050	UL	0.050	0.050	UL
0.10	Endosulfan II	0.10	0.10	UL	0.10	0.10	U	0.10	0.10	UL	0.10	0.10	UL
0.10	Endosulfan Sulfate	0.10	0.10	UL	0.10	0.10	U	0.10	0.10	UL	0.10	0.10	UL
0.10	Endrin	0.10	0.10	UL	0.10	0.10	U	0.10	0.10	UL	0.10	0.10	UL
0.10	Endrin Aldehyde	0.10	0.10	UL	0.10	0.10	U	0.10	0.10	UL	0.10	0.10	UL
0.10	Endrin Ketone	0.10	0.10	UL	0.10	0.10	U	0.10	0.10	UL	0.10	0.10	UL
0.05	Heptachlor	0.050	0.050	UL	0.050	0.050	U	0.050	0.050	UL	0.050	0.050	UL
0.05	Heptachlor Epoxide	0.050	0.050	UL	0.050	0.050	U	0.050	0.050	UL	0.050	0.050	UL
0.50	Methoxychlor	0.50	0.50	UL	0.50	0.50	U	0.50	0.50	UL	0.50	0.50	UL
5.0	Toxaphene	5.0	5.0	UL	5.0	5.0	U	5.0	5.0	UL	5.0	5.0	UL

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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TOTAL (UNFILTERED) METALS

Phase 1A
Phase 1B

AR302964

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1A
BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Parameter	Sample Point SV-06/1A				Sample Point SV-07/1A				Sample Point SV-08/1A				Sample Point Date Sampled: Dilution Factor: Percent Solids: %			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	200	14.0	156	J	200	14.0	238	J	200	14.0	205	J				
Antimony	60.0	14.0	14.0	U	60.0	14.0	14.0	U	60.0	14.0	14.0	U				
Arsenic	10.0	3.0	3.0	U	10.0	3.0	3.0	U	10.0	3.0	3.0	U				
Barium	200	0.40	11.4	J	200	0.40	24.7	J	200	0.40	31.4	J				
Beryllium	5.0	0.30	0.30	U	5.0	0.30	0.30	U	5.0	0.30	0.30	U				
Cadmium	5.0	1.9	1.9	U	5.0	1.9	1.9	U	5.0	1.9	1.9	U				
Calcium	5000	4.1	30900	J	5000	4.1	45100	J	5000	4.1	47200	J				
Chromium	10.0	3.6	3.6	UL	10.0	3.6	3.6	UL	10.0	3.6	3.6	UL				
Cobalt	50.0	2.0	2.0	B	50.0	2.0	2.0	B	50.0	2.0	2.0	B				
Copper	25.0	1.9	2.4	B	25.0	1.9	4.2	B	25.0	1.9	4.2	B				
Iron	100	9.2	222	J	100	9.2	517	J	100	9.2	399	J				
Lead	3.0	1.0	1.4	B	3.0	1.0	1.4	B	3.0	1.0	1.4	B				
Magnesium	5000	12.2	11700	J	5000	12.2	13700	J	5000	12.2	14200	J				
Manganese	15.0	0.60	10.4	B	15.0	0.60	85.2	B	15.0	0.60	94.1	B				
Mercury	0.20	0.04	0.13	B	0.20	0.04	0.09	B	0.20	0.04	0.04	U				
Nickel	40.0	7.9	7.9	U	40.0	7.9	7.9	U	40.0	7.9	7.9	U				
Potassium	5000	64.0	1110	J	5000	64.0	1770	J	5000	64.0	2090	J				
Selenium	5.0	5.0	5.0	UL	5.0	5.0	5.0	UL	5.0	5.0	5.0	UL				
Silver	10.0	2.0	4.2	B	10.0	2.0	4.3	B	10.0	2.0	4.1	B				
Sodium	5000	8.0	6760	J	5000	8.0	8480	J	5000	8.0	10100	J				
Thallium	10.0	2.0	2.0	UL	10.0	2.0	2.0	UL	10.0	2.0	2.0	UL				
Vanadium	50.0	1.8	3.2	J	50.0	1.8	4.8	J	50.0	1.8	4.4	J				
Zinc	20.0	1.2	4.4	B	20.0	1.2	6.4	B	20.0	1.2	7.4	B				
Cyanide	10.0	10.0	51.9	A	10.0	10.0	10.0	U	10.0	10.0	10.0	U				

Notes: All units are ug/l

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers:

A - Acceptable (Quantitative) Data
 J - Estimated (Semi-quantitative) Data
 K - Biased High (Semi-quantitative) Data
 L - Biased Low (Semi-quantitative) Data
 B - Present in associated blanks (Semi-quantitative) Data

UL - Not Detected/Estimated Data
 U - Not Detected/Quantitative Data
 UL - Not Detected/Biased Low

N - Tentative Identification
 R - Unusable Data
 Q - Not Applicable

AR302965

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1B
BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Parameter	Sample Point SW01/1B				Sample Point SW03/1B				Sample Point SW04/1B				Sample Point SW09/1B			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	200	44.0	117	B	200	44.0	334	B	200	44.0	214	B	200	44.0	111	B
Antimony	60.0	35.0	35.0	U	60.0	35.0	35.0	U	60.0	35.0	35.0	U	60.0	35.0	35.0	U
Arsenic	10.0	4.0	4.0	UJ	10.0	4.0	4.0	UJ	10.0	4.0	4.0	UJ	10.0	4.0	4.0	UJ
Barium	200	2.0	23.5	A	200	2.0	22.4	A	200	2.0	14.9	B	200	2.0	35.4	A
Beryllium	5.0	1.0	1.0	U	5.0	1.0	1.0	U	5.0	1.0	1.0	U	5.0	1.0	1.0	U
Cadmium	5.0	3.0	3.0	U	5.0	3.0	3.0	U	5.0	3.0	3.0	U	5.0	3.0	3.0	U
Calcium	5000	17.0	32000	A	5000	17.0	29200	A	5000	17.0	35900	A	5000	17.0	50700	A
Chromium	10.0	8.0	8.0	U	10.0	8.0	8.0	U	10.0	8.0	8.0	U	10.0	8.0	8.0	U
Cobalt	50.0	9.0	9.0	U	50.0	9.0	9.0	U	50.0	9.0	9.0	U	50.0	9.0	9.0	U
Copper	25.0	4.0	4.0	U	25.0	4.0	4.0	U	25.0	4.0	4.2	A	25.0	4.0	4.0	U
Iron	100	25.0	135	B	100	25.0	461	J	100	25.0	203	J	100	25.0	84.4	B
Lead	3.0	2.0	2.0	UL	3.0	2.0	2.0	UL	3.0	2.0	2.0	UL	3.0	2.0	2.0	UL
Magnesium	5000	48.0	11000	A	5000	48.0	11600	A	5000	48.0	12600	A	5000	48.0	15900	A
Manganese	15.0	1.0	9.0	B	15.0	1.0	67.3	A	15.0	1.0	23.5	A	15.0	1.0	48.8	A
Mercury	0.20	0.20	0.20	U	0.20	0.20	0.20	U	0.20	0.20	0.20	U	0.20	0.20	0.20	U
Nickel	60.0	18.0	18.0	U	60.0	18.0	18.0	U	60.0	18.0	18.0	U	60.0	18.0	18.0	U
Potassium	5000	1270	1800	A	5000	1270	1270	U	5000	1270	1530	A	5000	1270	4000	A
Selenium	5.0	3.0	3.0	UJ	5.0	3.0	4.0	UJ	5.0	3.0	3.2	J	5.0	3.0	3.0	UJ
Silver	10.0	4.0	4.0	U	10.0	4.0	4.0	U	10.0	4.0	4.0	U	10.0	4.0	4.0	U
Sodium	5000	123	7530	L	5000	123	7020	L	5000	123	6210	L	5000	123	19000	L
Thallium	10.0	3.0	3.0	UL	10.0	3.0	3.0	UL	10.0	3.0	3.0	UL	10.0	3.0	3.0	UL
Vanadium	50.0	6.0	6.0	U	50.0	6.0	6.0	U	50.0	6.0	6.0	U	50.0	6.0	6.0	U
Zinc	20.0	4.0	8.2	B	20.0	4.0	26.1	B	20.0	4.0	17.2	B	20.0	4.0	8.2	B
Cyanide	10.0	10.0	10.0	U	10.0	10.0	10.0	U	10.0	10.0	10.0	U	10.0	10.0	10.0	U

Notes: All units are ug/l

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers:

A - Acceptable (Quantitative) Data
 J - Estimated (Semi-quantitative) Data
 K - Biased High (Semi-quantitative) Data
 L - Biased Low (Semi-quantitative) Data
 B - Present in associated blanks (Semi-quantitative) Data

UJ - Not Detected/Estimated Data
 U - Not Detected/Quantitative Data
 UL - Not Detected/Biased Low

M - Tentative Identification
 R - Unusable Data
 Q - Not Applicable

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October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REHABILITATION INVESTIGATION - PHASE 1B
BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Parameter	Sample Point SW10/18				Sample Point SW10/18				Sample Point SW10/18				Sample Point SW11/18				Sample Point SW12/18			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	200	44.0	110	B	200	44.0	112	B	200	44.0	116	B	200	44.0	134	B	200	44.0	134	B
Antimony	60.0	35.0	35.0	U	60.0	35.0	35.0	U	60.0	35.0	35.0	U	60.0	35.0	35.0	U	60.0	35.0	35.0	U
Arsenic	10.0	4.0	4.0	UJ	10.0	4.0	4.0	UJ	10.0	4.0	4.0	UJ	10.0	4.0	4.0	UJ	10.0	4.0	4.0	UJ
Barium	200	2.0	27.4	A	200	2.0	28.7	A	200	2.0	22.7	A	200	2.0	32.9	A	200	2.0	32.9	A
Beryllium	5.0	1.0	1.0	U	5.0	1.0	1.0	U	5.0	1.0	1.0	U	5.0	1.0	1.0	U	5.0	1.0	1.0	U
Cadmium	5.0	3.0	3.0	U	5.0	3.0	3.0	U	5.0	3.0	3.0	U	5.0	3.0	3.0	U	5.0	3.0	3.0	U
Calcium	5000	17.0	42200	A	5000	17.0	43900	A	5000	17.0	38800	A	5000	17.0	37000	A	5000	17.0	37000	A
Chromium	10.0	8.0	8.0	U	10.0	8.0	8.0	U	10.0	8.0	8.0	U	10.0	8.0	8.0	U	10.0	8.0	8.0	U
Chromium	50.0	9.0	9.0	U	50.0	9.0	9.0	U	50.0	9.0	9.0	U	50.0	9.0	9.0	U	50.0	9.0	9.0	U
Cobalt	25.0	4.0	4.0	U	25.0	4.0	4.0	U	25.0	4.0	4.0	U	25.0	4.0	4.0	U	25.0	4.0	4.0	U
Copper	100	25.0	641	J	100	25.0	709	J	100	25.0	135	B	100	25.0	394	J	100	25.0	394	J
Iron	3.0	2.0	2.0	UL	3.0	2.0	2.0	UL	3.0	2.0	2.0	UL	3.0	2.0	2.0	UL	3.0	2.0	2.0	UL
Magnesium	5000	48.0	14100	A	5000	48.0	14700	A	5000	48.0	12100	A	5000	48.0	14800	A	5000	48.0	14800	A
Manganese	15.0	1.0	267	A	15.0	1.0	284	A	15.0	1.0	30.2	A	15.0	1.0	253	A	15.0	1.0	253	A
Mercury	0.20	0.20	0.20	U	0.20	0.20	0.20	U	0.20	0.20	0.20	U	0.20	0.20	0.20	U	0.20	0.20	0.20	U
Nickel	40.0	18.0	18.0	U	40.0	18.0	18.0	U	40.0	18.0	18.0	U	40.0	18.0	18.0	U	40.0	18.0	18.0	U
Potassium	5000	1270	2590	A	5000	1270	1870	A	5000	1270	1460	A	5000	1270	4090	A	5000	1270	4090	A
Selenium	5.0	3.0	3.0	UJ	5.0	3.0	3.0	UJ	5.0	3.0	3.0	UJ	5.0	3.0	3.0	UJ	5.0	3.0	3.0	UJ
Silver	10.0	4.0	4.0	U	10.0	4.0	4.0	U	10.0	4.0	4.0	U	10.0	4.0	4.0	U	10.0	4.0	4.0	U
Sodium	5000	123	10000	L	5000	123	10600	L	5000	123	8290	L	5000	123	19600	L	5000	123	19600	L
Thallium	10.0	3.0	3.0	UL	10.0	3.0	3.0	UL	10.0	3.0	3.0	UL	10.0	3.0	3.0	UL	10.0	3.0	3.0	UL
Vanadium	50.0	6.0	6.0	U	50.0	6.0	6.0	U	50.0	6.0	6.0	U	50.0	6.0	6.0	U	50.0	6.0	6.0	U
Zinc	20.0	4.0	13.4	B	20.0	4.0	4.0	U	20.0	4.0	14.8	B	20.0	4.0	23.5	B	20.0	4.0	23.5	B
Cyanide	10.0	10.0	10.0	U	10.0	10.0	10.0	U	10.0	10.0	10.0	U	10.0	10.0	10.0	U	10.0	10.0	10.0	U

Notes: All units are ug/l

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers:

A - Acceptable (Quantitative) Data
 J - Estimated (Semi-quantitative) Data
 K - Biased High (Semi-quantitative) Data
 L - Biased Low (Semi-quantitative) Data
 B - Present in associated blanks (Semi-quantitative) Data

UJ - Not Detected/Estimated Data
 U - Not Detected/Quantitative Data
 UL - Not Detected/Biased Low

N - Tentative Identification
 R - Unusable Data
 Q - Not Applicable

AR302967

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1B
BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Parameter	Sample Point SU13/1B			Sample Point			Sample Point			Sample Point		
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	200	44.0	164	B								
Antimony	60.0	35.0	35.0	U								
Arsenic	10.0	4.0	4.0	UJ								
Berilium	200	2.0	6.8	B								
Beryllium	5.0	1.0	1.0	U								
Cadmium	5.0	3.0	3.0	U								
Calcium	5000	17.0	27400	A								
Chromium	10.0	8.0	8.0	U								
Cobalt	50.0	9.0	9.0	U								
Copper	25.0	4.0	4.0	U								
Iron	100	25.0	135	B								
Lead	3.0	2.0	2.0	UL								
Magnesium	5000	48.0	11300	A								
Manganese	15.0	1.0	35.6	A								
Mercury	0.20	0.20	0.20	U								
Nickel	40.0	18.0	18.0	U								
Potassium	5000	1270	1390	A								
Selenium	5.0	3.0	3.0	UJ								
Silver	10.0	4.0	4.0	U								
Sodium	5000	123	6680	L								
Thallium	10.0	3.0	3.0	UL								
Vanadium	50.0	6.0	6.0	U								
Zinc	20.0	4.0	5.9	B								
Cyanide	10.0	10.0	10.0	U								

Notes: All units are ug/l

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers:

- A - Acceptable (Quantitative) Data
- J - Estimated (Semi-quantitative) Data
- K - Biased High (Semi-quantitative) Data
- L - Biased Low (Semi-quantitative) Data
- B - Present in associated blanks (Semi-quantitative) Data
- UJ - Not Detected/Estimated Data
- U - Not Detected/Quantitative Data
- UL - Not Detected/Biased Low
- N - Tentative Identification
- R - Unusable Data
- O - Not Applicable

AR302968

WET CHEMISTRY

Phase 1A
Phase 1B

AR302969

October 1993

913-6773

SUMMARY OF WET CHEMISTRY CONVENTIONAL ANALYSES - PHASE 1A

BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Parameter	Sample Point SV-06/1A Date Sampled: 09/03/92 Dilution Factor: NA Percent Solids: NA %			Sample Point SV-07/1A Date Sampled: 09/03/92 Dilution Factor: NA Percent Solids: NA %			Sample Point SV-08/1A Date Sampled: 09/03/92 Dilution Factor: NA Percent Solids: NA %			Sample Point Date Sampled: Dilution Factor: Percent Solids: %		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Total Inorganic Carbon		Not Analyzed		1.0	22.0	A	1.0	31	A			
Total Organic Carbon		Not Analyzed		1.0	1.0	U	1.0	1.0	U			

Notes: All units are mg/l except Turbidity which is NTU.
The Reporting Limits (RLs) have been adjusted for percent solids.
The Qual column indicates the Qualifier applied to the result following data validation (see below).

Qualifiers.....
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative) Data
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
R - Unusable Data
Q - Not Applicable
N - Tentative Identification
N* - Tentative Identification
(result below laboratory MDL)

AR302970

October 1993

913-6773

SUMMARY OF WET CHEMISTRY CONVENTIONAL ANALYSES - PHASE 1B

BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Parameter	Sample Point SU01/1B Date Sampled: 06/23/93 Dilution Factor: NA Percent Solids: NA %			Sample Point SU03/1B Date Sampled: 06/23/93 Dilution Factor: NA Percent Solids: NA %			Sample Point SU04/1B Date Sampled: 06/23/93 Dilution Factor: NA Percent Solids: NA %			Sample Point SU09/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: NA %		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Alkalinity - CaCO ₃	2	2	U	2	45	A	2	82	A	2	130	A
Hardness - CaCO ₃	2	130	A	2	120	A	2	150	A	2	190	A

Notes: All units are mg/l

The Reporting Limits (RLs) have been adjusted for percent solids.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers.....
 A - Acceptable (Quantitative) Data
 J - Estimated (Semi-quantitative) Data
 K - Biased High (Semi-quantitative) Data
 L - Biased Low (Semi-quantitative) Data
 B - Present in associated blanks (Semi-quantitative) Data
 UJ - Not Detected/Estimated Data
 U - Not Detected/Quantitative Data
 UL - Not Detected/Biased Low
 N - Tentative Identification
 N* - Tentative Identification
 (result below laboratory MDL)
 R - Unusable Data
 Q - Not Applicable

AR302971

October 1993

913-6773

SUMMARY OF UET CHEMISTRY CONVENTIONAL ANALYSES - PHASE 1B

BERKS COUNTY, PENNSYLVANIA

Matrix: Surface Water

Parameter	Sample Point SU13/1B			Sample Point			Sample Point			Sample Point		
	RL	Result	Qual	Date Sampled: Dilution Factor: Percent Solids: NA	%		Date Sampled: Dilution Factor: Percent Solids:	%		Date Sampled: Dilution Factor: Percent Solids:	%	
Alkalinity - CaCO3	2	75	A									
Hardness - CaCO3	2	120	A									

Notes: All units are mg/l
The Reporting Limits (RLs) have been adjusted for percent solids.
The Qual column indicates the Qualifier applied to the result following data validation (see below).

Qualifiers.....
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative) Data
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
R - Unusable Data
Q - Not Applicable
N - Tentative Identification
N* - Tentative Identification
(result below laboratory MDL)

AR302973

SEDIMENTS

AR302974

VOLATILE ORGANIC COMPOUNDS

Phase 1A

AR302975

SUMMARY OF CLP ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

volatile Organics

CRCL	Parameter	Sample Point SED05/1A Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: 4.8 %			Sample Point SED05/FD Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: 4.6 %			Sample Point SED06/1A Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: 1.0 %			Sample Point SED06/1A Date Sampled: 09/03/92 Dilution Factor: 1.0 Percent Moisture: 1.0 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
10	Acetone	19	19	U	19	19	U	12	12	U	12	12	U
10	Benzene	19	19	U	19	19	U	12	12	U	12	12	U
10	Bromodichloromethane	19	19	U	19	19	U	12	12	U	12	12	U
10	Bromoform	19	19	U	19	19	U	12	12	U	12	12	U
10	Bromomethane	19	19	U	19	19	U	12	12	U	12	12	U
10	2-Butanone	19	19	U	19	19	U	12	12	U	12	12	U
10	Carbon Disulfide	19	19	U	19	19	U	12	12	U	12	12	U
10	Carbon Tetrachloride	19	19	U	19	19	U	12	12	U	12	12	U
10	Chlorobenzene	19	19	U	19	19	U	12	12	U	12	12	U
10	Chloroethane	19	19	U	19	19	U	12	12	U	12	12	U
10	Chloroform	19	19	U	19	19	U	12	12	U	12	12	U
10	Chloromethane	19	19	U	19	19	U	12	12	U	12	12	U
10	Dibromochloromethane	19	19	U	19	19	U	12	12	U	12	12	U
10	1,1-Dichloroethane	19	19	U	19	19	U	12	12	U	12	12	U
10	1,2-Dichloroethane	19	19	U	19	19	U	12	12	U	12	12	U
10	1,1-Dichloroethene	19	19	U	19	19	U	12	12	U	12	12	U
10	Total 1,2-Dichloroethene	19	19	U	19	19	U	12	12	U	12	12	U
10	1,2-Dichloropropene	19	19	U	19	19	U	12	12	U	12	12	U
10	cis-1,3-Dichloropropene	19	19	U	19	19	U	12	12	U	12	12	U
10	trans-1,3-Dichloropropene	19	19	U	19	19	U	12	12	U	12	12	U
10	Ethylbenzene	19	19	U	19	19	U	12	12	U	12	12	U
10	2-Hexanone	19	19	U	19	19	U	12	12	U	12	12	U
10	4-Methyl-2-Pentanone	19	19	U	19	19	U	12	12	U	12	12	U
10	Methylene Chloride	19	19	U	19	19	U	12	12	U	12	12	U
10	Styrene	19	19	U	19	6	8	12	2	8	12	2	8
10	1,1,2,2-Tetrachloroethane	19	19	U	19	19	U	12	12	U	12	12	U
10	Tetrachloroethene	19	19	U	19	19	U	12	12	U	12	12	U
10	Toluene	19	19	U	19	19	U	12	12	U	12	12	U
10	1,1,1-Trichloroethane	19	19	U	19	19	U	12	12	U	12	12	U
10	1,1,2-Trichloroethane	19	19	U	19	19	U	12	12	U	12	12	U
10	Trichloroethene	19	19	U	19	19	U	12	12	U	12	12	U
10	Vinyl Chloride	19	19	U	19	19	U	12	12	U	12	12	U
10	Total Xylenes	19	19	U	19	19	U	12	12	U	12	12	U

Notes:
All units are ug/kg
Sample Quantitation Limit (SOL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate. The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:				Tentative Identification			
A - Acceptable (Quantitative) Data	K - Biased High (Semi-quantitative) Data	UJ - Not Detected/Estimated Data	N - Urushable Data				
J - Estimated (Quantitative) Data	L - Biased Low (Semi-quantitative) Data	UJ - Not Detected/Quantitative Data	R - Urushable Data				
B - Present in associated blanks (Semi-quantitative Data)		UL - Not Detected/Biased Low	Q - Not Applicable				

Golder Associates

Page 1

AR302976

SEMI-VOLATILE ORGANIC COMPOUNDS

Phase 1A
Phase 1B

AR302977

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Semivolatile Organics

CROL	Parameter	Sample Point SED05/1A Date Sampled: 09/03/92 Dilution Factor: 48 % Percent Moisture: 48 %			Sample Point SED05/FD Date Sampled: 09/03/92 Dilution Factor: 46 % Percent Moisture: 46 %			Sample Point SED06/1A Date Sampled: 09/03/92 Dilution Factor: 19 % Percent Moisture: 19 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Acenaphthene	630	630	UJ	610	610	UJ	410	400	UJ
330	Acenaphthylene	630	630	UJ	610	610	UJ	410	400	UJ
330	Anthracene	630	630	UJ	610	610	UJ	410	400	UJ
330	Benzo(a)Anthracene	630	630	UJ	610	610	UJ	410	400	UJ
330	4-Bromophenyl-phenylether	630	630	UJ	610	610	UJ	410	400	UJ
330	Butylbenzylphthalate	630	630	UJ	610	610	UJ	410	400	UJ
330	Carbazole	630	630	UJ	610	610	UJ	410	400	UJ
330	4-Chloro-3-Methylphenol	630	630	UJ	610	610	UJ	410	400	UJ
330	4-Chloroaniline	630	630	UJ	610	610	UJ	410	400	UJ
330	bis(2-Chloroethoxy)Methane	630	630	UJ	610	610	UJ	410	400	UJ
330	bis(2-Chloroethyl)ether	630	630	UJ	610	610	UJ	410	400	UJ
330	2-Chloronaphthalene	630	630	UJ	610	610	UJ	410	400	UJ
330	2-Chlorophenol	630	630	UJ	610	610	UJ	410	400	UJ
330	4-Chlorophenyl-phenylether	630	630	UJ	610	610	UJ	410	400	UJ
330	Chrysene	630	630	UJ	610	610	UJ	410	400	UJ
330	Dibenz(a,h)Anthracene	630	630	UJ	610	610	UJ	410	400	UJ
330	Dibenzofuran	630	630	UJ	610	610	UJ	410	400	UJ
330	1,2-Dichlorobenzene	630	630	UJ	610	610	UJ	410	400	UJ
330	1,3-Dichlorobenzene	630	630	UJ	610	610	UJ	410	400	UJ
330	1,4-Dichlorobenzene	630	630	UJ	610	610	UJ	410	400	UJ
330	3,3'-Dichlorobenzidine	630	630	UJ	610	610	UJ	410	400	UJ
330	2,4-Dichlorophenol	630	630	UJ	610	610	UJ	410	400	UJ
330	Diethylphthalate	630	630	UJ	610	610	UJ	410	400	UJ
330	2,4-Dimethylphenol	630	630	UJ	610	610	UJ	410	400	UJ
330	Dimethyl Phthalate	630	630	UJ	610	610	UJ	410	400	UJ
330	Di-n-butylphthalate	630	630	UJ	610	610	UJ	410	400	UJ
800	4,6-Dinitro-2-methylphenol	1500	1500	UJ	1500	1500	UJ	990	980	UJ
800	2,4-Dinitrophenol	1500	1500	UJ	1500	1500	UJ	990	980	UJ
330	2,4-Dinitrotoluene	630	630	UJ	610	610	UJ	410	400	UJ
330	2,6-Dinitrotoluene	630	630	UJ	610	610	UJ	410	400	UJ
330	Di-n-Octyl Phthalate	630	120	8	610	610	UJ	410	400	UJ
330	bis(2-Ethylhexyl)Phthalate	630	630	UJ	610	610	UJ	410	400	UJ
330	Fluorene	630	630	UJ	610	610	UJ	410	400	UJ
330	Benzo(b)Fluoranthene	630	630	UJ	610	610	UJ	410	400	UJ
330	Benzo(k)Fluoranthene	630	630	UJ	610	610	UJ	410	400	UJ
330	Fluorene	630	630	UJ	610	610	UJ	410	400	UJ
330	Hexachlorobenzene	630	630	UJ	610	610	UJ	410	400	UJ
330	Hexachlorobutadiene	630	630	UJ	610	610	UJ	410	400	UJ
330	Hexachlorocyclopentadiene	630	630	UJ	610	610	UJ	410	400	UJ
330	Hexachloroethane	630	630	UJ	610	610	UJ	410	400	UJ

Notes:

All units are ug/kg
 Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
 The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302978

Semivolatile Organics

Notes:

Qualifiers:				Tentative Identification			
A - Acceptable (Quantitative) Data	K - Biased High (Semi-quantitative) Data	UJ - Not Detected/Estimated Data	N -	UJ - Not Detected/Quantitative Data	R - Unusable Data	UJ - Not Detected/Quantitative Data	Q - Not Applicable
J - Estimated (Semi-quantitative) Data	L - Biased Low (Semi-quantitative) Data	UL - Not Detected/Biased Low					
g - Present in associated blanks (Semi-quantitative Data)							

October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Semivolatile Organics

CROL	Parameter	Sample Point SD01/18			Sample Point SD02/18			Sample Point SD03/18			Sample Point SD04/18		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Acenaphthene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Acenaphthylene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Anthracene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Benzof(a)anthracene	530	170	J	410	410	UJ	430	430	UJ	510	510	UJ
330	4-Bromophenyl-phenylether	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Butylbenzylphthalate	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Carbazole	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	4-Chloro-3-methylphenol	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	4-Chloroaniline	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	bis(2-Chloroethoxy)methane	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	bis(2-Chloroethyl)ether	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	2-Chloronaphthalene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	2-Chlorophenol	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	4-Chlorophenyl-phenylether	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Chrysene	530	130	J	410	410	UJ	430	430	UJ	510	510	UJ
330	Dibenz(a,h)anthracene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Dibenzofuran	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	1,2-Dichlorobenzene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	1,3-Dichlorobenzene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	1,4-Dichlorobenzene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	3,3'-Dichlorobenzidine	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	2,4-Dichlorophenol	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Diethylphthalate	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	2,4-Dimethylphenol	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Dimethyl Phthalate	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Di-n-butylphthalate	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
800	4,6-Dinitro-2-methylphenol	1300	1300	UJ	1000	1000	UJ	1100	1100	UJ	1200	1200	UJ
800	2,4-Dinitrophenol	1300	1300	UJ	1000	1000	UJ	1100	1100	UJ	1200	1200	UJ
330	2,4-Dinitrotoluene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	2,6-Dinitrotoluene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Di-n-Octyl Phthalate	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	bis(2-Ethylhexyl)phthalate	530	62	B	410	53	UJ	430	430	UJ	510	510	UJ
330	Fluoranthene	530	260	J	410	410	UJ	430	430	UJ	510	510	UJ
330	Benzo(b)fluoranthene	530	530	JW	410	410	UJ	430	430	UJ	510	510	UJ
330	Benzok(k)fluoranthene	530	250	JW	410	410	UJ	430	430	UJ	510	510	UJ
330	Fluorene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Hexachlorobenzene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Hexachlorobutadiene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Hexachlorocyclopentadiene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Hexachloroethane	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Semi-volatile Organics

CRQL	Parameter	Sample Point SD01/1B			Sample Point SD02/1B			Sample Point SD03/1B			Sample Point SD04/1B		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Indeno(1,2,3-cd)Pyrene	530	88	J	410	410	UJ	430	430	UJ	510	510	UJ
330	Isophorone	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	2-Methylnaphthalene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	2-Methylphenol	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	4-Methylphenol	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Naphthalene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
800	2-Nitroaniline	1300	1300	UJ	1000	1000	UJ	1100	1100	UJ	1200	1200	UJ
800	3-Nitroaniline	1300	1300	UJ	1000	1000	UJ	1100	1100	UJ	1200	1200	UJ
330	4-Nitroaniline	1300	1300	UJ	1000	1000	UJ	1100	1100	UJ	1200	1200	UJ
330	Nitrobenzene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	2-Nitrophenol	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
800	4-Nitrophenol	1300	1300	UJ	1000	1000	UJ	1100	1100	UJ	1200	1200	UJ
330	N-Nitroso-di-n-propylamine	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	N-Nitrosodiphenylamine	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	2,2'-Oxybis(1-Chloropropane)	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Pentachlorophenol	1300	1300	UJ	1000	1000	UJ	1100	1100	UJ	1200	1200	UJ
330	Benzot(g,h,i)perylene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Phenanthrene	530	87	J	410	410	UJ	430	430	UJ	510	510	UJ
330	Phenol	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
330	Pyrene	530	190	J	410	410	UJ	430	430	UJ	510	510	UJ
330	Benzot(a)Pyrene	530	110	J	410	410	UJ	430	430	UJ	510	510	UJ
330	1,2,4-Trichlorobenzene	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ
800	2,4,5-Trichlorophenol	1300	1300	UJ	1000	1000	UJ	1100	1100	UJ	1200	1200	UJ
330	2,4,6-Trichlorophenol	530	530	UJ	410	410	UJ	430	430	UJ	510	510	UJ

Notes:

All units are ug/kg

Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
 The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
 A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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October 1993

SUMMARY OF CLP ORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Semivolatile Organics

CROL	Parameter	Sample Point SD058/1B Date Sampled: 06/22/93 Dilution Factor: 1.0 Percent Moisture: 23 %			Sample Point SD068/1B Date Sampled: 06/22/93 Dilution Factor: 1.0 Percent Moisture: 34 %			Sample Point SD067/1B Date Sampled: 06/22/93 Dilution Factor: 1.0 Percent Moisture: 35 %			Sample Point SD068/1B Date Sampled: 06/22/93 Dilution Factor: 1.0 Percent Moisture: 36 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Acenaphthene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Acenaphthylene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Anthracene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Benzo(a)Anthracene	430	430	UJ	490	100	J	500	60	J	510	85	J
330	4-Bromophenyl-phenylether	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Butylbenzylphthalate	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Carbazole	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	4-Chloro-3-Methylphenol	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	4-Chloroaniline	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	bis(2-Chloroethoxy)Methane	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	bis(2-Chloroethyl) ether	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	2-Chloronaphthalene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	2-Chlorophenol	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	4-Chlorophenyl-phenylether	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Chrysene	430	430	UJ	490	89	J	500	67	J	510	510	UJ
330	Dibenz(a,h)Anthracene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Dibenzofuran	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	1,2-Dichlorobenzene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	1,3-Dichlorobenzene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	1,4-Dichlorobenzene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	3,3'-Dichlorobenzidine	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	2,4-Dichlorophenol	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Diethylphthalate	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Dimethyl Phthalate	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Di-n-butylphthalate	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
800	4,6-Dinitro-2-methylphenol	1000	1000	UJ	1200	1200	UJ	1200	1200	UJ	1200	1200	UJ
800	2,4-Dinitrophenol	1000	1000	UJ	1200	1200	UJ	1200	1200	UJ	1200	1200	UJ
330	2,4-Dinitrotoluene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	2,6-Dinitrotoluene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Di-n-Octyl Phthalate	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	bis(2-Ethylhexyl)Phthalate	430	48	B	490	72	B	500	120	J	510	70	B
330	Fluoranthene	430	430	UJ	490	150	J	500	99	J	510	100	J
330	Benzo(b)Fluoranthene	430	430	UJ	490	190	JN	500	99	JN	510	100	JN
330	Benzo(k)Fluoranthene	430	430	UJ	490	190	JN	500	99	JN	510	100	JN
330	Fluorene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Hexachlorobenzene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Hexachlorobutadiene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Hexachlorocyclopentadiene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Hexachloroethane	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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Matrix: Sediment

Semivolatile Organics

CRQL	Parameter	Sample Point SD058/1B			Sample Point SD068/1B			Sample Point SD07/1B			Sample Point SD088/1B		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Indeno(1,2,3-cd)Pyrene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Isochlorone	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	2-Methylnaphthalene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	2-Methylphenol	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	4-Methylphenol	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Naphthalene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
800	2-Nitroaniline	1000	1000	UJ	1200	1200	UJ	1200	1200	UJ	1200	1200	UJ
800	3-Nitroaniline	1000	1000	UJ	1200	1200	UJ	1200	1200	UJ	1200	1200	UJ
800	4-Nitroaniline	1000	1000	UJ	1200	1200	UJ	1200	1200	UJ	1200	1200	UJ
330	Nitrobenzene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	2-Nitrophenol	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
800	4-Nitrophenol	1000	1000	UJ	1200	1200	UJ	1200	1200	UJ	1200	1200	UJ
330	N-Nitroso-di-n-propylamine	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	N-Nitrosodiphenylamine	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	2,2'-Oxybis(1-Chloropropane)	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
800	pentachlorophenol	1000	1000	UJ	1200	1200	UJ	1200	1200	UJ	1200	1200	UJ
330	Benzo(g,h,i)Perylene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Phenanthrene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Phenol	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Pyrene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	Benzo(a)Pyrene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
330	1,2,4-Trichlorobenzene	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ
800	2,4,5-Trichlorophenol	1000	1000	UJ	1200	1200	UJ	1200	1200	UJ	1200	1200	UJ
330	2,4,6-Trichlorophenol	430	430	UJ	490	490	UJ	500	500	UJ	510	510	UJ

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semiquantitative) Data UJ - Not Detected/Estimated Data M - Tentative Identification
J - Estimated (Semiquantitative) Data L - Biased Low (Semiquantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semiquantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

SUMMARY OF CLP CHEMICALS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Semivolatile Organics

CRQL	Parameter	Sample Point SD088/FD Date Sampled: 06/22/93 Dilution Factor: 1.0 Percent Moisture: 33 %			Sample Point SD09/1B Date Sampled: 06/22/93 Dilution Factor: 1.0 Percent Moisture: 28 %			Sample Point SD10/1B Date Sampled: 06/22/93 Dilution Factor: 1.0 Percent Moisture: 31 %			Sample Point SD11/1B Date Sampled: 06/22/93 Dilution Factor: 1.0 Percent Moisture: 30 %		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Acenaphthene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Acenaphthylene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Anthracene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Benzo(a)Anthracene	490	72	J	460	460	UJ	480	480	UJ	470	470	UJ
330	4-Bromophenyl-phenylether	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Butylbenzylphthalate	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Carbazole	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	4-Chloro-3-Methylphenol	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	4-Chloroaniline	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	bis(2-Chloroethoxy)Methane	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	bis(2-Chloroethyl)Ether	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	2-Chloronaphthalene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	2-Chlorophenol	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	4-Chlorophenyl-phenylether	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Chrysene	490	67	J	460	460	UJ	480	480	UJ	470	470	UJ
330	Dibenz(a,h)Anthracene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Dibenzofuran	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	1,2-Dichlorobenzene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	1,3-Dichlorobenzene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	1,4-Dichlorobenzene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	3,3'-Dichlorobenzidine	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	2,4-Dichlorophenol	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Diethylphthalate	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	2,4-Dimethylphenol	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Dimethyl Phthalate	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Di-n-butylphthalate	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	4,6-Dinitro-2-methylphenol	1200	1200	UJ	1100	1100	UJ	1200	1200	UJ	1100	1100	UJ
800	2,4-Dinitrophenol	1200	1200	UJ	1100	1100	UJ	1200	1200	UJ	1100	1100	UJ
330	2,4-Dinitrotoluene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	2,6-Dinitrotoluene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Di-n-Octyl Phthalate	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	bis(2-Ethylhexyl)Phthalate	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Fluoranthene	490	100	J	460	47	J	480	91	B	470	52	B
330	Benzo(b)Fluoranthene	490	130	JN	460	460	UJ	480	58	J	470	470	UJ
330	Benzo(k)Fluoranthene	490	130	JN	460	460	UJ	480	65	JN	470	51	JN
330	Fluorene	490	490	UJ	460	460	UJ	480	65	JN	470	51	JN
330	Hexachlorobenzene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Hexachlorobutadiene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Hexachlorocyclopentadiene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Hexachloroethene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data
K - Biased High (Semi-quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)
.....
N - Tentative Identification
R - Unusable Data
Q - Not Applicable
UL - Not Detected/Biased Low

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Matrix: Sediment

Semi-volatile Organics

CROL	Parameter	Sample Point SD085/FD			Sample Point SD09/1B			Sample Point SD10/1B			Sample Point SD11/1B		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
330	Indeno(1,2,3-cd)Pyrene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Isophorone	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	2-Methylnaphthalene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	2-Methylphenol	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	4-Methylphenol	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Naphthalene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
800	2-Nitroaniline	1200	1200	UJ	1100	1100	UJ	1200	1200	UJ	1100	1100	UJ
800	3-Nitroaniline	1200	1200	UJ	1100	1100	UJ	1200	1200	UJ	1100	1100	UJ
800	4-Nitroaniline	1200	1200	UJ	1100	1100	UJ	1200	1200	UJ	1100	1100	UJ
330	Nitrobenzene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	2-Nitrophenol	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
800	4-Nitrophenol	1200	1200	UJ	1100	1100	UJ	1200	1200	UJ	1100	1100	UJ
330	N-Nitroso-di-n-propylamine	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	N-Nitrosodiphenylamine	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	2,2'-Oxybis(1-Chloropropane)	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
800	Pentachlorophenol	1200	1200	UJ	1100	1100	UJ	1200	1200	UJ	1100	1100	UJ
330	Benzo(g,h,i)Perylene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Phenanthrene	490	51	J	460	460	UJ	480	480	UJ	470	470	UJ
330	Phenol	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	Pyrene	490	73	J	460	460	UJ	480	50	J	470	470	UJ
330	Benzo(a)Pyrene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
330	1,2,4-Trichlorobenzene	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ
800	2,4,5-Trichlorophenol	1200	1200	UJ	1100	1100	UJ	1200	1200	UJ	1100	1100	UJ
330	2,4,6-Trichlorophenol	490	490	UJ	460	460	UJ	480	480	UJ	470	470	UJ

Notes:

All units are ug/kg

Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....

A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
 J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/quantitative Data R - Unusable Data
 B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

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PESTICIDES/PCBs

Phase 1A

AR302986

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SUMMARY OF CLP ORCS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Pesticide Organics

CROL	Parameter	Sample Point SED05/1A			Sample Point SED05/FD			Sample Point SED06/1A			Sample Point SED06/1A		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
1.7	Aldrin	3.2	3.2	UL	3.1	3.1	UL	2.1	2.1	UL	2.1	2.1	UL
33.0	Aroclor-1016	63	63	UL	60	60	UL	41	41	UL	41	41	UL
67.0	Aroclor-1221	130	130	UL	120	120	UL	83	83	UL	83	83	UL
33.0	Aroclor-1232	63	63	UL	60	60	UL	41	41	UL	41	41	UL
33.0	Aroclor-1242	63	63	UL	60	60	UL	41	41	UL	41	41	UL
33.0	Aroclor-1248	63	63	UL	60	60	UL	41	41	UL	41	41	UL
33.0	Aroclor-1254	63	63	UL	60	60	UL	41	41	UL	41	41	UL
33.0	Aroclor-1260	63	63	UL	60	60	UL	41	41	UL	41	41	UL
1.7	alpha-BHC	3.2	3.2	UL	3.1	3.1	UL	2.1	2.1	UL	2.1	2.1	UL
1.7	beta-BHC	3.2	3.2	UL	3.1	3.1	UL	2.1	2.1	UL	2.1	2.1	UL
1.7	delta-BHC	3.2	3.2	UL	3.1	3.1	UL	2.1	2.1	UL	2.1	2.1	UL
1.7	gamma-BHC (Lindane)	3.2	3.2	UL	3.1	3.1	UL	2.1	2.1	UL	2.1	2.1	UL
1.7	alpha-Chlordane	3.2	3.2	UL	3.1	3.1	UL	2.1	2.1	UL	2.1	2.1	UL
1.7	gamma-Chlordane	3.2	3.2	UL	3.1	3.1	UL	2.1	2.1	UL	2.1	2.1	UL
3.3	4,4'-DDB	6.3	6.3	UL	6.0	6.0	UL	4.1	4.1	UL	4.1	4.1	UL
3.3	4,4'-DDE	6.3	6.3	UL	6.0	6.0	UL	4.1	4.1	UL	4.1	4.1	UL
3.3	4,4'-DDT	6.3	6.3	UL	6.0	6.0	UL	4.1	4.1	UL	4.1	4.1	UL
3.3	Dieldrin	6.3	6.3	UL	6.0	6.0	UL	4.1	4.1	UL	4.1	4.1	UL
1.7	Endosulfen I	3.2	3.2	UL	3.1	3.1	UL	2.1	2.1	UL	2.1	2.1	UL
3.3	Endosulfen II	6.3	6.3	UL	6.0	6.0	UL	4.1	4.1	UL	4.1	4.1	UL
3.3	Endosulfen Sulfate	6.3	6.3	UL	6.0	6.0	UL	4.1	4.1	UL	4.1	4.1	UL
3.3	Endrin Aldehyde	6.3	6.3	UL	6.0	6.0	UL	4.1	4.1	UL	4.1	4.1	UL
3.3	Endrin Ketone	6.3	6.3	UL	6.0	6.0	UL	4.1	4.1	UL	4.1	4.1	UL
1.7	Heptachlor Epoxide	3.2	3.2	UL	3.1	3.1	UL	2.1	2.1	UL	2.1	2.1	UL
1.7	Heptachlor	3.2	3.2	UL	3.1	3.1	UL	2.1	2.1	UL	2.1	2.1	UL
17.0	Methoxychlor	32	32	UL	31	31	UL	21	21	UL	21	21	UL
170.0	Toxaphene	320	320	UL	310	310	UL	210	210	UL	210	210	UL

Notes:

All units are ug/kg
Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:.....
A - Acceptable (Quantitative) Data K - Biased High (Semi-quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data L - Biased Low (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
B - Present in associated blanks (Semi-quantitative Data) UL - Not Detected/Biased Low Q - Not Applicable

AR302987

METALS

Phase 1A

Phase 1B

AR302988

October 1993

913-6773

SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1A
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1A
BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Parameter	Sample Point SED05/1A			Sample Point SED05/FB			Sample Point SED06/1A			Sample Point SED08/1A		
	CRDL	IDL	Result	CRDL	IDL	Result	CRDL	IDL	Result	CRDL	IDL	Result
Aluminum	61.2	4.3	10200	55.1	3.9	15300	43.7	3.1	7200	48.9	3.4	8710
Antimony	18.4	4.3	4.3	16.5	3.9	5.5	13.1	3.1	3.1	14.7	3.4	3.4
Arsenic	3.4	1.0	1.7	2.7	0.80	1.4	1.9	0.56	3.4	1.7	0.51	3.3
Barium	61.2	0.12	56.3	55.1	0.11	87.0	43.7	0.09	55.8	48.9	0.10	106
Beryllium	1.5	0.09	0.91	1.4	0.08	1.3	1.1	0.07	0.88	1.2	0.07	0.94
Cadmium	1.5	0.58	4.1	1.4	0.52	4.4	1.1	0.41	3.9	1.2	0.46	4.7
Calcium	1529	1.3	4400	1377	1.1	6880	1091	0.89	8140	1222	1.0	6560
Chromium	3.1	1.1	26.5	2.8	0.99	27.2	2.2	0.79	9.1	2.4	0.88	16.0
Cobalt	15.3	0.61	19.2	13.8	0.55	42.1	10.9	0.44	13.2	12.2	0.49	16.3
Copper	7.7	0.58	43.0	6.9	0.52	39.0	5.7	0.41	32.5	6.1	0.46	35.9
Iron	30.6	2.8	25800	27.5	2.5	30400	21.8	2.0	29500	24.6	2.3	31600
Lead	1.0	0.34	8.9	0.80	0.27	9.1	0.56	0.20	10.7	0.51	0.17	6.3
Magnesium	1529	3.7	4040	1377	3.4	6340	1091	2.7	3410	1222	3.0	3770
Manganese	4.6	0.18	948	4.1	0.17	1670	3.3	0.13	983	3.7	0.15	1120
Mercury	0.18	0.04	0.21	0.15	0.03	0.20	0.12	0.02	0.02	0.10	0.02	0.06
Nickel	12.2	2.4	19.9	11.0	2.2	34.5	8.7	1.7	13.8	9.8	1.9	15.9
Potassium	1529	19.6	528	1377	17.6	1440	1091	14.0	483	1222	15.7	839
Selenium	1.7	1.7	1.7	1.3	1.3	1.3	0.94	0.94	0.94	0.86	0.86	0.86
Silver	3.1	0.61	0.61	2.8	0.55	0.55	2.2	0.44	0.44	2.4	0.49	0.49
Sodium	1529	2.5	166	1377	2.2	365	1091	1.8	241	1222	2.0	225
Thallium	3.4	0.69	0.69	2.7	0.53	0.53	1.9	0.38	0.38	1.7	0.34	0.34
Vanadium	15.3	0.55	69.2	13.8	0.50	68.2	10.9	0.39	198	12.2	0.44	110
Zinc	6.1	0.37	72.9	5.5	0.33	71.3	4.4	0.26	77.9	4.9	0.29	51.0
Cyanide	2.0	2.0	2.0	1.8	1.8	1.8	1.2	1.2	1.2	1.3	1.3	1.3

Notes: All units are mg/kg

Sample Quantitation Limit (SOL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers.....

A - Acceptable (Quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification

J - Estimated (Semiquantitative) Data U - Not Detected/Quantitative Data R - Unusable Data

K - Biased High (Semiquantitative) Data UL - Not Detected/Biased Low Q - Not Applicable

L - Biased Low (Semiquantitative) Data

B - Present in associated blanks (Semiquantitative) Data

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October 1993

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SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1B
BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Parameter	Sample Point SD01/1B			Sample Point SD02/1B			Sample Point SD03/1B			Sample Point SD04/1B		
	CRDL	IDL	Result	CRDL	IDL	Result	CRDL	IDL	Result	CRDL	IDL	Result
Aluminum	64.9	13.6	24200	50.4	10.6	10600	53.5	11.2	11100	61.2	12.8	11300
Antimony	19.5	14.6	14.6	15.1	11.3	11.3	16.0	12.0	12.0	18.4	13.8	13.8
Arsenic	3.3	1.3	3.9	2.5	1.0	3.3	2.7	1.1	10.7	3.1	1.2	3.2
Barium	64.9	0.65	102	50.4	0.50	56.8	53.5	0.53	85.7	61.2	0.61	58.1
Beryllium	1.6	1.3	1.5	1.3	1.0	1.0	1.3	1.1	1.1	1.5	1.2	1.2
Cadmium	1.6	1.6	1.6	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.5	1.5
Calcium	1623	36.0	7040	1259	28.0	4410	1337	29.7	4330	1529	33.9	6320
Chromium	3.3	3.3	16.5	2.5	2.5	22.4	2.7	2.7	16.6	3.1	3.1	23.6
Cobalt	16.2	2.9	21.6	12.6	2.3	18.8	13.4	2.4	19.4	15.3	2.8	18.0
Copper	8.1	4.9	69.6	6.3	3.8	45.7	6.7	4.0	50.6	7.7	4.6	18.5
Iron	32.5	4.2	36000	25.2	3.3	29400	26.7	3.5	34300	30.6	4.0	25000
Lead	2.0	1.3	14.9	0.76	0.50	8.6	1.6	1.1	13.3	9.2	6.1	31.4
Magnesium	1623	119	4250	1259	92.7	2320	1337	98.4	2600	1529	113	1760
Manganese	4.9	1.3	601	3.8	1.0	700	4.0	1.1	1650	4.6	1.2	708
Mercury	0.16	0.16	0.16	0.13	0.13	0.13	0.13	0.13	0.13	0.15	0.15	0.15
Nickel	13.0	11.4	16.9	10.1	8.8	17.5	10.7	9.4	15.5	12.2	10.7	10.7
Potassium	1623	741	1430	1259	575	575	1337	610	610	1529	698	698
Selenium	1.6	0.97	0.97	1.3	0.76	0.76	1.3	0.80	0.80	1.5	0.92	0.92
Silver	3.3	1.3	1.3	2.5	1.0	1.0	2.7	1.1	1.1	3.1	1.2	1.2
Sodium	1623	35.4	904	1259	27.5	452	1337	29.1	514	1529	33.3	247
Thallium	3.3	0.97	0.97	2.5	0.76	0.76	2.7	0.80	0.80	3.1	0.92	0.92
Vanadium	16.2	3.3	134	12.6	2.5	133	13.4	2.7	101	15.3	3.1	62.6
Zinc	6.5	1.6	90.5	5.0	1.3	80.8	5.4	1.3	61.8	6.1	1.5	65.5
Cyanide			Not Analyzed			Not Analyzed			Not Analyzed			Not Analyzed

Notes: All units are mg/kg

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers:

A - Acceptable (Quantitative) Data
 J - Estimated (Semi-quantitative) Data
 K - Biased High (Semi-quantitative) Data
 L - Biased Low (Semi-quantitative) Data
 B - Present in associated blanks (Semi-quantitative) Data

UJ - Not Detected/Estimated Data
 U - Not Detected/Quantitative Data
 UL - Not Detected/Biased Low

N - Tentative Identification
 R - Unusable Data
 Q - Not Applicable

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Associates

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October 1993

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SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1B
BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Parameter	Sample Point SD058/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 77.0%				Sample Point SD068/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 66.5%				Sample Point SD07/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 65.4%				Sample Point SD088/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 64.1%			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	52.0	10.9	8430	A	60.2	12.6	14900	A	61.2	12.8	17300	A	62.4	13.1	12700	A
Antimony	15.6	11.7	11.7	UL	18.1	13.5	13.5	UL	18.4	13.8	13.8	UL	18.7	14.0	14.0	UL
Arsenic	2.6	1.0	2.3	A	3.0	1.2	4.4	A	3.1	1.2	4.2	UL	3.1	1.3	5.1	A
Barium	52.0	0.52	49.3	A	60.2	0.60	99.4	A	61.2	0.61	115	A	62.4	0.62	77.2	A
Beryllium	1.3	1.0	1.0	U	1.5	1.2	1.2	A	1.5	1.2	1.3	A	1.6	1.2	1.2	U
Cadmium	1.3	1.3	1.3	U	1.5	1.5	1.5	U	1.5	1.5	1.5	U	1.6	1.6	1.6	U
Calcium	1299	28.8	3630	A	1504	33.4	7770	A	1529	33.9	6280	A	1560	34.6	8450	A
Chromium	2.6	2.6	35.0	A	3.0	3.0	29.0	A	3.1	3.1	16.0	A	3.1	3.1	16.7	A
Chromium	13.0	2.30	14.4	A	15.0	2.7	17.5	A	15.3	2.80	19.8	A	15.6	2.8	16.8	A
Cobalt	6.5	3.9	49.1	A	7.5	4.5	63.0	A	7.7	4.6	67.9	A	7.8	4.7	51.9	A
Copper	26.0	3.4	22300	A	30.1	3.9	34100	A	30.6	4.0	36300	A	31.2	4.1	33500	A
Iron	0.78	0.52	5.9	J	9.0	6.0	19.7	J	0.92	0.61	15.0	J	4.7	3.1	18.0	J
Lead	1299	95.6	3880	A	1504	111	6920	A	1529	113	4440	A	1560	115	5230	A
Magnesium	3.9	1.0	1040	A	4.5	1.2	761	A	4.6	1.2	899	A	4.7	1.3	783	A
Manganese	0.13	0.13	0.13	U	0.15	0.15	0.15	U	0.15	0.15	0.15	U	0.16	0.16	0.24	L
Mercury	10.4	9.1	18.9	A	12.0	10.5	13.8	A	12.2	10.7	15.4	A	12.5	10.9	15.4	A
Nickel	1299	593	593	U	1504	687	687	U	1529	698	1250	U	1560	712	712	U
Potassium	1.3	0.78	0.78	U	1.5	0.90	0.90	U	1.5	0.92	0.92	U	1.6	0.94	0.94	U
Selenium	2.6	1.0	1.0	UL	3.0	1.2	1.2	UL	3.1	1.2	1.2	UL	3.1	1.2	1.2	UL
Silver	1299	28.3	307	B	1504	32.8	407	B	1529	33.3	482	B	1560	34.0	473	B
Sodium	2.6	0.78	0.78	U	3.0	0.90	0.90	U	3.1	0.92	0.92	U	3.1	0.94	0.94	U
Thallium	13.0	2.6	58.2	A	15.0	3.0	109	U	15.3	3.1	137	U	15.6	3.1	93.7	U
Vanadium	5.2	1.3	58.0	A	6.0	1.5	97.0	A	6.1	1.5	110	A	6.2	1.6	73.1	A
Zinc			Not Analyzed				Not Analyzed				Not Analyzed				Not Analyzed	
Cyanide																

Notes: All units are mg/kg
Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).
The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers.....
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative) Data
.....
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
.....
N - Tentative Identification
R - Unusable Data
Q - Not Applicable

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SUMMARY OF CLP TOTAL INORGANICS ANALYSES - PHASE 1B
BERKS LANDFILL REMEDIAL INVESTIGATION - PHASE 1B
BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Parameter	Sample Point SD088/FD				Sample Point SD09/1B				Sample Point SD10/1B				Sample Point SD11/1B			
	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual	CRDL	IDL	Result	Qual
Aluminum	60.0	12.6	11400	A	55.9	11.7	9520	A	58.2	12.2	8850	A	57.1	12.0	10900	A
Antimony	18.0	13.5	13.5	UL	16.8	12.6	12.6	UL	17.5	13.1	13.1	UL	17.1	12.8	12.8	UL
Arsenic	3.0	1.2	3.5	A	2.8	1.1	2.0	A	2.9	1.2	2.5	J	2.9	1.1	2.6	A
Barium	60.0	0.60	86.0	A	55.9	0.56	42.3	A	58.2	0.58	53.1	A	57.1	0.57	58.9	A
Beryllium	1.5	1.2	1.2	U	1.4	1.1	1.1	U	1.5	1.2	1.2	U	1.4	1.1	1.1	U
Cadmium	1.5	1.5	1.5	U	1.4	1.4	1.4	U	1.5	1.5	1.5	U	1.4	1.4	1.4	U
Calcium	1499	33.3	5860	A	1397	31.0	12400	A	1456	32.3	3350	A	1427	31.7	4120	A
Chromium	3.0	3.0	17.1	A	2.8	2.8	23.3	A	2.9	2.9	23.1	A	2.9	2.9	30.7	A
Cobalt	15.0	2.7	16.5	A	14.0	2.5	12.0	A	14.6	2.6	11.2	A	14.3	2.60	14.3	A
Copper	7.5	4.5	48.4	A	7.0	4.2	16.9	A	7.3	4.4	15.4	A	7.1	4.3	17.3	A
Iron	30.0	3.9	29300	A	27.9	3.6	21000	A	29.1	3.8	16500	A	28.5	3.7	22300	A
Lead	0.90	0.60	12.1	J	0.84	0.56	7.7	J	0.87	0.58	10.4	J	0.86	0.57	10.4	J
Magnesium	1499	110	4830	A	1397	103	5530	A	1456	107	2800	A	1427	105	2020	A
Manganese	4.5	1.2	890	A	4.2	1.1	826	A	4.4	1.2	758	A	4.3	1.1	779	A
Mercury	0.15	0.15	0.15	U	0.14	0.14	0.14	U	0.15	0.15	0.15	U	0.14	0.14	0.14	U
Nickel	12.0	10.5	13.1	A	11.2	9.8	12.1	A	11.6	10.2	11.3	A	11.4	10.0	16.3	A
Potassium	1499	685	702	A	1397	638	638	U	1456	665	665	U	1427	651	696	A
Selenium	1.5	0.90	0.90	UL	1.4	0.84	0.84	UL	1.5	0.87	0.87	UL	1.4	0.86	0.86	UL
Silver	3.0	1.2	1.2	UL	2.8	1.1	1.1	UL	2.9	1.2	1.2	UL	2.9	1.1	1.1	UL
Sodium	1499	32.7	422	B	1397	30.5	320	B	1456	31.7	226	B	1427	31.1	344	B
Thallium	3.0	0.90	0.90	UL	2.8	0.84	0.84	U	2.9	0.87	0.87	U	2.9	0.86	0.86	U
Vanadium	15.0	3.0	85.3	A	14.0	2.8	60.9	A	14.6	2.9	41.9	A	14.3	2.9	59.1	A
Zinc	6.0	1.5	77.9	A	5.6	1.4	80.8	A	5.8	1.5	50.4	A	5.7	1.4	52.8	A
Cyanide			Not Analyzed				Not Analyzed				Not Analyzed				Not Analyzed	

Notes: All units are mg/kg

Sample Quantitation Limit (SQL) is the Instrument Detection Limit (IDL).

The CRDLs and IDLs have been adjusted for dilution factors and percent solids as appropriate.

Qualifiers:

A - Acceptable (Quantitative) Data UJ - Not Detected/Estimated Data N - Tentative Identification
J - Estimated (Semi-quantitative) Data U - Not Detected/Quantitative Data R - Unusable Data
K - Biased High (Semi-quantitative) Data UL - Not Detected/Biased Low Q - Not Applicable
L - Biased Low (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative) Data

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Associates

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AR302992

WET CHEMISTRY

Phase 1A
Phase 1B

AR302993

913-6773

SUMMARY OF WET CHEMISTRY CONVENTIONALS ANALYSES - PHASE 1A

BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Parameter	Sample Point SED05/1A Date Sampled: 09/03/92 Dilution Factor: NA Percent Solids: NA %			Sample Point SED05/FD Date Sampled: 09/03/92 Dilution Factor: NA Percent Solids: NA %			Sample Point SED06/1A Date Sampled: 09/03/92 Dilution Factor: NA Percent Solids: NA %			Sample Point SED06/1A Date Sampled: 09/03/92 Dilution Factor: NA Percent Solids: NA %		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Total Inorganic Carbon	30	30.0	U	30	30.0	U	30	30.0	U	30	30.0	U
Total Organic Carbon	30	72000	A	30	73000	A	30	2300	A	30	1800	A

Notes: All units are except Turbidity which is NTU. The Reporting Limits(RLs) have been adjusted for percent solids.

The Reporting Limits (RLs) have been adjusted for percent solids. The Qual column indicates the Qualifier applied to the result following data validation (see below).

Qualifiers.....

.....

A - Acceptable (Quantitative) Data	UJ - Not Detected/Estimated Data	R - Unusable Data
J - Estimated (Semiquantitative) Data	U - Not Detected/Quantitative Data	Q - Not Applicable
K - Biased High (Semiquantitative) Data	UL - Not Detected/Biased Low	N - Tentative Identification
L - Biased Low (Semiquantitative) Data		N* - Tentative Identification
B - Present in associated blanks (Semiquantitative) Data		(Result below Laboratory MDL)

berkswetchem.rpi

AR302994

October 1993

913-6773

SUMMARY OF WET CHEMISTRY CONVENTIONAL ANALYSES - PHASE 1B

BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Parameter	Sample Point SD01/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 67.72%			Sample Point SD02/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 81.9 %			Sample Point SD03/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 85.35 %			Sample Point SD04/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 73.83 %		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Total Organic Carbon	5	4600	A	5	1200	A	5	1400	A	5	6100	A

Notes: All units are mg/l

The Reporting Limits (RLs) have been adjusted for percent solids.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers.....

- A - Acceptable (Quantitative) Data
- J - Estimated (Semi-quantitative) Data
- K - Biased High (Semi-quantitative) Data
- L - Biased Low (Semi-quantitative) Data
- B - Present in associated blanks (Semi-quantitative) Data
- UJ - Not Detected/Estimated Data
- U - Not Detected/Quantitative Data
- UL - Not Detected/Biased Low
- R - Unusable Data
- Q - Not Applicable
- N - Tentative Identification
- N* - Tentative Identification (result below laboratory MDL)

AR302995

October 1993

913-6773

SUMMARY OF WEI CHEMISTRY CONVENTIONAL ANALYSES - PHASE 1B

BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Parameter	Sample Point SD058/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 79.39%			Sample Point SD068/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 66.89 %			Sample Point SD07/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 66.79 %			Sample Point SD088/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 69.8 %		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Total Organic Carbon	5	3500	A	5	3600	A	5	4600	A	5	2700	A

Notes: All units are mg/l

The Reporting Limits (RLs) have been adjusted for percent solids.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers.....

A - Acceptable (Quantitative) Data UJ - Not Detected/Estimated Data R - Unusable Data

J - Estimated (Semi-quantitative) Data U - Not Detected/Quantitative Data Q - Not Applicable

K - Biased High (Semi-quantitative) Data UL - Not Detected/Biased Low N - Tentative Identification

L - Biased Low (Semi-quantitative) Data B - Present in associated blanks (Semi-quantitative) Data N+ - Tentative Identification

B - Present in associated blanks (Semi-quantitative) Data (result below laboratory MDL)

AR302996

October 1993

913-6773

SUMMARY OF UET CHEMISTRY CONVENTIONAL ANALYSES - PHASE 1B

BERKS COUNTY, PENNSYLVANIA

Matrix: Sediment

Parameter	Sample Point SD088/FD Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 69.3 %			Sample Point SD09/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 79.05 %			Sample Point SD10/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 73.44 %			Sample Point SD11/1B Date Sampled: 06/22/93 Dilution Factor: NA Percent Solids: 73.03 %		
	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual
Total Organic Carbon	5	2500	A	5	2900	A	5	2500	A	5	3700	A

Notes: All units are mg/l
The Reporting Limits (RLs) have been adjusted for percent solids.
The Qual column indicates the Qualifier applied to the result following data validation (see below).

Qualifiers.....
A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative) Data
UJ - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low
R - Unusable Data
Q - Not Applicable
N - Tentative Identification
N* - Tentative Identification
(result below laboratory MOL)

AR302997

ATTACHMENT P-1

Fourth Quarter Residential Well Data

AR302998

Golder Associates Inc.

305 Fellowship Road, Suite 200
Mt. Laurel, NJ USA 08054
Tel: (609) 273-1110
Fax (609) 273-0778



July 6, 1994

Project No.: 913-6773

USEPA Region III
Mailcode 3HW22
841 Chestnut Building
Philadelphia, PA 19107

Attn: Mr. Anthony Koller

RE: RESIDENTIAL AND BUSINESS WELL SAMPLING
BERKS LANDFILL SITE

Dear Mr. Koller:

Please find enclosed copies of the fourth quarter Phase 1B residential and business well sampling analytical results and data validation narrative for the Berks Landfill Remedial Investigation/Feasibility Study (RI/FS) project. This sampling completes the scheduled residential and business well sampling presented in the June 1992 RI/FS Work Plan.

No volatile organic compounds (VOCs) were detected in any residential well sample except for methylene chloride, which is blank related. The only other VOCs detected were in the auction house sample (.5 ug/l chloroethane, .7 ug/l 1,4-dichlorobenzene, .5 ug/l cis-1,2-dichloroethene, and 1 ug/l 1,1-dichloroethane). The auction house well is not used for potable purposes. The detected VOC concentrations are an order of magnitude less than the Federal and Pennsylvania maximum contaminant levels (MCLs) for 1,4-dichlorobenzene (75 ug/l) and cis-1,2-dichloroethene (70 ug/l). Chloroethane and 1,1-dichloroethane do not have MCLs.

Please call me if you have any questions or require clarification.

Very truly yours,

GOLDER ASSOCIATES INC.

Randolph S. White, P.E.
Group Director - Associate

RSW/lrl

Enclosure

cc: R. Klinikowski, PADER
R. Bishop, PADER
M. Rosenberg, CH2M Hill
K. Chung, American Geotech
Berks Landfill Respondents

AR302999

SUMMARY OF

ORGANICS ANALYSES
BERKS LAND REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix Groundwater Well

Sample Results
Volatile Organics
4th Quarter

CRQL	Parameter	Sample Point 26140-EQ Date Sampled: 04/26/94 Dilution Factor: 1.0 Percent Moisture: NA%				Sample Point 27631A-EQ Date Sampled: 04/27/94 Dilution Factor: 1.0 Percent Moisture: NA%				Sample Point 27631B-EQ Date Sampled: 04/27/94 Dilution Factor: 1.0 Percent Moisture: NA%				Sample Point 46120-EQ Date Sampled: 04/26/94 Dilution Factor: 1.0 Percent Moisture: NA%			
		SQL	Result	Qual		SQL	Result	Qual		SQL	Result	Qual		SQL	Result	Qual	
5	Acetone	5	5	R		5	5	R		5	5	R		5	5	R	
1	Benzene	1	1	U		1	1	U		1	1	U		1	1	U	
1	Bromochloromethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Bromodichloromethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Bromofom	1	1	U		1	1	U		1	1	U		1	1	U	
1	Bromomethane	1	1	U		1	1	U		1	1	U		1	1	U	
5	2-Butanone	5	5	R		5	5	R		5	5	R		5	5	R	
1	Carbon Disulfide	1	1	U		1	1	U		1	1	U		1	1	U	
1	Carbon Tetrachloride	1	1	U		1	1	U		1	1	U		1	1	U	
1	Chlorobenzene	1	1	U		1	1	U		1	1	U		1	1	U	
1	Chloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Chloroform	1	1	U		1	1	U		1	1	U		1	1	U	
1	Chloromethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,2-Dibromo-3-Chloropropane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Dibromochloromethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,2-Dibromoethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,2-Dichlorobenzene	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,3-Dichlorobenzene	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,4-Dichlorobenzene	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,1-Dichloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,2-Dichloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	cis-1,2-Dichloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	trans-1,2-Dichloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,2-Dichloropropane	1	1	U		1	1	U		1	1	U		1	1	U	
1	cis-1,3-Dichloropropene	1	1	U		1	1	U		1	1	U		1	1	U	
1	trans-1,3-Dichloropropene	1	1	U		1	1	U		1	1	U		1	1	U	
1	Ethylbenzene	1	1	U		1	1	U		1	1	U		1	1	U	
5	2-Hexanone	5	5	U		5	5	U		5	5	U		5	5	U	
5	4-Methyl-2-Pentanone	5	5	U		5	5	U		5	5	U		5	5	U	
2	Methylene Chloride	2	2	U		2	2	U		2	2	U		2	2	U	
1	Styrene	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,1,2,2-Tetrachloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Tetrachloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Toluene	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,1,1-Trichloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,1,2-Trichloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Trichloroethene	1	1	U		1	1	U		1	1	U		1	1	U	
1	Vinyl Chloride	1	1	U		1	1	U		1	1	U		1	1	U	
1	Total Xylenes	1	1	U		1	1	U		1	1	U		1	1	U	

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:

A - Acceptable (Quantitative) Data
J - Estimated (Semi-quantitative) Data
B - Present in associated blanks (Semi-quantitative Data)

K - Biased High (Semi-quantitative) Data
L - Biased Low (Semi-quantitative) Data

UL - Not Detected/Estimated Data
U - Not Detected/Quantitative Data
UL - Not Detected/Biased Low

N - Tentative Identification
R - Unusable Data
Q - Not Applicable

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SUMMARY OF ORGANICS ANALYSES
BERKS LANDFILL MEDICAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA
Sample Results
Volatile Organics
4th Quarter

Matrix: Groundwater Well

CROL	Parameter	Sample Point 62090-EQ				Sample Point 6883A-EQ				Sample Point 6883B-EQ				Sample Point 71230-EQ			
		SQL	Result	Qual	NA%	SQL	Result	Qual	NA%	SQL	Result	Qual	NA%	SQL	Result	Qual	NA%
5	Acetone	5	5	R		5	5	R		5	5	R		5	5	R	
1	Benzene	1	1	U		1	1	U		1	1	U		1	1	U	
1	Bromochloromethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Bromodichloromethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Bromoforn	1	1	U		1	1	U		1	1	U		1	1	U	
1	Bromomethane	1	1	U		1	1	U		1	1	U		1	1	U	
5	2-Butanone	5	5	R		5	5	R		5	5	R		5	5	R	
1	Carbon Disulfide	1	1	U		1	1	U		1	1	U		1	1	U	
1	Carbon Tetrachloride	1	1	U		1	1	U		1	1	U		1	1	U	
1	Chlorobenzene	1	1	U		1	1	U		1	1	U		1	1	U	
1	Chloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Chloroform	1	1	U		1	1	U		1	1	U		1	1	U	
1	Chloromethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,2-Dibromo-3-Chloropropane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Dibromochloromethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,2-Dibromomethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,2-Dichlorobenzene	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,3-Dichlorobenzene	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,4-Dichlorobenzene	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,1-Dichloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,2-Dichloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,1-Dichloroethene	1	1	U		1	1	U		1	1	U		1	1	U	
1	cis-1,2-Dichloroethene	1	1	U		1	1	U		1	1	U		1	1	U	
1	trans-1,2-Dichloroethene	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,2-Dichloropropane	1	1	U		1	1	U		1	1	U		1	1	U	
1	cis-1,3-Dichloropropene	1	1	U		1	1	U		1	1	U		1	1	U	
1	trans-1,3-Dichloropropene	1	1	U		1	1	U		1	1	U		1	1	U	
1	Ethylbenzene	1	1	U		1	1	U		1	1	U		1	1	U	
5	2-Hexanone	5	5	R		5	5	R		5	5	R		5	5	R	
5	4-Methyl-2-Pentanone	5	5	R		5	5	R		5	5	R		5	5	R	
2	Methylene Chloride	2	2	B		2	2	B		2	2	B		2	2	B	
1	Styrene	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,1,2,2-Tetrachloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Tetrachloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Toluene	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,1,1-Trichloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	1,1,2-Trichloroethane	1	1	U		1	1	U		1	1	U		1	1	U	
1	Trichloroethene	1	1	U		1	1	U		1	1	U		1	1	U	
1	Vinyl Chloride	1	1	U		1	1	U		1	1	U		1	1	U	
1	Total Xylenes	1	1	U		1	1	U		1	1	U		1	1	U	

Notes:

All units are ug/l
 Sample Quantitation Limit (SQL) is CROL multiplied by the dilution factor and adjusted for percent moisture as appropriate.
 The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:

A - Acceptable (Quantitative) Data
 J - Estimated (Semi-quantitative) Data
 B - Present in associated blanks (Semi-quantitative Data)

K - Biased High (Semi-quantitative) Data
 L - Biased Low (Semi-quantitative) Data

UJ - Not Detected/Estimated Data
 U - Not Detected/Quantitative Data
 UL - Not Detected/Biased Low

N - Tentative Identification
 R - Unusable Data
 Q - Not Applicable

AR303001

SUMMARY OF ORGANICS ANALYSES
BERKS LAND REMEDIAL INVESTIGATION
BERKS COUNTY, PENNSYLVANIA

Matrix Groundwater Well

Sample Results
Volatile Organics
4th Quarter

CRQL	Parameter	Sample Point 72260-EQ			Sample Point 7679A-EQ			Sample Point 7679B-EQ			Sample Point 80820-EQ		
		SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual	SQL	Result	Qual
5	Acetone	5	5	R	5	5	R	5	5	R	5	5	R
1	Benzene	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromochloromethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromodichloromethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromoforn	1	1	U	1	1	U	1	1	U	1	1	U
1	Bromomethane	1	1	U	1	1	U	1	1	U	1	1	U
5	2-Butanone	5	5	R	5	5	R	5	5	R	5	5	R
1	Carbon Disulfide	1	1	U	1	1	U	1	1	U	1	1	U
1	Carbon Tetrachloride	1	1	U	1	1	U	1	1	U	1	1	U
1	Chlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	Chloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Chloroform	1	1	U	1	1	U	1	1	U	1	1	U
1	Chloromethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dibromo-3-Chloropropane	1	1	U	1	1	U	1	1	U	1	1	U
1	Dibromochloromethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dibromoethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dichlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,3-Dichlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,4-Dichlorobenzene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1-Dichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1-Dichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	cis-1,2-Dichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	trans-1,2-Dichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,2-Dichloropropane	1	1	U	1	1	U	1	1	U	1	1	U
1	cis-1,3-Dichloropropene	1	1	U	1	1	U	1	1	U	1	1	U
1	trans-1,3-Dichloropropene	1	1	U	1	1	U	1	1	U	1	1	U
1	Ethylbenzene	1	1	U	1	1	U	1	1	U	1	1	U
5	2-Hexanone	5	5	B	5	5	B	5	5	B	5	5	B
5	4-Methyl-2-Pentanone	5	5	B	5	5	B	5	5	B	5	5	B
2	Methylene Chloride	2	2	U	2	2	U	2	2	U	2	2	U
1	Styrene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1,2,2-Tetrachloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Tetrachloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Toluene	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1,1-Trichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	1,1,2-Trichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Trichloroethane	1	1	U	1	1	U	1	1	U	1	1	U
1	Vinyl Chloride	1	1	U	1	1	U	1	1	U	1	1	U
1	Total Xylenes	1	1	U	1	1	U	1	1	U	1	1	U

Notes:

All units are ug/l

Sample Quantitation Limit (SQL) is CRQL multiplied by the dilution factor and adjusted for percent moisture as appropriate.

The Qual column indicates the qualifier applied to the result following data validation (see below).

Qualifiers:

A - Acceptable (Quantitative) Data

U - Estimated (Semiquantitative) Data

L - Present in associated blanks (Semiquantitative Data)

K - Biased High (Semiquantitative) Data

L - Biased Low (Semiquantitative) Data

UJ - Not Detected/Estimated Data

U - Not Detected/Quantitative Data

UL - Not Detected/Biased Low

N - Tentative Identification

R - Unusable Data

Q - Not Applicable

CONTRACT LABORATORY PROGRAM DATA VALIDATION NARRATIVE
RESIDENTIAL WELLS IN SUPPORT OF THE REMEDIAL INVESTIGATION
BERKS LANDFILL
BERKS COUNTY, PENNSYLVANIA

1.0 INTRODUCTION

Golder Associates, Inc. (Golder) has validated analytical data from the fourth quarter Phase 1B residential and business well samples which were collected April 26 and April 27, 1994, at various private residences and businesses in Spring Township, Berks County, Pennsylvania. The samples were collected in support of the Phase 1B Remedial Investigation/Feasibility Study (RI/FS). The samples were analyzed for the Volatile Organic Target Compound List (TCL) in accordance with the U.S. Environmental Protection Agency (USEPA) Superfund Analytical Methods for Low Concentration Water for Organics Analysis (SAM) dated 10/92. The analyses were performed by CompuChem Environmental Corporation, Research Triangle Park, North Carolina.

Samples were collected from twelve (12) primary locations, and one sample location was collected in duplicate for Field Duplicate analysis. The sample point locations, sample identification numbers, corresponding Sample Delivery Groups (SDG), and parameters of analyses are summarized in Table 1.

Validation of CLP organic data was performed in accordance with the USEPA CLP National Functional Guidelines for Organic Data Review (National Guidelines; dated December, 1990 and revised June, 1991), the Region III Modifications to National Functional Guidelines for Organic Data Review, Multi-Media, Multi-Concentration (Region III Guidelines; dated June, 1992). These documents are referred to as "functional guidelines" hereafter. Criteria specified in the Quality Assurance Project Plan (QAPjP) dated May, 1992 were also used in data validation.

In general, the discussion which follows in Section 2.0 describes specific instances where the quality control criteria specified in the documents named above were not fully achieved. Where quality control criteria were met, positive results were qualified as acceptable (A) and non-detected results were qualified as below the quantitation limit (U). In some cases, there are multiple degrees to which the quality control criteria may not be met. For example, a surrogate recovery for an organic analysis may be slightly less than the lower limit of the Contract Required Recovery range; the corresponding positive results may be qualified as biased low (L) and the non-detected results as biased low quantitation limits (UL). However, if the surrogate recovery is less than 10%, the non-detected results would be qualified as unusable (R). In accordance with the data validation guidelines, if the non-adherence to quality control criteria are slight, qualification of data may not be warranted. However, if the non-adherence is significant,

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qualification of the data may be necessary. This narrative discussion specifies where qualification of the data was necessary.

Data qualifiers are defined in Table 2. Where more than one qualifier for a sample result was warranted, the most predominant or general qualifier was applied to the results. For example, if a positive result needs to be qualified as estimated (J) due to the initial or continuing calibration but is also present in the associated blanks, the result would be qualified with a "B" if the sample result is less than the associated blank action level.

Following data validation, evaluation, and qualification, Golder prepared tables which summarize the analytical data and qualifiers for each sample point. These qualified results are provided in Appendix A of this report. Table 1 also provides a cross reference for Sample Identification Numbers and Sample Point Locations for all samples except blanks, and the parameters analyzed for each sample.

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2.0 TARGET COMPOUND LIST VOLATILE ORGANIC PARAMETERS

The samples were reported in one SDG and validated in accordance with the functional guidelines. In addition to the primary samples, one field duplicate and three trip blanks were submitted for analysis.

Data Quality Objectives

Precision: Goals for laboratory and field precision were met for this SDG.

Accuracy: Goals for accuracy were met for this SDG.

Sample Result Verification: All sample results were supported in the raw data.

Detection Limits: The detection limit goals were achieved for all samples.

Completeness: The data package was complete for the requested analysis. Thirteen (13) samples were validated in this data set. A total of 520 results for these samples were reported in which 496 were deemed valid. This results in a completeness of 95.4% for these samples which meets the Work Plan objective of 85%.

Major Deficiencies

Identified below are the major deficiencies which required qualification of the data. Refer to Table A1 for the specific samples affected by each deficiency.

The functional guidelines require that the calculated response factors for the initial and continuing calibrations be greater than 0.05. This criterion was not achieved for the initial calibration nor the daily continuing calibrations for 2-Butanone and Acetone. The sample results associated with these calibrations required qualification as biased low values (L) for positive results and unusable values (R) for non-detected results.

Minor Deficiencies

Identified below are the minor deficiencies which required qualification of the data. Refer to Table A1 for the specific samples affected by each deficiency.

Laboratory preparation blanks, trip blanks and storage blanks are evaluated for target compound contamination. Methylene chloride was found as a contaminant in blanks for this SDG. Samples associated with these blanks required qualification. Methylene chloride is considered a common laboratory contaminant. For common laboratory contaminants, an action limit of 10 times the highest concentration found in any blank is calculated. For all samples, Methylene chloride was detected as a positive result

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below the action limit and is believed attributable to laboratory contamination. The positive results for Methylene Chloride were flagged with the B qualifier.

The functional guidelines require that the calculated response factors remain stable over the concentration range of the initial calibration ($< 30\%$ RSD). This criterion was not achieved in the initial calibration for Methylene chloride, Acetone and 2-Butanone. The samples associated with the initial calibration required qualification as estimated values (J) for positive results. Based on professional judgement, non-detected results were qualified as estimated quantitation limits (UJ).

The functional guidelines require the percent differences for the response factors between the initial calibration and the continuing daily calibration be less than $\pm 25\%$. This criterion was not achieved for all continuing daily calibrations for Methylene chloride. The samples associated with these calibrations required qualification as estimated values (J) for positive results. Based on professional judgement, non-detected results were qualified as estimated quantitation limits (UJ). This criteria was also not satisfied for the compound Chloromethane in the daily continuing calibration analyzed on May 3, 1994. Since there were no primary samples analyzed on this day, no action was required.

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3.0 SUMMARY

Validation of the data collected for the fourth quarter residential wells in support of the RI/FS for the Berks Landfill was performed in accordance with USEPA National and Region III data validation guidelines and the QAPjP.

Overall, the data required qualification due to some quality control criteria which were not fully achieved, but the majority of the data may be deemed useable in terms of objectives of the remedial investigation. Although a positive result was qualified as estimated, the analyte should be considered present. Similarly, a non-detected result which was qualified as an estimated quantitation/detection limit, the analyte should not be considered present for the purposes of this study, although the limit itself may not be precise. Rejected (unusable) data that are assigned the "R" qualifier should not be used and have been included in the summary tables for the purpose of completeness.

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TABLE 1
Sample Point Identifications

<u>SAMPLE LOCATION</u>	<u>SAMPLE IDENTIFICATION NUMBER</u>	<u>SDG NUMBER</u>	<u>PARAMETERS OF ANALYSES</u>
Bino Residence	06883A-EQ	001-L	Volatile Organics
Buller Residence (shallow)	02753B-EQ	001-L	Volatile Organics
Buller Residence (deep)	02753A-EQ	001-L	Volatile Organics
Roberts Residence	071290-EQ	001-L	Volatile Organics
Cremer Residence	046120-EQ	001-L	Volatile Organics
Auction House	07579B-EQ	001-L	Volatile Organics
Cass Residence	07579A-EQ	001-L	Volatile Organics
Heinz Residence	080820-EQ	001-L	Volatile Organics
Reifsnyder Residence	072250-EQ	001-L	Volatile Organics
Faust Residence	052090-EQ	001-L	Volatile Organics
Bechtald Residence	025140-EQ	001-L	Volatile Organics
Berkel Residence	06883B-EQ	001-L	Volatile Organics

TABLE 1 (Cont'd)

QUALITY CONTROL SAMPLES

TRIP BLANKS

<u>SAMPLE IDENTIFICATION NUMBER</u>	<u>SDG NUMBER</u>	<u>PARAMETERS OF ANALYSES</u>
0GWTB01	001-L	Volatile Organics
0GWTB02	001-L	Volatile Organics
0GWTB03	001-L	Volatile Organics

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

<u>SAMPLE IDENTIFICATION NUMBER</u>	<u>SDG NUMBER</u>	<u>PARAMETERS OF ANALYSES</u>
071290-EQ	001-L	Volatile Organics

FIELD DUPLICATE

<u>SAMPLE IDENTIFICATION NUMBER</u>	<u>SDG NUMBER</u>	<u>PARAMETERS OF ANALYSES</u>
7579AFDEQ	001-L	Volatile Organics

TABLE 2
Data Qualifiers

- A** - The data is acceptable; identification is confirmed.
- U** - The analyte was tested for but was not detected. The associated numerical value is either the sample quantitation limit or the sample detection limit.
- B** - The analyte was also detected in one or more of the associated quality control blanks (laboratory, rinsate, field, and/or trip blanks). The compound was not detected substantially above the level reported in the associated blanks as defined in the functional guidelines.
- R** - Rejected data due to quality control criteria. The data are qualified as unusable (analyte may or may not be present in the sample).
- J** - The analyte is present. The associated numerical value is an estimated quantity and may or may not be accurate or precise.
- K** - The analyte is present. The associated numerical value may be biased high. The actual value is expected to be lower.
- L** - The analyte is present. The associated numerical value may be biased low. The actual value is expected to be higher.
- UJ** - The analyte was tested for but was not detected. The sample quantitation limit or the sample detection limit is estimated and may be inaccurate or imprecise.
- UL** - The analyte was tested for but was not detected. The sample quantitation limit or the sample detection limit is estimated but is probably higher.

TABLE A1

DATE: June 30, 1994
PROJECT NAME: Berks Landfill RI/FS
ANALYSIS: TCL Volatiles 10/92
SAMPLE DELIVERY GROUP NUMBER: 001-L
REVIEWER: Jeffrey Hendel

DEFICIENCY	COMPOUND(S)	QUALIFIER	SAMPLES AFFECTED
Blank contamination	Methylene Chloride	B	All
Response factors unstable over the concentration range of the initial calibration; > 30% RSD	Acetone, 2-Butanone, Methylene Chloride	UJ	All
% difference between the initial and continuing RRF exceeds +/- 25%	Chloromethane	J for positive results UJ for nondetects	None
% difference between the initial and continuing RRF exceeds +/- 25%	Methylene chloride,	UJ	All
Response Factor less than 0.05 for initial and continuing calibrations	Acetone, 2-Butanone	R	All

APPENDIX Q
DETECTED CONSTITUENT SUMMARY TABLES

AR303012

APPENDIX Q**EXPLANATION AND NOTES****Explanation of Contents**

Appendix Q contains tables that display all analytical sampling results for those constituents considered to be present in each medium subgroup (e.g., background groundwater; see Table Q-A, attached for list of subgroups). Within a given medium subgroup, a constituent was considered to be present if at least one detected concentration (data qualified A, J, K, or L) for that constituent was reported. Data qualified with a U, UJ, UL, or B were considered not detected (see Table Q-B, attached, for definition of data qualifiers). If a constituent was detected at least once in the medium subgroup, then all sample results for that constituent in the subgroup were listed in the respective table and arranged by analytical fraction (volatile organics, semivolatile organics, pesticide and PCBs, total inorganics [metals and cyanide], and dissolved inorganics [metals]).

A summary of data presentation in the RI report is included in Appendix P, along with tables showing the analytical results for all constituents analyzed in the various media. The subset of analytical results consisting of constituents considered to be present, listed in the following tables, was defined to enable more clear presentation of constituents detected in the different media.

Calculations were performed on the data contained in Appendix Q in order to determine frequency of detection, range of detected concentration, and mean concentration. Methods used to perform calculations and notes on anomalous cases are described in detail in Appendix R of the RI report. Tables in Section 4.0 of the RI report present summaries of the calculations, which are arranged by medium subgroup and then by analytical fraction.

After data contained in Appendix Q was manipulated according to Appendix R, total and dissolved inorganic values for background and on-site groundwater were compared using further statistical calculations. See Appendix T of this report for a description of statistical methods used and tabulated results. See Section 4.2.7 of the RI report for a discussion of the comparison.

Specific Notes on Compilation of Data in This Appendix

1. During Phase 1A, residential well samples 7579A and 71290 were analyzed using two different methods: 524.2 and CLP (3/90). Because the CLP 3/90 analysis was mistakenly performed by the laboratory on the original samples, samples were recollected for 524.2 analysis. Only results from the

524.2 method are included in Appendix P and Q, and the tables and figures in Section 4.0 of the RI report.

2. During Phase 1A, leachate seep sample point L1-EL required resampling for volatile organic analysis because the original sample was not analyzed within holding time. The recollected sample, identified as L1-EL/RA, was collected in field duplicate. Because the results for the primary sample, L1-EL/1A, are unusable, they were not used in determining frequency of detection, range of concentration, or mean concentration. Instead, the re-sampled results were used as primary sample results in these calculations.

3. During Phase 1A, sample GWM16 was analyzed twice by the laboratory for two analytical fractions. The well was originally sampled on 9/4/92; however, due to insufficient recovery in the well, only one bottle for SVOCs and one bottle for Pesticide/PCBs could be collected. Sampling of well GWM16 was completed on 9/9/92 and additional bottles were filled for SVOC and Pesticide/PCB analysis and submitted to the laboratory for use if needed. The laboratory mistook these additional bottles as separate samples and performed additional analyses of SVOCs and Pesticide/PCBs. In this appendix, the sample collected on 9/4/92 was designated as GWM16/1A and the sample collected on 9/9/92 was designated as GWM16/1A2. GWM16/1A2 has been treated as a re-analysis. Therefore, as described in Appendix R, the higher concentration between GWM16/1A and GWM16/1A2 was used in determining frequency of detection, range of concentration, and mean concentration for constituents considered to be present in on-site groundwater.

4. During Phase 1A, groundwater monitoring well samples were analyzed for VOCs using the CLP (3/90) VOC methodology, while residential well samples were analyzed for VOCs using method 524.2.

In separating samples into subgroup media it was determined that two residential wells (7579B-the Auction House, and 12330-the Nein Residence) belong in the On-site Groundwater subgroup.

During compilation of data for the Draft RI, it was noted that three compounds (1,2-Dichlorobenzene, 1,3-Dichlorobenzene, and 1,4-Dichlorobenzene) were analyzed as SVOCs for groundwater monitoring wells (using the CLP (3/90) method) and as VOCs for residential wells (using the 524.2 method). At that point it was determined that the VOC results for dichlorobenzenes from the Auction House and Nein well samples should be presented with the SVOC groundwater monitoring well sample results. The decision to treat the data in this manner was made to allow for a clearer presentation of data.

Following this decision it was noted that two sets of dichlorobenzene results existed for the Nein well for the Phase 1A sampling event. One set of results was from the VOC analysis and the other set of results from the SVOC analysis. The Auction House well was not analyzed for SVOCs as per the RI Work Plan.

For presentation in the March 1994 Draft RI Report, the dichlorobenzene results from the VOC analysis of the Nein well were listed in the semivolatile table using sample designation 12330/FD instead of 12330/AQ. The designation was changed in this manner to differentiate the sets of data and to avoid complications in database manipulation.

While reviewing data in response to USEPA and CH2MHill comments, Golder determined that the presentation of dichlorobenzene results for the Nein well were not accurately presented. The VOC results should not be presented as field duplicate results because the sample was analyzed using two different methods, rather than two aliquots of sample having been analyzed using the same method. Therefore, averaging the results would be inappropriate for calculations. Additionally, for calculation purposes, dichlorobenzene results for each sample should be included only once per phase, instead of twice. Consequently, the dichlorobenzene results from the VOC analysis of the Nein well from Phase 1A (formerly designated 12330/FD) have been removed from Table Q-2 and only the SVOC dichlorobenzene results are presented for this well.

Table Q-1
Summary of Background Groundwater
Volatile Organic Compounds
Units are µg/l

EPASAMP	SAMPLE LOC	1,2-Dichloroethane	Bromomethane	Chloromethane
72250/AQ	HEINZ	1	2	2
72250/BQ	HEINZ	1	1	1
72250-CQ	HEINZ	0.5	1.0	1.0
72250-DQ	HEINZ	1.0	1.0	1.0
7579A/AR	CASS	1	2	2
7579A/BQ	CASS	1	1	1
7579A-CQ	CASS	1.0	1.0	1.0
7579A-DQ	CASS	1.0	1.0	1.0
80820/AQ	REIFSNYDER	1	2	2
80820/BQ	REIFSNYDER	1	1	1
80820-CQ	REIFSNYDER	1.0	1.0	1.0
80820-DQ	REIFSNYDER	1.0	1.0	1.0
GWG02/1A	G-2	10	14	20
GWG02/1B	G-2	10	10	10
GWG03/1A	G-3	10	10	10
GWG03/1B	G-3	10	10	10
GWG07/1B	G-7	10	10	10
GWG08/1B	G-8	10	10	10
GWG10/1B	G-10	10	10	10

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303016

Table Q-1
Summary of Background Groundwater
Semivolatiles, Pesticides and PCBs - NONE DETECTED

AR303017

Table Q-1
Summary of Background Groundwater
Total Metals
All units are µg/l

EPASAMP	SAMPLE_LOC	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
7579A-CQ	CASS	38.8	5.2	2.3	U	5.0	62700	9.2
7579A/AQ	CASS	26.6	3.0	0.91	U	1.9	54800	3.6
7579A/BQ	CASS	97.4	4.0	2.0	U	3.0	56400	8.0
GWG-02/1A	G-2	58300	8.0	173	4.5	13.1	35300	97.5
GWG-02/1B	G-2	28200	7.9	116	2.2	3.0	37100	57.0
GWG-03/1A	G-3	44600	3.4	72.1	0.30	9.4	22000	4.4
GWG-03/1B	G-3	5150	4.0	11.3	1.0	3.0	20200	8.0
GWG-07/1B	G-7	7510	7.4	28.0	1.0	3.0	26400	8.0
GWG-08/1B	G-8	14100	4.0	73.6	1.0	3.0	29600	8.0
GWG10/1B	G-10	47300	7.9	144	5.7	3.0	32000	57.5

EPASAMP	SAMPLE_LOC	Cobalt	Copper	Cyanide	Iron	Lead	Magnesium
7579A-CQ	CASS	13.6	11.1	Not Analyzed	10.7	2.0	12800
7579A/AQ	CASS	2.0	3.9	44.5	32.9	2.2	11300
7579A/BQ	CASS	9.0	14.5	Not Analyzed	33.8	2.0	11400
GWG-02/1A	G-2	26.7	83.7	10.0	68400	11.2	22600
GWG-02/1B	G-2	25.2	57.3	Not Analyzed	35600	11.9	16600
GWG-03/1A	G-3	26.0	272	10.0	56400	10.0	9970
GWG-03/1B	G-3	9.0	41.1	Not Analyzed	6460	2.5	6940
GWG-07/1B	G-7	13.8	47.6	Not Analyzed	16000	4.0	4290
GWG-08/1B	G-8	20.1	142	Not Analyzed	30000	7.0	7490
GWG10/1B	G-10	27.5	175	Not Analyzed	46000	17.3	22600

EPASAMP	SAMPLE_LOC	Manganese	Nickel	Potassium	Sodium	Vanadium	Zinc
7579A-CQ	CASS	1.4	14.2	1760	8000	6.8	5.7
7579A/AQ	CASS	0.60	7.9	631	7320	4.7	5.4
7579A/BQ	CASS	1.0	18	1360	7500	6.1	14.8
GWG-02/1A	G-2	844	75.5	3950	9340	156	124
GWG-02/1B	G-2	813	18.0	2590	10300	84.2	136
GWG-03/1A	G-3	1180	36.4	2110	5940	122	67.4
GWG-03/1B	G-3	158	18.0	1270	5410	16.3	25.4
GWG-07/1B	G-7	128	18.0	1850	12300	134	37.8
GWG-08/1B	G-8	611	18.0	2820	6780	49.6	63.5
GWG10/1B	G-10	1240	23.9	4090	10000	107	116

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303018

Table Q-1
Summary of Background Groundwater
Dissolved Metals
All units are µg/l

EPASAMP	SAMPLE LOC	Arsenic	Barium	Calcium	Iron	Magnesium
GWG02/1A	G-2	3.0	11.6	29400	49.1	8340
GWG02/1B	G-2	4.0	11.1	31600	41.0	9570
GWG03/1A	G-3	3.0	2.1	16800	28.0	6200
GWG03/1B	G-3	4.0	2.0	21200	41.0	7120
GWG07/1B	G-7	7.3	7.5	22600	162	1660
GWG08/1B	G-8	4.0	15.7	28900	41.0	5640
GWG10/1B	G-10	4.0	6.3	23000	41.0	7180

EPASAMP	SAMPLE LOC	Manganese	Potassium	Sodium	Vanadium
GWG02/1A	G-2	51.7	976	9300	5.0
GWG02/1B	G-2	6.8	1350	9820	6.0
GWG03/1A	G-3	122	734	5090	1.8
GWG03/1B	G-3	19.9	1350	5670	6.0
GWG07/1B	G-7	8.5	1350	11700	12.0
GWG08/1B	G-8	361	1350	5570	6.0
GWG10/1B	G-10	36.9	1350	7580	6.0

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

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Table
Summary On-Site Groundwater
Volatile Organic Compounds
All units are µg/l

EPASAMP	SAMPLE_LOC	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,2-Dichloropropane
12330/AQ	NEIN	1	1	1	1	1	1
12330/BQ	NEIN	1	1	1	1	1	1
12330/CD	NEIN	1.0	1.0	1.0	1.0	1.0	1.0
12330/CE	NEIN	1.0	1.0	1.0	1.0	1.0	1.0
12330/CF	NEIN	1	1	1	1	1	1
7579B/AQ	AUCTION HOUSE	1	1	1	1	1	1
7579B/BQ	AUCTION HOUSE	1	1	1	1	1	1
7579B/CQ	AUCTION HOUSE	1.0	1.0	1.0	1.0	1.0	1.0
7579B/DQ	AUCTION HOUSE	1.0	1.0	1.0	1.0	1.0	1.0
GR18D/A	GR18D	170	170	170	170	170	170
GW18S/A	MP-18S	200	200	200	200	200	200
GW18S/BD	MP-18S	10	10	10	10	10	10
GW001/B	C-2	10	10	10	10	10	10
GW002/B	C-2	10	10	10	10	10	10
GW003/A	C-3D	200	200	200	200	200	200
GW003/B	C-3D	67	67	67	67	67	67
GW003/RE	C-3D	100	100	100	100	100	100
GW003/DF	C-3D	6	6	6	6	6	6
GW003/FR	C-3D	100	100	100	100	100	100
GW003S/A	C-3S	10	10	10	10	10	10
GW003S/B	C-3S	10	10	10	10	10	10
GW004D/B	C-4D	10	10	10	10	10	10
GW004S/B	C-4S	10	10	10	10	10	10
GW005/A	C-6	10	10	10	10	10	10
GW006D/B	C-6D	10	10	10	10	10	10
GW006S/B	C-6S	10	10	10	10	10	10
GW007D/B	C-7D	10	10	10	10	10	10
GW007S/B	C-7S	10	10	10	10	10	10
GW002/B	MD-2	10	10	10	10	10	10
GW001/A	G-1	10	10	10	10	10	10
GW001/B	G-1	10	10	10	10	10	10
GW004/B	G-4	10	10	10	10	10	10
GW005/B	G-5	10	10	10	10	10	10
GW006/B	G-6	10	10	10	10	10	10
GW011/B	G-11	10	10	10	10	10	10
GW011/DF	G-11	10	10	10	10	10	10
GW012/B	G-12	10	10	10	10	10	10
GW012/DF	G-12	10	10	10	10	10	10
GW013/B	G-13	10	10	10	10	10	10
GW003/B	MP-3	10	10	10	10	10	10
GW006/B	MP-6	10	10	10	10	10	10
GW011/B	MP-11	10	10	10	10	10	10
GW014D/B	MP-14D	10	10	10	10	10	10
GW014S/B	MP-14S	10	10	10	10	10	10
GW015D/B	MP-15D	10	10	10	10	10	10
GW015S/B	MP-15S	10	10	10	10	10	10
GW016/A	MP-16	10	10	10	10	10	10
GW016/B	MP-16	10	10	10	10	10	10
GW017/B	MP-17	10	10	10	10	10	10
GW019S/B	MP-19S	10	10	10	10	10	10
GW019D/B	GR-19D	10	10	10	10	10	10

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303020

Table 1.

6/20/2019

Notes:

Table
Summary
On-Site Groundwater
Volatile Organic Compounds
All units are µg/l

EPASAMP	SAMPLE LOC	Tetrachloroethene	Total 1,2-Dichloroethene	Total Xylenes	Trichloroethene	Vinyl Chloride	cis-1,2-Dichloroethene
12330/AQ	NEIN	1	NA	1	1	2	7
12330/BQ	NEIN	1	NA	1	0.7	1	4
12330/FD	NEIN	1	NA	1	0.6	1	4
12330-CQ	NEIN	1.0	NA	1.0	0.6	1.0	1.0
12330-PD	NEIN	1.0	NA	1.0	1.0	1.0	1.0
75798/AQ	AUCTION HOUSE	1	NA	1	1	2	2
75798/FD	AUCTION HOUSE	1	NA	1	1	2	2
75798/BQ	AUCTION HOUSE	1	NA	1	1	1	1
75798-CQ	AUCTION HOUSE	1.0	NA	1.0	1.0	1.0	0.8
75798-DQ	AUCTION HOUSE	1.0	NA	1.0	1.0	1.0	0.8
GR180/A	GR-180	10	2200	170	3100	180	NA
GW18S/A	MP-18S	200	2100	200	3100	170	NA
GW18S/FD	MP-18S	10	10	10	10	10	NA
GW001/B	C-1	10	10	10	10	10	NA
GW002/B	C-2	10	10	10	10	10	NA
GW003/A	C-3D	200	3700	200	2000	370	NA
GW003D/B	C-3D	67	1600	67	640	100	NA
GW003D/RE	C-3D	100	1800	100	650	150	NA
GW003D/FD	C-3D	1	1400	10	660	95	NA
GW003D/FR	C-3D	100	1800	100	660	180	NA
GW003S/A	C-3S	10	62	10	4	13	NA
GW003S/B	C-3S	10	53	10	2	10	NA
GW004D/B	C-4D	10	8	10	2	10	NA
GW004S/B	C-4S	10	16	10	2	2	NA
GW005/A	C-5	10	10	10	10	16	NA
GW006D/B	C-6D	10	10	10	10	10	NA
GW006S/B	C-6S	10	10	10	10	10	NA
GW007D/B	C-7D	10	10	10	10	10	NA
GW007S/B	C-7S	10	10	10	10	10	NA
GW007/B	MD-2	10	3	10	10	10	NA
GW001/A	G-1	10	10	10	10	10	NA
GW001/B	G-1	10	10	10	10	10	NA
GW004/B	G-4	10	10	10	10	10	NA
GW005/B	G-5	10	26	10	10	10	NA
GW006/B	G-6	10	10	10	10	10	NA
GW011/B	G-11	10	10	10	10	10	NA
GW011/FD	G-11	10	10	10	10	10	NA
GW012/B	G-12	10	2	10	10	10	NA
GW012/FD	G-12	10	2	10	10	10	NA
GW013/B	G-13	10	11	10	10	15	NA
GW003/B	MP-3	10	53	10	61	9	NA
GW006/B	MP-6	10	56	10	10	10	NA
GW011/B	MP-11	10	10	10	72	2	NA
GW014D/B	MP-14D	10	10	10	10	10	NA
GW014S/B	MP-14S	10	10	10	10	10	NA
GW015D/B	MP-15D	10	10	10	10	10	NA
GW015S/B	MP-15S	10	10	110	10	10	NA
GW016/B	MP-16	10	10	94	10	10	NA
GW017/B	MP-17	10	10	10	10	10	NA
GW019S/B	MP-19S	10	10	10	10	10	NA
GW019D/B	GR-19D	10	1	10	10	10	NA

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303022

Table Q-2

Note: Methods used to create table and data qualifiers are described in "Explanation and Notes" the front of this Appendix.

Table Q-2
Summary of Site Groundwater
Semi-volatile Organic Compounds
All units are µg/l

EPASAMP	SAMPLE LOC	4-Nitroaniline	Butylbenzylphthalate	Di-n-Octyl Phthalate	Di-n-butylphthalate	Diethylphthalate	Hexachloroethane
1230/AQ	NEIN	25	10	10	10	10	10
1230/BQ	NEIN	25	10	10	10	10	10
1230/CQ	NEIN	25.0	10.0	10.0	10.0	10.0	10.0
1230/PD	NEIN	25.0	10.0	10.0	10.0	10.0	10.0
75789/AQ	AUCTION HOUSE	NA	NA	NA	NA	NA	NA
75789/BQ	AUCTION HOUSE	NA	NA	NA	NA	NA	NA
75789/CQ	AUCTION HOUSE	NA	NA	NA	NA	NA	NA
75789/DQ	AUCTION HOUSE	NA	NA	NA	NA	NA	NA
GR180/A	GR-180	25	10	10	10	10	10
MP-185	MP-185	25	10	10	10	10	10
MP-185	MP-185	25	10	10	10	10	10
MP-185	MP-185	25	10	10	10	10	10
C-1	C-1	25	10	10	10	10	10
C-2	C-2	25	10	10	10	10	10
C-30	C-30	25	10	10	10	10	10
C-30	C-30	25	10	10	10	10	10
C-30	C-30	25	10	10	10	10	10
C-35	C-35	25	10	10	10	10	10
C-35	C-35	25	10	10	10	10	10
C-35	C-35	25	10	10	10	10	10
C-40	C-40	25	10	10	10	10	10
C-45	C-45	25	10	10	10	10	10
C-45	C-45	25	10	10	10	10	10
C-5	C-5	25	10	10	10	10	10
C-5	C-5	25	10	10	10	10	10
C-60	C-60	25	10	10	10	10	10
C-65	C-65	25	10	10	10	10	10
C-70	C-70	25	10	10	10	10	10
C-75	C-75	25	10	10	10	10	10
MD-2	MD-2	25	10	10	10	10	10
G-1	G-1	25	10	10	10	10	10
G-1	G-1	25	10	10	10	10	10
G-4	G-4	25	10	10	10	10	10
G-4	G-4	25	10	10	10	10	10
G-5	G-5	25	10	10	10	10	10
G-5	G-5	25	10	10	10	10	10
G-11	G-11	25	10	10	10	10	10
G-11	G-11	25	10	10	10	10	10
G-11	G-11	25	10	10	10	10	10
G-11	G-11	25	10	10	10	10	10
G-11	G-11	25	10	10	10	10	10
G-12	G-12	25	10	10	10	10	10
G-12	G-12	25	10	10	10	10	10
G-13	G-13	25	10	10	10	10	10
G-13	G-13	25	10	10	10	10	10
MP-3	MP-3	25	10	10	10	10	10
MP-6	MP-6	25	10	10	10	10	10
MP-11	MP-11	25	10	10	10	10	10
MP-140	MP-140	25	10	10	10	10	10
MP-145	MP-145	25	10	10	10	10	10
MP-145	MP-145	25	10	10	10	10	10
MP-150	MP-150	25	10	10	10	10	10
MP-153	MP-153	25	10	10	10	10	10
MP-16	MP-16	25	10	10	10	10	10
MP-16	MP-16	25	10	10	10	10	10
MP-17	MP-17	25	10	10	10	10	10
MP-185	MP-185	25	10	10	10	10	10
GR-180	GR-180	25	10	10	10	10	10

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303024

Table Q-2
Summary of ...Sils Groundwater
Semivolatile Organic Compounds
All units are µg/l

EPASAMP	SAMPLE LOC	Isoprenes	(N-Nitroso-di-n-propylamine	Naphthalene	1,2-Dichloroethane
123300Q	NEIN	10	10	10	10
123308Q	NEIN	10	10	10	2
123309Q	NEIN	10.0	10.0	10.0	10.0
12330-FD	NEIN	10.0	10.0	10.0	2.0
75798/AQ	AUCTION HOUSE	NA	NA	NA	NA
75798/FD	AUCTION HOUSE	NA	NA	NA	NA
75798/CQ	AUCTION HOUSE	NA	NA	NA	NA
75798-DQ	AUCTION HOUSE	NA	NA	NA	NA
GR180YA	MP-18S	10	10	10	1
GW18S1A	MP-18S	10	10	10	12
GW18S2RE	MP-18S	10	10	10	12
GW18SFD	MP-18S	10	10	10	7
GW18S1B	C-1	10	10	10	10
GW18S2B	C-2	10	10	10	11
GW18S3A	C-3D	10	10	10	5
GW18S3B	C-3D	10	10	10	7
GW18S3C	C-3D	10	10	10	5
GW18S3D	C-3D	10	10	10	5
GW18S3E	C-3D	10	10	10	5
GW18S3F	C-3D	10	10	10	5
GW18S3G	C-3D	10	10	10	5
GW18S3H	C-3D	10	10	10	5
GW18S3I	C-3D	10	10	10	5
GW18S3J	C-3D	10	10	10	5
GW18S3K	C-3D	10	10	10	5
GW18S3L	C-3D	10	10	10	5
GW18S3M	C-3D	10	10	10	5
GW18S3N	C-3D	10	10	10	5
GW18S3O	C-3D	10	10	10	5
GW18S3P	C-3D	10	10	10	5
GW18S3Q	C-3D	10	10	10	5
GW18S3R	C-3D	10	10	10	5
GW18S3S	C-3D	10	10	10	5
GW18S3T	C-3D	10	10	10	5
GW18S3U	C-3D	10	10	10	5
GW18S3V	C-3D	10	10	10	5
GW18S3W	C-3D	10	10	10	5
GW18S3X	C-3D	10	10	10	5
GW18S3Y	C-3D	10	10	10	5
GW18S3Z	C-3D	10	10	10	5
GW18S4A	C-4S	10	10	10	2
GW18S4B	C-4S	10	10	10	2
GW18S4C	C-4S	10	10	10	2
GW18S4D	C-4S	10	10	10	2
GW18S4E	C-4S	10	10	10	2
GW18S4F	C-4S	10	10	10	2
GW18S4G	C-4S	10	10	10	2
GW18S4H	C-4S	10	10	10	2
GW18S4I	C-4S	10	10	10	2
GW18S4J	C-4S	10	10	10	2
GW18S4K	C-4S	10	10	10	2
GW18S4L	C-4S	10	10	10	2
GW18S4M	C-4S	10	10	10	2
GW18S4N	C-4S	10	10	10	2
GW18S4O	C-4S	10	10	10	2
GW18S4P	C-4S	10	10	10	2
GW18S4Q	C-4S	10	10	10	2
GW18S4R	C-4S	10	10	10	2
GW18S4S	C-4S	10	10	10	2
GW18S4T	C-4S	10	10	10	2
GW18S4U	C-4S	10	10	10	2
GW18S4V	C-4S	10	10	10	2
GW18S4W	C-4S	10	10	10	2
GW18S4X	C-4S	10	10	10	2
GW18S4Y	C-4S	10	10	10	2
GW18S4Z	C-4S	10	10	10	2
GW18S5A	C-5	10	10	10	11
GW18S5B	C-5	10	10	10	7
GW18S5C	C-5	10	10	10	24
GW18S5D	C-5	10	10	10	4
GW18S5E	C-5	10	10	10	10
GW18S5F	C-5	10	10	10	10
GW18S5G	C-5	10	10	10	10
GW18S5H	C-5	10	10	10	10
GW18S5I	C-5	10	10	10	10
GW18S5J	C-5	10	10	10	10
GW18S5K	C-5	10	10	10	10
GW18S5L	C-5	10	10	10	10
GW18S5M	C-5	10	10	10	10
GW18S5N	C-5	10	10	10	10
GW18S5O	C-5	10	10	10	10
GW18S5P	C-5	10	10	10	10
GW18S5Q	C-5	10	10	10	10
GW18S5R	C-5	10	10	10	10
GW18S5S	C-5	10	10	10	10
GW18S5T	C-5	10	10	10	10
GW18S5U	C-5	10	10	10	10
GW18S5V	C-5	10	10	10	10
GW18S5W	C-5	10	10	10	10
GW18S5X	C-5	10	10	10	10
GW18S5Y	C-5	10	10	10	10
GW18S5Z	C-5	10	10	10	10
GW18S6A	C-6	10	10	10	10
GW18S6B	C-6	10	10	10	10
GW18S6C	C-6	10	10	10	10
GW18S6D	C-6	10	10	10	10
GW18S6E	C-6	10	10	10	10
GW18S6F	C-6	10	10	10	10
GW18S6G	C-6	10	10	10	10
GW18S6H	C-6	10	10	10	10
GW18S6I	C-6	10	10	10	10
GW18S6J	C-6	10	10	10	10
GW18S6K	C-6	10	10	10	10
GW18S6L	C-6	10	10	10	10
GW18S6M	C-6	10	10	10	10
GW18S6N	C-6	10	10	10	10
GW18S6O	C-6	10	10	10	10
GW18S6P	C-6	10	10	10	10
GW18S6Q	C-6	10	10	10	10
GW18S6R	C-6	10	10	10	10
GW18S6S	C-6	10	10	10	10
GW18S6T	C-6	10	10	10	10
GW18S6U	C-6	10	10	10	10
GW18S6V	C-6	10	10	10	10
GW18S6W	C-6	10	10	10	10
GW18S6X	C-6	10	10	10	10
GW18S6Y	C-6	10	10	10	10
GW18S6Z	C-6	10	10	10	10
GW18S7A	C-7D	10	10	10	10
GW18S7B	C-7D	10	10	10	10
GW18S7C	C-7D	10	10	10	10
GW18S7D	C-7D	10	10	10	10
GW18S7E	C-7D	10	10	10	10
GW18S7F	C-7D	10	10	10	10
GW18S7G	C-7D	10	10	10	10
GW18S7H	C-7D	10	10	10	10
GW18S7I	C-7D	10	10	10	10
GW18S7J	C-7D	10	10	10	10
GW18S7K	C-7D	10	10	10	10
GW18S7L	C-7D	10	10	10	10
GW18S7M	C-7D	10	10	10	10
GW18S7N	C-7D	10	10	10	10
GW18S7O	C-7D	10	10	10	10
GW18S7P	C-7D	10	10	10	10
GW18S7Q	C-7D	10	10	10	10
GW18S7R	C-7D	10	10	10	10
GW18S7S	C-7D	10	10	10	10
GW18S7T	C-7D	10	10	10	10
GW18S7U	C-7D	10	10	10	10
GW18S7V	C-7D	10	10	10	10
GW18S7W	C-7D	10	10	10	10
GW18S7X	C-7D	10	10	10	10
GW18S7Y	C-7D	10	10	10	10
GW18S7Z	C-7D	10	10	10	10
GW18S8A	C-8	10	10	10	10
GW18S8B	C-8	10	10	10	10
GW18S8C	C-8	10	10	10	10
GW18S8D	C-8	10	10	10	10
GW18S8E	C-8	10	10	10	10
GW18S8F	C-8	10	10	10	10
GW18S8G	C-8	10	10	10	10
GW18S8H	C-8	10	10	10	10
GW18S8I	C-8	10	10	10	10
GW18S8J	C-8	10	10	10	10
GW18S8K	C-8	10	10	10	10
GW18S8L	C-8	10	10	10	10
GW18S8M	C-8	10	10	10	10
GW18S8N	C-8	10	10	10	10
GW18S8O	C-8	10	10	10	10
GW18S8P	C-8	10	10	10	10
GW18S8Q	C-8	10	10	10	10
GW18S8R	C-8	10	10	10	10
GW18S8S	C-8	10	10	10	10
GW18S8T	C-8	10	10	10	10
GW18S8U	C-8	10	10	10	10
GW18S8V	C-8	10	10	10	10
GW18S8W	C-8	10	10	10	10
GW18S8X	C-8	10	10	10	10
GW18S8Y	C-8	10	10	10	10
GW18S8Z	C-8	10	10	10	10
GW18S9A	C-9	10	10	10	10
GW18S9B	C-9	10	10	10	10
GW18S9C	C-9	10	10	10	10
GW18S9D	C-9	10	10	10	10
GW18S9E	C-9	10	10	10	10
GW18S9F	C-9	10	10	10	10
GW18S9G	C-9	10	10	10	10
GW18S9H	C-9	10	10	10	10
GW18S9I	C-9	10	10	10	10
GW18S9J	C-9	10	10	10	10
GW18S9K	C-9	10	10	10	10
GW18S9L	C-9	10	10	10	10
GW18S9M	C-9	10	10	10	10
GW18S9N	C-9	10	10	10	10
GW18S9O	C-9	10	10	10	10
GW18S9P	C-9	10	10	10	10
GW18S9Q	C-9	10	10	10	10
GW18S9R	C-9	10	10	10	10
GW18S9S	C-9	10	10	10	10
GW18S9T	C-9	10	10	10	10
GW18S9U	C-9	10	10	10	10
GW18S9V	C-9	10	10	10	10
GW18S9W	C-9	10	10	10	10
GW18S9X	C-9	10	10	10	10
GW18S9Y	C-9	10	10	10	10
GW18S9Z	C-9	10	10	10	10
GW18S0A	GR-18D	10	10	10	1

Note: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix

AR303025

Table Q-2
Summary of On-Site (Downgradient) Groundwater
Pesticides and PCBs - NONE DETECTED

AR303026

Table Q-2
Summary of On-Site (Downgradient) Groundwater
Total Metals
All units are µg/l

EPASAMP	SAMPLE LOC	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
GWC01/1B	C-1	127	4.0	3.1	1.0	3.6	28300	8.0	9.0	4.0	14200	2.0
GWC02/1B	C-2	161	4.0	21.2	1.0	3.9	33300	8.0	9.0	4.0	8590	2.0
GWC03D/1A	C-3D	41.9	3.0	56.0	0.30	4.0	178000	3.6	2.0	3.4	16500	1.0
GWC03D/1B	C-3D	575	4.0	22.7	1.0	3.0	134000	8.0	9.0	9.2	679	2.0
GWC03D/1D	C-3D	660	4.0	24.7	1.0	3.0	138000	8.0	9.0	9.7	862	2.0
GWC03S/1A	C-3S	3160	6.6	116	1.0	2.2	251000	3.6	14.6	12.6	7220	9.6
GWC03S/1B	C-3S	1930	5.6	89.4	1.0	3.3	210000	19.8	14.3	7.6	4920	2.0
GWC04D/1B	C-4D	506	13.6	79.4	3.5	3.0	37700	8.0	12.7	10.0	371	2.0
GWC04S/1B	C-4S	201	4.0	403	1.0	3.4	145000	8.0	9.0	9.5	2060	2.0
GWC05/1A	C-5	81.8	3.0	42.6	0.30	1.4	80100	3.6	4.2	8.0	119000	3.4
GWC06D/1B	C-6D	184	4.0	52.0	1.0	3.0	35800	8.0	9.0	6.2	113	2.0
GWC06S/1B	C-6S	230	4.0	107	1.0	3.0	26600	8.0	9.0	4.0	2880	2.0
GWC07D/1B	C-7D	218	4.2	59.6	1.0	5.3	31500	8.0	9.0	4.0	126	2.0
GWC07S/1B	C-7S	413	4.0	323	1.0	3.8	333000	8.0	9.0	9.4	518	2.0
GWC01/1A	G-1	55700	8.9	309	2.4	11.4	113000	65.5	30.2	152	52000	18.4
GWC01/1B	G-1	13400	5.8	154	1.0	3.0	22400	15.7	10.3	46.5	11000	5.1
GWC11/1B	G-11	520	4.0	1360	1.0	4.2	473000	8.0	9.0	4.6	917	2.0
GWC11/1D	G-11	650	5.3	1380	1.0	3.2	480000	8.0	9.0	10.8	994	2.9
GWC12/1B	G-12	6820	6.6	450	1.0	3.0	418000	8.0	9.0	15.1	5740	19.5
GWC12/1D	G-12	48100	11.3	615	1.9	3.0	517000	54.0	30.4	93.0	42800	93.4
GWC13/1B	G-13	136	16.4	10.0	1.0	3.4	47400	8.0	9.0	4.0	280	2.0
GWC04/1B	G-4	352	21.2	63.0	1.0	3.0	246000	8.0	9.0	12.6	1220	2.2
GWC05/1B	G-5	18300	10.4	605	1.4	3.0	228000	16.6	9.0	7.0	7510	12.6
GWC06/1B	G-6	186	4.0	2.0	1.0	3.0	35500	8.0	9.0	10.8	339	2.0
GR18D/1A	GR-18D	104	4.8	32.6	0.30	2.4	57100	3.6	2.0	11.6	146.0	7.4
GWR19D/1B	GR-19D	40900	11.4	92.0	2.8	3.0	159000	84.8	33.8	12.4	44300	4.0
GWD02/1B	MD-2	7050	4.4	44.9	1.0	3.0	123000	8.9	15.5	31.4	32800	12.0
GWM11/1B	MP-11	705	4.0	94.4	1.0	3.0	108000	9.0	9.3	12.1	7850	2.0
GWM14D/1B	MP-14D	347	4.0	571	1.0	3.0	428000	8.0	9.0	4.0	400	2.6
GWM14S/1B	MP-14S	311	9.5	481	1.0	3.8	358000	8.0	9.0	4.8	12900	3.8
GWM15D/1B	MP-15D	247	4.0	48.6	1.0	4.7	33900	8.0	9.0	34.2	365	12.7
GWM15S/1B	MP-15S	18100	14.7	330	1.4	3.0	88200	51.5	29.2	24.9	24500	27.3
GWM16/1A	MP-16	3330	4.0	389	0.30	1.9	465000	13.7	10.5	10.8	9670	3.8
GWM16/1B	MP-16	873	4.0	365	1.0	3.0	394000	8.0	9.7	4.9	4110	2.1
GWM17/1B	MP-17	464	4.0	7.7	1.0	3.0	13400	3.6	2.0	5.9	5400	1.6
GW-18S/1A	MP-18S	50.2	3.0	58.3	0.30	1.9	203000	3.6	2.0	1.9	82.2	2.0
GW-18S/1D	MP-18S	75.4	3.0	60.6	0.30	1.9	209000	3.6	2.0	4.2	114	2.0
GWM19S/1B	MP-19S	647	4.0	61.8	1.0	3.0	394000	8.0	9.0	6.6	636	2.0
GWM03/1B	MP-3	2240	12.6	127	1.0	3.0	176000	8.0	29.8	14.6	10800	5.9
GWM06/1B	MP-6	147000	28.1	493	11.6	4.1	87100	8.0	13.8	24.3	75900	233
12330/AQ	NEIN	18.1	3.0	20.0	0.30	1.9	69700	3.6	2.0	15.1	114	3.2
12330/BQ	NEIN	89.4	4.0	22.3	1.0	3.0	83000	8.0	9.0	102	67.5	2.0
12330-CQ	NEIN	105	5.2	15.5	0.40	5.0	26300	9.2	13.6	241	113	2.0
12330-FD	NEIN	48.4	5.2	15.0	0.40	5.0	26200	9.2	13.6	254	28.2	2.0

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

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Table Q-2
Summary of On-Site (Downgradient) Groundwater
Total Metals
All units are µg/l

EPASAMP	SAMPLE LOC	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Vanadium	Zinc
GWC01/1B	C-1	10000	J 1020	0.20	18.0	U 1270	3.0	4.0	6990	6.0	16.2 B
GWC02/1B	C-2	11300	J 111	0.20	18.0	U 1270	3.0	4.0	9220	6.0	8.7 B
GWC03D/1A	C-3D	83800	J 429	0.04	7.9	U 1690	5.0	2.7	14300	1.8	7.3 B
GWC03D/1B	C-3D	45100	J 118	0.20	18.0	UL 2440	3.0	4.0	11800	6.0	30.0 J
GWC03D/1D	C-3D	46400	J 145	0.20	18.0	UL 1670	3.0	4.0	12100	6.0	39.1 J
GWC03S/1A	C-3S	153000	J 10100	0.04	10.4	A 3720	5.0	2.0	48200	12.8	30.9 J
GWC03S/1B	C-3S	135000	J 7580	0.20	56.7	A 3180	3.0	4.0	36100	6.0	27.1 J
GWC04D/1B	C-4D	7260	J 361	0.20	18.0	U 3350	15.0	4.0	35000	6.0	81.1 J
GWC04S/1B	C-4S	46100	J 942	0.20	18.0	U 5710	15.0	4.0	18200	6.0	83.9 J
GW-05/1A	C-5	34400	J 1300	0.07	10.3	B 5340	5.0	5.4	23100	8.3	11.0 B
GWC06D/1B	C-6D	11300	J 15.7	0.20	18.0	U 1270	3.0	4.0	7830	10.1	18.9 B
GWC06S/1B	C-6S	7200	J 64.6	0.20	18.0	U 1640	3.0	4.0	7210	6.0	11.6 B
GWC07D/1B	C-7D	6300	J 42.2	0.20	18.0	U 1650	3.0	4.0	9650	6.0	7.7 B
GWC07S/1B	C-7S	66200	J 1400	0.20	19.1	A 4060	3.0	4.0	24200	6.0	29.6 J
GWG01/1A	G-1	44400	J 2980	0.27	60.1	A 8490	5.0	2.6	12000	111	152 J
GWG01/1B	G-1	14600	J 6670	0.20	18.0	UL 2640	3.0	4.0	12200	25.4	44.3 J
GWG11/1B	G-11	107000	J 5170	0.20	51.4	A 8250	3.0	4.0	151000	6.0	18.6 B
GWG11/1D	G-11	109000	J 5250	0.20	52.1	A 8630	3.0	4.0	154000	6.0	18.6 B
GWG12/1B	G-12	108000	J 2370	0.20	18.5	L 9480	30.0	4.0	27100	7.3	76.3 J
GWG12/1D	G-12	190000	J 3380	0.20	38.3	L 11000	30.0	4.0	26900	54.8	236 J
GWG13/1B	G-13	13200	J 26.6	0.20	18.0	U 1270	3.0	4.0	12100	9.8	10.2 B
GWG04/1B	G-4	41000	J 1580	0.20	18.0	UL 7320	3.0	4.0	38200	6.0	68.3 J
GWG05/1B	G-5	48900	J 1280	0.20	18.0	UL 1270	3.0	4.0	61500	6.0	48.6 J
GWG06/1B	G-6	13100	J 23.3	0.20	18.0	UL 1270	3.0	4.0	6810	8.5	23.8 J
GR18D/1A	GR-18D	9780	A 24.5	0.05	7.9	U 7040	5.0	2.0	17400	1.8	22.0 B
GWR19D/1B	GR-19D	102000	J 1050	0.20	39.6	L 7080	30.0	4.0	7460	99.0	278 J
MD-2	MD-2	47100	J 2510	0.20	18.0	UL 7540	30.0	4.0	33900	13.8	70.7 J
MP-11	MP-11	23900	J 3850	0.20	18.0	U 2880	3.0	4.0	20600	6.0	41.1 B
MP-14D	MP-14D	46300	J 142	0.20	22.2	A 32600	3.0	4.0	183000	6.0	162 J
MP-14S	MP-14S	95400	J 6070	0.25	36.0	A 32000	3.0	4.0	429000	6.0	21.8 B
MP-15D	MP-15D	4970	J 58.2	0.20	18.0	U 4260	3.0	4.0	17700	6.0	47.1 B
MP-15S	MP-15S	25800	J 27600	0.20	30.2	L 4680	30.0	4.0	28800	47.2	102 J
MP-16	MP-16	129000	J 12200	0.05	32.4	A 15800	5.0	2.0	71900	8.1	47.4 J
MP-16	MP-16	102000	J 12600	0.20	24.6	L 13000	3.0	4.0	78100	6.0	16.0 J
MP-17	MP-17	5480	J 325	0.20	18.0	U 1270	3.0	4.0	3450	6.0	47.9 B
MP-18S	MP-18S	47600	J 62.3	0.30	7.9	U 2540	5.0	4.4	15000	1.8	7.3 B
MP-18S/1A	MP-18S	49300	J 65.3	0.10	30.4	B 2690	5.0	3.5	15800	1.8	10.4 B
GW-18S/1D	MP-18S	46400	J 693	0.20	18.0	U 4450	3.9	4.0	9570	10.0	17.2 B
GW-18S/1B	MP-3	101000	J 13500	0.20	57.0	L 3590	3.0	4.0	188000	6.0	315 J
GW-18S/1B	MP-6	50300	J 582	0.20	18.0	UL 4020	3.0	4.0	105000	16.1	919 J
12330/AQ	NEIN	22200	J 70.0	0.04	9.3	B 3140	5.0	4.8	10800	2.7	91.0 J
12330/BQ	NEIN	27200	A 29.4	0.20	18.0	U 3700	3.0	4.0	10700	6.0	129 A
12330-CQ	NEIN	9630	A 2.7	0.20	14.2	U 4850	3.6	5.5	8640	6.8	149 A
12330-FD	NEIN	8800	A 2.4	0.20	14.2	U 4820	3.6	5.5	8380	6.8	132 A

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

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Table Q-2
Summary of On-Site (Downgradient) Groundwater
Dissolved Metals
All units are µg/l

SPASAMP	SAMPLE LOC	Antimony	Arsenic	Barium	Calcium	Cobalt	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Vanadium	Zinc
GR18D1/A	GR-18D	14.0 U	4.8 A	30.7 B	52200 A	2.0 B	9.2 UL	1.1 B	8930 A	16.2 A	7.9 U	6030 A	15000 A	1.8 U	7.4 B
GW18S1/A	MP-18S	14.0 U	3.0 U	61.0 A	216000 J	2.0 U	10.4 B	1.2 B	50900 J	72.1 J	7.9 U	2630 A	16100 J	1.8 U	11.3 B
GW18S1/D	MP-18S	14.0 U	3.0 U	63.5 A	221000 J	2.0 U	9.2 UL	1.0 U	52500 J	69.8 J	7.9 U	2790 A	16700 J	1.8 U	15.2 B
GW0011/B	C-1	35.0 U	4.0 U	2.0 U	29500 A	9.0 U	66.8 A	2.0 UL	10800 A	50.2 A	18.0 U	1270 U	7520 A	6.0 U	4.0 U
GW0021/B	C-2	35.0 U	4.0 U	16.7 A	33100 A	9.0 U	53.5 A	2.0 UL	11800 A	28.9 A	18.0 U	1270 U	9850 A	6.0 U	6.0 B
GW003D1/A	C-3D	14.0 U	3.0 U	50.7 A	169000 J	2.0 U	12000 A	1.0 U	79600 J	40.8 J	7.9 U	1810 A	13500 J	1.8 U	16.4 B
GW003D1/B	C-3D	36.0 U	4.0 U	18.9 B	146000 A	8.0 U	41.0 U	2.0 UL	40700 A	30.8 B	17.0 U	1370 A	12600 A	6.0 U	16.7 B
GW003D1/D	C-3D	36.0 U	4.0 U	18.2 B	150000 A	8.0 U	41.0 U	2.0 UL	50900 A	24.8 B	17.0 U	1350 U	12900 A	6.0 U	17.3 B
GW003S1/A	C-3S	14.0 U	3.9 A	80.4 A	216000 J	13.2 A	58.0 L	3.0 B	133000 J	84.60 J	90.5 A	3360 A	42400 J	1.8 U	44.9 A
GW003S1/B	C-3S	36.0 U	10.2 J	87.3 A	230000 A	12.4 A	1030 A	2.0 UL	147000 A	83.20 A	75.3 A	2840 A	39000 A	6.0 U	15.2 B
GW004D1/B	C-4D	36.0 U	7.3 A	173 A	16600 A	8.0 U	18.2 A	2.0 UL	3140 A	78.3 A	17.0 U	1670 A	21000 A	6.0 U	44.7 B
GW004S1/B	C-4S	36.0 U	3.0 U	398 A	148000 A	8.0 U	95.9 A	2.0 UL	47000 A	97.0 A	17.0 U	4370 A	17900 A	6.0 U	80.0 B
GW0051/A	C-5	14.0 U	3.0 U	32.2 A	91300 J	2.0 U	4480 A	1.4 B	36700 J	55.9 J	10.9 B	5280 A	22800 J	1.8 U	8.8 B
GW006D1/B	C-6D	35.0 U	4.0 U	60.3 A	33800 A	9.0 U	25.0 U	2.0 UL	11300 A	4.1 A	18.0 A	1270 A	8180 A	9.5 A	4.4 B
GW006S1/B	C-6S	35.0 U	4.0 U	97.7 A	21800 A	9.0 U	26.8 A	2.0 UL	7050 A	11.0 B	18.0 U	1610 A	7290 A	6.0 U	4.0 U
GW007D1/B	C-7D	35.0 U	4.0 U	45.0 A	33600 A	9.0 U	25.0 U	2.0 UL	7100 A	30.1 B	18.0 U	1460 A	10500 A	6.0 U	4.0 U
GW007S1/B	C-7S	35.0 U	4.0 U	33.4 A	325000 A	9.0 U	26.5 A	2.0 UL	68500 A	13.30 A	29.4 A	4300 A	24800 A	6.0 U	22.1 B
GW0021/B	MD-2	35.0 U	4.0 U	39.7 A	123000 A	9.0 U	14000 A	2.0 UL	36500 A	24.20 A	18.0 U	7490 A	34900 A	6.0 U	5.7 B
GW0011/A	G-1	14.0 U	3.0 U	39.8 A	110000 J	2.0 U	56.7 B	1.0 U	27800 J	85.7 J	12.3 B	2710 A	9850 J	1.8 U	28.3 B
GW0011/B	G-1	36.0 U	4.0 U	26.1 B	23500 A	8.0 U	41.0 U	2.0 UL	13200 A	33.1 A	17.0 U	1350 U	13100 A	6.0 U	7.9 B
GW0041/B	G-4	35.0 U	18.1 A	76.0 U	247000 A	9.0 U	76.2 A	2.8 L	49900 A	1590 A	19.7 A	3640 A	40400 A	6.0 U	37.0 B
GW0051/B	G-5	36.0 U	11.8 A	148 A	232000 A	8.0 U	128 A	2.0 UL	48900 A	1070 A	20.4 A	5090 A	66500 A	6.0 U	20.4 B
GW0061/B	G-6	36.0 U	4.0 U	2.0 U	40400 A	8.0 U	41.0 U	2.0 UL	14000 A	2.5 B	17.0 U	1350 U	7240 A	6.3 A	9.7 B
GW0111/B	G-11	36.0 U	4.0 U	1430 A	470000 A	9.0 U	481 A	2.0 UL	108000 A	5110 A	47.5 A	8840 A	155000 A	6.0 U	12.8 B
WG11/FD	G-11	42.1 A	4.0 U	1420 A	470000 A	9.0 U	481 A	2.0 UL	108000 A	5110 A	47.4 A	9080 A	155000 A	6.0 U	11.1 B
WG121/B	G-12	36.0 U	4.2 A	475 A	430000 A	8.0 U	18.2 A	11.2 L	99100 A	2470 A	24.1 A	7260 A	27800 A	6.0 U	4.0 U
WG121/D	G-12	36.0 U	4.6 J	480 A	432000 A	8.0 U	168 A	14.0 L	100000 A	2480 A	21.2 A	7340 A	28400 A	6.0 U	4.0 U
WG131/B	G-13	36.2 A	14.6 A	11.1 A	46200 A	9.0 U	25.0 U	2.0 UL	13400 A	21.2 B	18.0 U	1270 U	12500 A	12.3 A	4.0 U
WWM031/B	MP-3	35.0 U	9.7 A	123 A	180000 A	21.7 A	3640 A	2.2 L	103000 A	13900 A	77.0 A	3950 A	186000 A	6.0 U	20.8 B
WWM111/B	MP-11	36.0 U	4.8 A	51.8 A	110000 A	8.0 U	661 A	2.0 UL	24000 A	2570 A	17.0 U	1830 A	20300 A	6.0 U	12.8 B
WWM14D1/B	MP-14D	35.0 U	4.0 U	578 A	420000 A	9.0 U	25.0 U	2.0 UL	46700 A	99.8 A	24.0 A	33400 A	187000 A	6.0 U	12.0 B
WWM14S1/B	MP-14S	35.0 U	4.6 K	445 A	333000 A	9.0 U	5390 A	2.0 UL	95400 A	5220 A	38.6 A	31500 A	440000 A	6.0 U	13.3 B
WWM15D1/B	MP-15D	35.0 U	4.0 U	36.1 A	20500 A	9.0 U	25.0 U	2.0 UL	2120 A	1.7 B	18.0 U	3760 A	18300 A	6.0 U	4.0 U
WWM15S1/B	MP-15S	36.0 U	4.0 U	15.9 B	81900 A	8.0 U	41.0 U	2.0 UL	10700 A	29.2 A	17.0 U	4850 A	30200 A	6.0 U	62.4 B
WWM161/A	MP-16	14.0 U	13.8 A	337 A	450000 J	6.7 B	1030 A	1.0 UL	128000 J	9420 J	28.0 B	14800 A	71500 J	1.8 U	16.4 B
WWM161/B	MP-16	38.0 A	9.0 A	359 A	400000 A	10.3 A	1110 A	2.0 UL	105000 A	12300 A	36.3 A	13400 A	80500 A	6.0 U	11.7 B
WWM171/B	MP-17	35.0 U	4.0 U	3.2 A	13300 A	9.0 U	25.4 A	2.0 UL	5560 A	251 A	18.0 U	1270 U	3700 B	6.0 U	5.1 B
WWM18S1/B	MP-18S	36.0 U	3.0 U	67.8 A	427000 A	8.0 U	87.8 A	2.0 UL	52300 A	724 A	17.7 A	3090 A	10600 A	6.0 U	14.0 B
GWR19D1/B	GR-19D	36.0 U	4.0 U	29.6 A	43200 A	8.0 U	41.0 U	2.0 UL	12600 A	25.9 A	17.0 U	3010 A	5620 A	6.0 U	4.0 U

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

Table Q-3
Summary of Off-Site Residential Groundwater
Volatile Organic Compounds
Units are µg/l

EPASAMP	SAMPLE LOC	1,1,2-Trichloroethane	1,2-Dichloroethane	Chloroform	Toluene
25140/AQ	BECHTALD	1	U	1	U
25140/BQ	BECHTALD	1	U	1	U
25140-CQ	BECHTALD	0.6	U	1.0	1.0
25140-DQ	BECHTALD	1.0	U	1.0	1.0
2753A/AQ	BULLER	1	U	1	U
2753A/BQ	BULLER	1	U	1	U
2753A-CQ	BULLER	1.0	U	1.0	1.0
2753A-DQ	BULLER	1.0	U	1.0	1.0
2753B/AQ	BULLER	1	U	1	U
2753B/BQ	BULLER	1	U	1	U
2753B-CQ	BULLER	1.0	U	1.0	1.0
2753B-DQ	BULLER	1.0	U	1.0	1.0
46120/AQ	CREMER	1	U	1	U
46120/BQ	CREMER	1	U	1	U
46120-CQ	CREMER	1.0	U	1.0	1.0
46120-DQ	CREMER	1.0	U	1.0	1.0
52090/AQ	FAUST	1	U	1	U
52090/BQ	FAUST	1	U	1	U
52090-CQ	FAUST	1.0	U	1.0	1.0
52090-DQ	FAUST	1.0	U	1.0	1.0
6883A/AQ	BREITEGAM	1	U	1	U
6883A/BQ	BREITEGAM	1	U	1	U
6883A-CQ	BREITEGAM	1.0	U	1.0	1.0
6883A-DQ	BREITEGAM	1.0	U	1.0	1.0
6883B/AQ	BERKEL	1	U	1	U
6883B/BQ	BERKEL	1	U	1	U
6883B-CQ	BERKEL	1.0	U	0.6	0.9
6883B-DQ	BERKEL	1.0	U	1.0	1.0
6883B-FD	BERKEL	1.0	U	1.0	1.0
71290/AR	BOTCH/ROBERTS	1	U	1	U
71290/BQ	BOTCH/ROBERTS	1	U	1	U
71290-CQ	BOTCH/ROBERTS	1.0	U	1.0	1.0
71290-DQ	BOTCH/ROBERTS	1.0	U	1.0	1.0
71290/FD	BOTCH/ROBERTS	1	U	1	U

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

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Table Q-3
Summary of Off-Site Residential Well Groundwater
Semivolatiles, Pesticides and PCBs - NONE DETECTED

AR303031

Table Q-3
Summary of Off-site Residential Groundwater
Total Metals
All units are µg/l

EPASAMP	SAMPLE_LOC	Arsenic	Barium	Calcium	Copper	Magnesium
71290-CQ	BOTCH/ROBERTS	6.0	A 28.0	A 70300	U 11.1	A 2470
71290/AQ	BOTCH/ROBERTS	3.0	U 23.3	J 70700	J 8.6	B 857
71290/BQ	BOTCH/ROBERTS	4.0	UJ 16.1	B 51700	A 31.1	A 2420

EPASAMP	SAMPLE_LOC	Nickel	Potassium	Sodium	Zinc
71290-CQ	BOTCH/ROBERTS	14.2	U 1760	U 34800	A 10.0
71290/AQ	BOTCH/ROBERTS	7.9	U 466	J 37900	J 3.4
71290/BQ	BOTCH/ROBERTS	41.8	A 1270	U 27900	L 27.5

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303032

Table Q-4
Summary of Background Soil
Volatile Organic Compounds - NONE DETECTED
Pesticides and PCBs - NOT ANALYZED

AR303033

Table Q-4
Summary of Background Soil
Semivolatile Organic Compounds
All units are mg/kg

EPASAMP	SAMPLE	LOG	Butylbenzylphthalate	Chrysene	Fluoranthene	Pyrene
S1BG/1B	S1-BG		400	400 U	400 U	400 U
S2BG/1B	S2-BG		44	47 J	68 J	41 J
S3BG/1B	S3-BG		390	390 U	390 U	390 U

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

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Table Q-4
Summary of Background Soil
Total Metals
All units are mg/kg

EPASAMP	SAMPLE LOC	Aluminum	Arsenic	Barium	Beryllium	Calcium	Chromium	Cobalt	Copper
S1BG/1B	S1-BG	26600	J 4.5	A 112	A 1.5	J 2720	J 91.8	A 34.8	A 60.4
S2BG/1B	S2-BG	19200	J 4.4	A 95.4	U 0.97	J 3630	J 51.4	A 16.1	A 31.8
S3BG/1B	S3-BG	26000	J 4.2	A 151	A 1.5	J 5740	J 2.4	U 28.9	L 408

EPASAMP	SAMPLE LOC	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Vanadium	Zinc
S1BG/1B	S1-BG	43600	A 32.0	J 2200	L 1350	J 37.3	A 619	A 152	J 95.9
S2BG/1B	S2-BG	26100	A 37.4	J 3550	L 712	J 22.4	A 906	A 67.6	J 102
S3BG/1B	S3-BG	65900	A 31.2	J 3500	L 1160	J 11.2	A 3130	A 71.1	J 151

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

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Table Q-5
Summary of On-Site Soil
Volatile Organic Compounds
All units are µg/l

EPASAMP	SAMPLE LOC	2-Butanone	4-Methyl-2-Pentanone	Acetone	Chlorobenzene	Chloroform	Ethylbenzene	Toluene	Total Xylenes
S1-EL/1A	S1-EL	12	J	24	B	12	U	3	19
S1-WL/1A	S1-WL	12	U	9	B	12	U	12	12
S2-EL/1A	S2-EL	5	J	9	B	12	U	12	12
S2-EL/FD	S2-EL	11	U	5	B	11	U	11	11
S2-WL/1A	S2-WL	14	U	14	U	14	U	14	14
S3-EL/1A	S3-EL	12	A	110	J	12	A	2	73
S3-WL/1A	S3-WL	14	A	45	B	12	U	12	12
S4-EL/1B	S4-EL	13	U	66	B	13	U	13	13
S4-EL/FD	S4-EL	13	U	47	B	13	U	13	13
S4-WL/1B	S4-WL	11	U	11	U	11	U	11	11
S5-EL/1B	S5-EL	11	U	29	B	11	U	11	11
S5-WL/1B	S5-WL	11	U	20	B	11	U	11	11
S6-EL/1B	S6-EL	11	U	83	B	11	U	11	11
S6-WL-1C	S6-WL	13	U	52	B	13	U	13	13
S7-EL-1C	S7-EL	13	U	98	B	13	J	13	4
S7-WL-1C	S7-WL	12	U	120	B	6	U	180	5
S8-EL/1C	S8-EL	12	U	16	B	12	U	12	12
S8-WL/1C	S8-WL	12	U	20	B	12	U	12	12
S9-EL/1C	S9-EL	12	U	11	B	12	U	12	12
S9-EL/FD	S9-EL	13	U	8	B	13	U	13	13
S10-EL-1C	S10-EL	13	U	150	B	13	U	13	2
S11-EL-1C	S11-EL	12	U	100	B	12	U	12	12

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303036

Table Q-5
Summary of On-Site Soil
Semivolatile Organic Compounds
 All units are mg/kg

EPASAMP	SAMPLE LOC	1,4-Dichlorobenzene	2-Methylnaphthalene	Acenaphthene	Anthracene	Benzo(a)Anthracene	Benzo(a)Pyrene
S1-EL/A	S1-EL	390	390	390	46	140	87
S1-WL/A	S1-WL	440	440	440	440	440	440
S2-EL/A	S2-EL	380	380	380	380	380	380
S2-EL/FD	S2-EL	390	390	390	390	390	390
S2-WL/A	S2-WL	420	95	56	420	420	420
S3-EL/A	S3-EL	400	400	400	400	400	400
S3-WL/A	S3-WL	120	520	520	520	520	520
S4-EL	S4-EL	420	420	420	420	420	420
S4-EL/FD	S4-EL	430	430	430	430	430	430
S4-WL/B	S4-WL	380	380	380	380	380	380
S5-EL	S5-EL	360	360	360	360	360	360
S5-WL	S5-WL	360	360	360	360	360	360
S6-EL	S6-EL	340	340	340	340	340	340
S6-WL-1C	S6-WL	420	420	420	420	420	420
S7-EL-1C	S7-EL	430	430	430	430	430	430
S7-WL-1C	S7-WL	400	400	400	400	400	400
S8-EL	S8-EL	390	390	390	390	390	390
S8-WL	S8-WL	380	380	380	380	380	380
S9-EL	S9-EL	410	150	400	640	1500	910
S9-EL/FD	S9-EL	830	89	360	670	2200	1500
S10-EL-1C	S10-EL	430	430	430	430	430	430
S11-EL-1C	S11-EL	390	390	390	390	390	390

EPASAMP	SAMPLE LOC	Benzo(b)Fluoranthene	Benzo(k)Fluoranthene	Benzybenzophenanthrene	Carbazole	Chrysene	Dibenz(a,h)Anthracene
S1-EL/A	S1-EL	150	68	390	390	140	390
S1-WL/A	S1-WL	440	440	440	440	440	440
S2-EL/A	S2-EL	380	380	380	380	380	380
S2-EL/FD	S2-EL	390	390	390	390	390	390
S2-WL/A	S2-WL	420	420	420	420	420	420
S3-EL/A	S3-EL	400	400	400	400	400	400
S3-WL/A	S3-WL	520	520	520	520	520	520
S4-EL	S4-EL	430	430	430	430	430	430
S4-EL/FD	S4-EL	390	380	57	430	430	430
S4-WL/B	S4-WL	360	360	63	380	380	54
S5-EL	S5-EL	360	360	360	360	360	360
S5-WL	S5-WL	340	340	340	340	340	340
S6-EL	S6-EL	420	420	420	420	420	420
S6-WL-1C	S6-WL	420	420	420	420	420	420
S7-EL-1C	S7-EL	400	400	400	400	400	400
S7-WL-1C	S7-WL	390	390	390	390	390	390
S8-EL	S8-EL	380	380	380	380	380	380
S8-WL	S8-WL	1700	1700	410	380	1300	410
S9-EL	S9-EL	2500	2500	830	360	1700	830
S9-EL/FD	S9-EL	430	430	430	430	430	430
S10-EL-1C	S10-EL	390	390	390	390	390	390
S11-EL-1C	S11-EL	390	390	390	390	390	390

Note: Values used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

Table Q-5
Summary of On-Site Soil
Semivolatile Organic Compounds
 All units are mg/kg

EPASAMP	SAMPLE LOC	Benz(a)anthracene	Dibenz(a,h)anthracene	Fluoranthene	Indeno(1,2,3-cd)Pyrene
S1-EL/A	S1-EL	350	350	330	350
S1-WL/A	S1-WL	440	440	59	440
S2-EL/A	S2-EL	380	380	380	380
S2-EL/FD	S2-EL	390	390	73	390
S2-WL/A	S2-WL	420	50	81	420
S3-EL/A	S3-EL	400	400	400	400
S3-WL/A	S3-WL	520	520	520	520
S4-EL/A	S4-EL	420	420	420	420
S4-EL/FD	S4-EL	430	430	430	430
S4-WL/A	S4-WL	380	380	380	380
S5-EL/A	S5-EL	380	380	380	380
S5-WL/A	S5-WL	380	380	380	380
S6-EL/A	S6-EL	340	340	340	340
S6-WL/A	S6-WL	420	420	420	420
S7-EL/A	S7-EL	400	400	400	400
S7-WL/A	S7-WL	390	390	390	390
S8-EL/A	S8-EL	380	380	380	380
S8-WL/A	S8-WL	380	380	380	380
S9-EL/A	S9-EL	630	260	2000	580
S9-EL/FD	S9-EL	1100	240	3700	1100
S10-EL/A	S10-EL	430	430	430	430
S11-EL/A	S11-EL	350	350	350	350

EPASAMP	SAMPLE LOC	Phenanthrene	Fluorene	Pyrene
S1-EL/A	S1-EL	200	350	250
S1-WL/A	S1-WL	440	440	49
S2-EL/A	S2-EL	380	380	380
S2-EL/FD	S2-EL	390	390	60
S2-WL/A	S2-WL	100	120	52
S3-EL/A	S3-EL	400	400	400
S3-WL/A	S3-WL	520	520	520
S4-EL/A	S4-EL	420	420	420
S4-EL/FD	S4-EL	430	430	430
S4-WL/A	S4-WL	380	380	380
S5-EL/A	S5-EL	380	380	380
S5-WL/A	S5-WL	380	380	380
S6-EL/A	S6-EL	340	340	340
S6-WL/A	S6-WL	57	420	420
S7-EL/A	S7-EL	400	400	400
S7-WL/A	S7-WL	390	390	390
S8-EL/A	S8-EL	380	380	380
S8-WL/A	S8-WL	2500	410	2000
S9-EL/A	S9-EL	3300	830	3400
S9-EL/FD	S9-EL	430	430	430
S10-EL/A	S10-EL	350	350	350
S11-EL/A	S11-EL	350	350	350

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303038

Table Q-5
Summary of On-Site Soil
Pesticides and PCBs
All units are mg/kg

EPASAMP	SAMPLE LOC	Amount-1248	
S1-EL/1A	S1-EL	40	UL
S1-WL/1A	S1-WL	44	UL
S2-EL/1A	S2-EL	38	UL
S2-EL/1A	S2-EL	39	UL
S2-WL/1A	S2-WL	270	L
S3-EL/1A	S3-EL	40	UL
S3-WL/1A	S3-WL	53	UL

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303039

Table Q-5
Summary of On-Site Soil
Total Metals
All units are mg/kg

EPASAMP	SAMPLE LOC	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
S1-EL/1A	S1-EL	20000 J	3.0	UL	40.5 J	0.96 A	5.6 A	7050 J	54.7 A	18.4 A	53.0 A	32300 J	9.4 L
S1-WL/1A	S1-WL	17900 J	4.3	L	53.6 J	2.0 A	5.4 A	7500 J	33.1 A	19.5 A	10.4 A	32000 J	5.3 L
S2-EL/1A	S2-EL	13400 J	3.0	UL	43.8 J	1.1 A	6.6 A	25300 J	18.8 L	26.9 A	75.7 A	41100 J	17.8 L
S2-EL/1A	S2-EL	10900 J	2.4	UL	52.9 J	0.97 A	5.7 A	12700 J	17.4 L	23.6 A	47.3 A	33900 J	19.8 L
S2-WL/1A	S2-WL	5430 J	4.1	L	11.5 A	0.39 A	15.3 R	4170 J	886 A	55.4 K	247 K	200000 J	176.7 L
S3-EL/1A	S3-EL	21300 J	3.2	UL	70.4 J	1.1 A	5.5 A	2150 J	58.3 A	16.0 A	48.3 A	34200 J	7.2 L
S3-WL/1A	S3-WL	26000 J	3.7	UL	145 J	1.6 A	9.1 A	4850 J	47.2 A	17.4 A	34.7 A	56700 J	17.1 L
S4-EL/1B	S4-EL	12800 J	11.7	R	43.9 A	1.0 U	1.3 UL	3850 J	31.7 A	24.9 A	15.0 J	24200 A	35.8 K
S4-EL/1B	S4-EL	21600 J	9.9	R	88.6 A	0.89 A	1.1 UL	13800 J	24.9 A	22.2 A	143 J	35800 A	30.6 K
S4-WL/1B	S4-WL	16300 J	10.4	R	933 A	1.9 A	1.2 UL	3720 J	26.7 A	10.9 A	32.8 J	28700 A	25.5 K
S5-EL/1B	S5-EL	21100 J	9.8	R	62.8 A	1.0 A	1.1 UL	2040 J	48.7 A	21.0 A	37.2 J	29800 A	7.2 K
S5-WL/1B	S5-WL	21800 J	9.8	R	75.8 A	1.2 A	1.1 UL	4240 J	67.6 A	15.2 A	45.2 J	33900 A	12.7 K
S6-EL/1B	S6-EL	20500 J	9.5	R	114 A	0.84 U	1.1 UL	16200 J	28.4 A	19.9 A	133 J	38100 A	6.4 K
S6-WL-1C	S6-WL	22300.00 J	8.80	U	167.00 A	1.70 A	1.20 U	7110.0 J	43.20 A	13.9 A	36.00 L	45500.0 J	16.70 K
S7-EL-1C	S7-EL	33400.00 J	8.80	U	83.80 A	1.40 A	1.20 U	2780.0 J	97.20 A	21.1 A	64.00 L	39900.0 J	15.40 K
S7-WL-1C	S7-WL	20800.00 J	8.50	U	78.80 A	1.00 U	1.20 U	7110.0 J	46.30 A	13.6 A	32.00 L	28300.0 J	14.30 K
S8-EL-1C	S8-EL	27700.00 J	8.20	U	62.80 A	1.00 U	1.10 U	2990.0 J	58.00 A	18.6 A	38.30 L	31000.0 J	8.90 K
S8-WL-1C	S8-WL	17400.00 J	8.20	U	38.90 A	0.99 U	1.10 U	4080.0 J	1180.00 A	37.0 A	142.00 L	39600.0 J	48.40 A
S9-EL-1C	S9-EL	18800.00 J	8.60	U	53.80 A	1.10 A	1.20 U	18800 J	33.60 A	16.8 A	121.00 L	29400.0 J	54.40 K
S9-EL/1D	S9-EL	23200.00 J	8.80	U	61.80 A	1.10 A	1.20 U	22400 J	42.10 A	19.0 A	74.80 L	36800.0 J	46.80 K
S10-EL-1C	S10-EL	32200.00 J	9.10	U	77.40 A	1.40 A	1.30 U	2850.0 J	76.30 A	24.1 A	51.80 L	36800.0 J	9.00 K
S11-EL-1C	S11-EL	19300.00 J	8.30	U	55.00 A	1.00 U	1.20 U	3750.0 J	40.40 A	14.5 A	32.70 L	21800.0 J	14.90 K

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303040

Table Q-5
Summary of On-Site Soil
Total Metals
All units are mg/kg

EPASAMP	SAMPLE LOC	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Vanadium	Zinc	
S1-EL/1A	S1-EL	8380	J	0.05	27.4	A	0.94	U	376	A	68.4	J
S1-WL/1A	S1-WL	14100	J	0.14	33.3	A	0.92	U	269	B	47.0	J
S2-EL/1A	S2-EL	20600	J	0.03	27.3	A	1.1	U	177	B	28.7	J
S2-EL/1D	S2-EL	20300	J	0.02	23.0	A	0.92	U	145	B	22.7	J
S2-WL/1A	S2-WL	2800	J	0.18	771	A	66.2	U	315	B	54.2	J
S3-EL/1A	S3-EL	5520	J	0.04	31.3	A	1.2	U	184	B	99.1	J
S3-WL/1A	S3-WL	10800	J	0.26	27.8	A	1.2	U	584	A	67.1	J
S4-EL/1B	S4-EL	4680	J	0.13	20.8	A	0.78	UJ	259	B	72.1	J
S4-EL/1D	S4-EL	40500	J	0.11	22.2	A	0.66	UJ	2310	A	31.5	J
S4-WL/1B	S4-WL	7760	J	0.13	24.9	A	0.69	UJ	196	B	44.3	J
S5-EL/1B	S5-EL	4630	J	0.11	23.5	A	0.65	UJ	233	B	85.3	J
S5-WL/1B	S5-WL	3800	J	0.11	38.7	A	0.66	UJ	184	B	83.0	J
S6-EL/1B	S6-EL	37500	J	0.11	27.7	A	0.63	UJ	2130	A	31.5	J
S6-WL-1C	S6-WL	11400.00	A	0.11	37.60	A	0.89	UJ	208.00	B	57.60	A
S7-EL-1C	S7-EL	5500.00	A	0.11	44.10	A	0.90	UJ	278.00	B	137.00	A
S7-WL-1C	S7-WL	7460.00	A	0.10	23.90	A	0.87	UJ	193.00	B	52.80	A
S8-EL-1C	S8-EL	5580.00	A	0.11	24.50	A	0.85	UJ	185.00	B	83.30	A
S8-WL-1C	S8-WL	3640.00	A	0.12	555.0	A	1.60	UJ	174.00	B	60.80	A
S9-EL-1C	S9-EL	23400.00	A	0.12	25.20	A	0.89	UJ	203.00	B	38.00	A
S9-EL/1D	S9-EL	26000.00	A	0.12	28.90	A	0.91	UJ	218.00	B	47.80	A
S10-EL-1C	S10-EL	6000.00	A	0.12	34.60	A	4.70	UJ	186.00	B	109.00	A
S11-EL-1C	S11-EL	5700.00	A	0.12	25.50	A	4.30	UJ	282.00	B	51.20	A

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303041

Table Q-6
Summary of Leachate Lagoon Water
Volatile Organic Compounds
All units are µg/l

EPASAMP	SAMPLE_LOC	1,1-Dichloroethane	1,1-Dichloroethene	2-Butanone	4-Methyl-2-Pentanone	Acetone
L1MH1/1A	L1-MH1	25	U	160	J	62
L1MH1/1B	L1-MH1	25	U	220	J	69
L2MH1/1B	L2-MH1	4	J	160	A	100

EPASAMP	SAMPLE_LOC	Benzene	Chlorobenzene	Ethylbenzene	Tetrachloroethene	Toluene
L1MH1/1A	L1-MH1	13	J	75	A	330
L1MH1/1B	L1-MH1	29	J	83	A	410
L2MH1/1B	L2-MH1	14	J	54	A	240

EPASAMP	SAMPLE_LOC	Total 1,2-Dichloroethene	Total Xylenes	Trichloroethene	Vinyl Chloride
L1MH1/1A	L1-MH1	69	A	9	8
L1MH1/1B	L1-MH1	81	A	24	6
L2MH1/1B	L2-MH1	45	A	6	11

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303042

Table Q-6
Summary of Leachate Lagoon Water
Semivolatile Organic Compounds
 All units are µg/l

EPASAMP	SAMPLE LOC	1,2-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dimethylphenol	2-Methylphenol	4-Methylphenol
L1LN1/1A	L1LN1	10	U	10	2	10
L1LN1/FD	L1LN1	10	U	10	2	1
L1LN1/FR	L1LN1	10	U	10	2	10
L2LN1/1B	L2LN1	3	J	1	2	180
L2LN1/DL	L2LN1	30	U	30	30	160

EPASAMP	SAMPLE LOC	Diethylphthalate	Isophorone	Naphthalene	Phenol
L1LN1/1A	L1LN1	1	2	10	10
L1LN1/FD	L1LN1	1	1	10	10
L1LN1/FR	L1LN1	1	1	10	10
L2LN1/1B	L2LN1	4	10	3	30
L2LN1/DL	L2LN1	4	30	3	26

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303043

Table Q-6
Summary of Leachate Lagoon Water
Pesticides and PCBs - NONE DETECTED

AR303044

Table Q-6
Summary of Leachate Lagoon Water
Total Metals
All units are µg/l

EPASAMP	SAMPLE	LOC	Barium	Calcium	Chromium	Cobalt	Iron
L1-LN1/1A	L1LN1		404	J 129000	J 3.6	UL 4.6	B 9900
L1-LN1/FD	L1LN1		363	J 119000	J 3.6	UL 3.2	B 9320
L2LN1/1B	L2LN1		623	A 173000	A 13.8	A 11.8	A 35400

EPASAMP	SAMPLE	LOC	Magnesium	Manganese	Nickel	Potassium	Sodium
L1-LN1/1A	L1LN1		66600	J 4650	J 26.0	B 30100	J 214000
L1-LN1/FD	L1LN1		59800	J 4250	J 32.1	B 26500	J 188000
L2LN1/1B	L2LN1		86500	A 5830	A 31.1	A 38500	A 275000

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix

AR303045

Table Q-7
Summary of Leachate Seeps
Volatile Organic Compounds
 All units are µg/l

EPASAMP	SAMPLE_LOC	Acetone	Benzene	Chlorobenzene	Chloroethane	Ethylbenzene	Toluene	Total Xylenes
L1-EL/1A	L1-EL	19	L 10	L 18	L 10	R 9	L 1	55
L1-EL/FD	L1-EL	16	J 7	J 15	L 10	U 7	J 1	41
L1-EL/RA	L1-EL	10	U 7	J 14	L 10	U 10	J 2	40
L1-WL/1A	L1-WL	29	B 10	U 10	U 10	U 10	U 10	10
L2-EL/1A	L2-EL	14	B 8	J 9	U 10	U 87	A 5	150
L2-WL/1A	L2-WL	10	U 10	U 2	J 16	A 10	U 1	10
L2-WL/FD	L2-WL	10	U 10	U 2	J 15	A 10	U 1	10
L3-EL/1A	L3-EL	10	U 10	U 10	U 10	U 10	U 10	10
L3-WL/1A	L3-WL	13	B 10	U 10	U 10	U 10	U 10	10

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303046

Table Q-7
Summary of Leachate Seeps
Semivolatile Organic Compounds
 All units are µg/l

EPASAMP	SAMPLE LOC	1,4-Dichlorobenzene	2-Methylnaphthalene	4-Chloro-3-Methylphenol
L1-EU/1A	L1-EL	9	2	10
L1-EU/RE	L1-EL	8	2	2
L1-WL/1A	L1-WL	10	2	10

EPASAMP	SAMPLE LOC	4-Methylphenol	Naphthalene	bis(2-Ethylhexyl)Phthalate
L1-EU/1A	L1-EL	1	13	10
L1-EU/RE	L1-EL	10	13	10
L1-WL/1A	L1-WL	10	11	1

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303047

Table Q-7
Summary of Leachate Lagoon Seeps
Pesticides and PCBs - NONE DETECTED

AR303048

Table Q-7
Summary of Leachate Seeps
Total Metals
All units are µg/l

EPASAMP	SAMPLE LOC	Aluminum	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper
L1-EL/1A	L1-EL	410	A 16.6	K 453	J 3.4	L 121000	J 24.9	L 31.3	A 4.2
L1-WL/1A	L1-WL	4040	A 9.1	K 266	J 2.2	L 46000	J 12.8	L 7.4	B 20.2

EPASAMP	SAMPLE LOC	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Vanadium	Zinc
L1-EL/1A	L1-EL	24700	J 17.4	A 153000	J 880	J 99.7	A 345000	J 954000	J 7.9	A 213
L1-WL/1A	L1-WL	10500	J 15.6	A 23200	J 2260	J 29.9	B 49000	J 132000	J 20.3	A 97.4

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303049

Table Q-8
Summary of Upstream Surface Water
Volatile and Semivolatile Organic Compounds - NONE DETECTED
Pesticides and PCBs - NONE DETECTED

AR303050

Table Q-8
Summary of Upstream Surface Water
Total Metals
All units are µg/l

EPASAMP	SAMPLE LOC	Barium	Calcium	Copper	Iron	Magnesium
SW01/1B	SW-1	23.5	A	4.0	135	11000
SW03/1B	SW-3	22.4	A	4.0	481	11600
SW04/1B	SW-4	14.9	B	4.2	203	12600

EPASAMP	SAMPLE LOC	Manganese	Potassium	Selenium	Sodium
SW01/1B	SW-1	9.0	B	3.0	7530
SW03/1B	SW-3	67.3	A	3.0	7020
SW04/1B	SW-4	23.5	A	3.2	6210

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303051

Table Q-9
Summary of On-Site Surface Water
Volatile and Semivolatile Organic Compounds - NONE DETECTED
Pesticides and PCBs - NONE DETECTED

AR303052

Table Q-9

Summary of On-Site Surface Water

Total Metals

All units are µg/l

EPASAMP	SAMPLE_LOC	Aluminum	Barium	Calcium	Cyanide	Iron	Magnesium	Manganese	Potassium	Sodium	Vanadium								
SW-06/1A	SW-6	156	J	30900	J	51.9	A	222	J	11700	J	10.4	J	1110	J	6760	J	3.2	J
SW-07/1A	SW-7	238	J	45100	J	10.0	U	517	J	13700	J	85.2	J	1770	J	8480	J	4.8	J
SW-08/1A	SW-8	205	J	47200	J	10.0	U	399	J	14200	J	94.1	J	2090	J	10100	J	4.4	J
SW-09/1B	SW-9	111	B	50700	A	10.0	U	84.4	B	15900	A	48.8	A	4000	A	19000	L	6.0	U
SW-10/1B	SW-10	110	B	42200	A	10.0	U	641	J	14100	A	267	A	2590	A	10000	L	6.0	U
SW-10/FD	SW-10	112	B	43900	A	10.0	U	709	J	14700	A	284	A	1870	A	10600	L	6.0	U
SW-11/1B	SW-11	116	B	38800	A	10.0	U	135	B	12100	A	30.2	A	1480	A	8290	L	6.0	U
SW-12/1B	SW-12	134	B	37000	A	10.0	U	394	J	14800	A	253	A	4090	A	19600	L	6.0	U
SW-13/1B	SW-13	164	B	27400	A	10.0	U	135	B	11300	A	35.6	A	1390	A	6680	L	6.0	U

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303053

Table Q-10
Summary of Upstream Sediment
Volatile Organic Compounds - NOT ANALYZED
Pesticides and PCBs - NOT ANALYZED

AR303054

Table Q-10

Summary of Upstream Sediment
Semi-volatile Organic Compounds

All units are mg/kg

EPASAMP	SAMPLE LOC	Banzo(a)Anthracene	Banzo(a)Pyrene	Banzo(b)Fluoranthene	Benzo(k)Fluoranthene	Chrysene
SD01/1B	SED-1	170	J 110	J 250	JN 250	J 130
SD02/1B	SED-2	410	UJ 410	UJ 410	UJ 410	UJ 410
SD03/1B	SED-3	430	UJ 430	UJ 430	UJ 430	UJ 430
SD04/1B	SED-4	510	UJ 510	UJ 61	J 79	UJ 510

EPASAMP	SAMPLE LOC	Fluoranthene	Indeno(1,2,3-cd)Pyrene	Phenanthrene	Pyrene
SD01/1B	SED-1	260	J 88	J 87	J 190
SD02/1B	SED-2	410	UJ 410	UJ 410	UJ 410
SD03/1B	SED-3	430	UJ 430	UJ 430	UJ 430
SD04/1B	SED-4	510	UJ 510	UJ 510	UJ 510

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303055

Table Q-10
Summary of Upstream Sediment
Total Metals
All units are mg/kg

EPASAMP	SAMPLE	LOC	Aluminum	Arsenic	Barium	Beryllium	Calcium	Chromium	Cobalt	Copper	Iron
SD01/1B	SED-1		24200 A	3.9 A	102 A	1.5 A	7040 A	16.5 A	21.6 A	69.6 A	38000 A
SD02/1B	SED-2		10600 A	3.3 A	56.8 A	1.0 U	4410 A	22.4 A	18.8 A	45.7 A	29400 A
SD03/1B	SED-3		11100 A	10.7 A	85.7 A	1.1 A	4330 A	16.6 A	19.4 A	50.6 A	34300 A
SD04/1B	SED-4		11300 A	3.2 A	58.1 A	1.2 U	6320 A	23.6 A	18.0 A	18.5 A	25000 A

EPASAMP	SAMPLE	LOC	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Vanadium	Zinc
SD01/1B	SED-1		14.9 J	4250 A	601 A	16.9 A	1430 A	904 A	134 A	90.5 A
SD02/1B	SED-2		8.6 J	2320 A	700 A	17.5 A	575 U	452 B	133 A	80.8 A
SD03/1B	SED-3		13.3 J	2600 A	1650 A	15.5 A	610 U	514 B	101 A	61.8 A
SD04/1B	SED-4		31.4 J	1760 A	708 A	10.7 U	698 U	247 B	82.6 A	65.5 A

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303056

Table Q-11
Summary of On-Site Sediment
Volatiles, Pesticides and PCBs - NONE DETECTED

AR303057

Table Q-11
Summary of On-Site Sediment
Semivolatile Organic Compounds
 All units are mg/kg

EPASAMP	SAMPLE LOC	Benzo(a)Anthracene	Benzo(b)Fluoranthene	Chrysene	Fluoranthene	Phenanthrene	Pyrene
SED05/1A	SED-5	630	630	630	630	630	630
SED05/FD	SED-5	610	610	610	610	610	610
SD05B/1B	SED-5	430	430	430	430	430	430
SED06/1A	SED-6	63	67	64	180	130	110
SED06/1B	SED-6	100	190	89	150	68	88
SD07/1B	SED-7	60	99	67	120	500	110
SED08/1A	SED-8	400	400	400	400	400	400
SD08B/1B	SED-8	85	100	510	100	75	510
SD08B/FD	SED-8	72	130	67	100	51	73
SD09/1B	SED-9	460	460	460	47	460	460
SD10/1B	SED-10	480	65	480	58	480	50
SD11/1B	SED-11	470	51	470	470	470	470

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

AR303058

Table Q-11
Summary of On-Site Sediment
Total Metals
All units are mg/kg

EPASAMP	SAMPLE LOC	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper
SD05/1A	SED-5	10200	1.7	58.3	0.91	4.1	4400	26.5	19.2	43.0
SD05/1B	SED-5	15300	1.4	87.0	1.3	4.4	6880	27.2	42.1	39.0
SD05B/1B	SED-5	8430	2.3	49.3	1.0	1.3	3630	35.0	14.4	49.1
SD06/1A	SED-6	7200	3.4	55.8	0.88	3.9	8140	9.1	13.2	32.5
SD06B/1B	SED-6	14900	4.4	99.4	1.2	1.5	7770	29.0	17.5	63.0
SD07/1B	SED-7	17300	4.2	115	1.3	1.5	6280	16.0	19.8	67.9
SD08/1A	SED-8	8710	3.3	106	0.94	4.7	8560	16.0	16.3	35.9
SD08B/1B	SED-8	12700	5.1	77.2	1.2	1.6	8450	16.7	16.8	51.9
SD08B/1B	SED-8	11400	3.5	86.0	1.2	1.5	5860	17.1	16.5	48.4
SD09/1B	SED-9	9520	2.0	42.3	1.1	1.4	12400	23.3	12.0	16.9
SD10/1B	SED-10	8850	2.5	53.1	1.2	1.5	3350	23.1	11.2	15.4
SD11/1B	SED-11	10900	2.6	58.9	1.1	1.4	4120	30.7	14.3	17.3

EPASAMP	SAMPLE LOC	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Vanadium	Zinc
SD05/1A	SED-5	25800	8.9	4040	948	0.21	19.9	528	69.2	72.9
SD05/1B	SED-5	30400	9.1	6340	1670	0.20	34.5	1440	68.2	71.3
SD05B/1B	SED-5	22300	5.9	3880	1040	0.13	18.9	593	58.2	58.0
SD06/1A	SED-6	29300	10.7	3410	983	0.02	13.8	483	138	77.9
SD06B/1B	SED-6	34100	19.7	6920	761	0.15	13.8	687	109	97.0
SD07/1B	SED-7	36300	15.0	4440	899	0.15	15.4	1250	137	110
SD08/1A	SED-8	31600	6.3	3770	1120	0.06	15.9	839	110	51.0
SD08B/1B	SED-8	33500	18.0	5230	783	0.24	15.4	712	93.7	73.1
SD08B/1B	SED-8	29300	12.1	4830	890	0.15	13.1	702	85.3	77.9
SD09/1B	SED-9	21000	7.7	5530	826	0.14	12.1	638	60.9	80.8
SD10/1B	SED-10	16500	10.4	2800	758	0.15	11.3	685	41.9	50.4
SD11/1B	SED-11	22300	10.4	2020	779	0.14	16.3	696	59.1	52.8

Notes: Methods used to create table and data qualifiers are described in "Explanation and Notes" at the front of this Appendix.

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