9613442.0963

0044123 629 2

000005 2/3

EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R05

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

10/2.1

EPA SAMPLE NO.

B06CP9

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R05

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10/28/92
WH

9613442.0965

000007

EPA SAMPLE NO.

B06CQ1

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R06

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	~~B~~J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CQ1

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R06

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10/25/92

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CV4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R09

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CV4

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R09

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10/28/92
WM

9613442.0969

000011

EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CW2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R03

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	25	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.0970

000012

EPA SAMPLE NO.

B06CW2

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R03

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10/28/92
JM

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CW6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R11

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.0972

000014

EPA SAMPLE NO.

B06CW6

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R11

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10/20/92
MM

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CY4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R12

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CY4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R12

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10/28/92
MY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CY8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R13

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	~~5~~	~~BJ~~
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

10/28/92

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CY8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R13

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10/28/92
WM

9613442.0977

000019

EPA SAMPLE NO.

B06CZ0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R14

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	~~BJ~~
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CZ0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526R14

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10/28/92

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CP9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N14

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/23/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/13/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

10/24/92

9613442.0980

000022
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N14

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/23/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/13/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~3~~ 10	~~BJ~~ U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613442.0981

000023

EPA SAMPLE NO.

B06CP9

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N14

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 05/23/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/13/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 13

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown hydrocarbon	4.22	130	~~BJ~~
2. 108-88-3	Benzene, methyl-	5.63	28	~~BJ~~
3.	Unknown hydrocarbon	8.15	3	~~BJ~~
4.	Unknown hydrocarbon	9.70	35	~~BJ~~
5.	Unknown ketone	10.12	39	~~BJ~~
6.	Unknown alcohol	11.58	8	J
7.	Unknown hydrocarbon	12.83	4	J
8.	Unknown carboxylic acid este	15.88	4	J
9.	Unknown hydrocarbon	18.68	2	J
10.	Unknown hydrocarbon	18.78	2	J
11.	Unknown hydrocarbon	22.23	3	J
12.	Unknown carboxylic acid	22.37	5	J
13.	Unknown hydrocarbon	30.00	29	J

10/21

BIK cont

9613442.0982

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

000024
EPA SAMPLE NO.

B06CP9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/20/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/23/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/24/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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WESTINGHOUSE/HANFORD

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CG2

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-125SAS No.: SDG No.: B06CG2

Matrix (soil/water): WATER Lab Sample ID: 05237-02S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.40	B	~~W~~ J	F
7440-39-3	Barium	40.40	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	27700.00			P
7440-47-3	Chromium	12.50			P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	31.20	B		P
7439-92-1	Lead	1.70	B		F
7439-95-4	Magnesium	10700.00			P
7439-96-5	Manganese	127.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	6.00	B		P
7440-09-7	Potassium	4880.00	B		P
7782-49-2	Selenium	20.00	U	~~WN~~ J	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	21200.00			P
7440-28-0	Thallium	1.00	U	~~WN~~ J	F
7440-62-2	Vanadium	14.40	B		P
7440-66-6	Zinc	11.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613442.0984

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CH7

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-125SAS No.: SDG No.: B06CG2

Matrix (soil/water): WATER Lab Sample ID: 05237-03S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.20	B		F
7440-39-3	Barium	43.30	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	41100.00			P
7440-47-3	Chromium	21.00			P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	165.00			P
7439-92-1	Lead	2.50	B		F
7439-95-4	Magnesium	10400.00			P
7439-96-5	Manganese	21.40			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	11.90	B		P
7440-09-7	Potassium	3480.00	B		P
7782-49-2	Selenium	4.00	U	WN	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	13000.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	2.00	B		P
7440-66-6	Zinc	11.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

003

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WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: 806CJ3

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-125SAS No.: SDG No.: 806CG2

Matrix (soil/water): WATER Lab Sample ID: 05237-048

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.10	B		F
7440-39-3	Barium	60.80	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	76100.00			P
7440-47-3	Chromium	122.00			P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	23.00	U		P
7439-92-1	Lead	1.20	B		F
7439-95-4	Magnesium	16800.00			P
7439-96-5	Manganese	36.40			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	4.50	B		P
7440-09-7	Potassium	4790.00	B	WN J	P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	11700.00			P
7440-28-0	Thallium	1.00	U	WN J	F
7440-62-2	Vanadium	5.90	B		P
7440-66-6	Zinc	11.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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9613442.0986

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CQ0

ab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

ab Code: SKINER Case No.: N2-05-125SAS No.: SDG No.: B06CG2

atrix (soil/water): WATER Lab Sample ID: 05237-019

evel (low/med): LOW Date Received: 05/21/92

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	5.00	B		F
7440-39-3	Barium	77.50	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	60200.00			P
7440-47-3	Chromium	44.80			P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	35.70	B		P
7439-92-1	Lead	1.00	U		F
7439-95-4	Magnesium	15800.00			P
7439-96-5	Manganese	175.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	9.30	B		P
7440-09-7	Potassium	6550.00			P
7782-49-2	Selenium	4.00	U	WN	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	27600.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	123.00			P
	Cyanide				NR

olor Before: COLORLESS Clarity Before: CLEAR Texture:

olor After: COLORLESS Clarity After: CLEAR Artifacts:

omments:

005

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1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CP9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-125SAS No.: SDG No.: B06CP9

Matrix (soil/water): WATER Lab Sample ID: 05235-015

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1140.00		N J	P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	4.30	B		F
7440-39-3	Barium	87.80	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	3.40	B		P
7440-70-2	Calcium	59800.00			P
7440-47-3	Chromium	127.00			P
7440-48-4	Cobalt	4.30	B		P
7440-50-8	Copper	10.60	B		P
7439-89-6	Iron	2070.00			P
7439-92-1	Lead	5.10			F
7439-95-4	Magnesium	15900.00			P
7439-96-5	Manganese	206.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	56.10			P
7440-09-7	Potassium	6510.00			P
7782-49-2	Selenium	4.00	U	W —	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	27000.00			P
7440-28-0	Thallium	4.00	U	WN J	F
7440-62-2	Vanadium	6.80	B		P
7440-66-6	Zinc	684.00		E J	P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CV3

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-125SAS No.: SDG No.: B06CP9

Matrix (soil/water): WATER Lab Sample ID: 05235-02S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CW1

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-125SAS No.: SDG No.: B06CP9

Matrix (soil/water): WATER Lab Sample ID: 05235-03S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

004

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1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CW5

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-125SAS No.: SDG No.: B06CP9

Matrix (soil/water): WATER Lab Sample ID: 05235-04S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CY3

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-125SAS No.: SDG No.: B06CP9

Matrix (soil/water): WATER Lab Sample ID: 05235-05S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CY7

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-1255AS No.: SDG No.: B06CP9

Matrix (soil/water): WATER Lab Sample ID: 05235-06S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CY9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-125SAS No.: SDG No.: B06CP9

Matrix (soil/water): WATER Lab Sample ID: 05235-07S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

008

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9613442.0994

000021
EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N14

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/23/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/13/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	~~U~~ R
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	~~U~~ R
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

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000022

EPA SAMPLE NO.

B06CP9

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N14

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/23/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/13/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10 ~~3~~	~~BJ~~ C1
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

10/2/92

(1) - Cannot be separated from Diphenylamine

9613442.0996

000023

EPA SAMPLE NO.

B06CP9

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N14

Level: (low/med) LOW Date Received: 05/20/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 05/23/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/13/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 13

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown hydrocarbon	4.22	130	~~BJ~~ U
2. 108-88-3	Benzene, methyl-	5.63	28	~~BJ~~
3.	Unknown hydrocarbon	8.15	3	~~BJ~~
4.	Unknown hydrocarbon	9.70	35	~~BJ~~
5.	Unknown ketone	10.12	39	~~BJ~~
6.	Unknown alcohol	11.58	8	J
7.	Unknown hydrocarbon	12.83	4	J
8.	Unknown carboxylic acid este	15.88	4	J
9.	Unknown hydrocarbon	18.68	2	J
10.	Unknown hydrocarbon	18.78	2	J
11.	Unknown hydrocarbon	22.23	3	J
12.	Unknown carboxylic acid	22.37	5	J
13.	Unknown hydrocarbon	30.00	29	J

CASE NARRATIVE

LABORATORY : TMA/ARLI

CASE : 06-024

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : June 5, 1992

1.0 DESCRIPTION OF CASE :

Six water samples were analyzed for TCL Organics-Volatiles, Semivolatiles, and Pesticide/PCBs according to the USEPA Contract Laboratory Program (CLP) Statement of Work for Organic Analysis, Revision OLM01.8.

2.0 SAMPLE LIST :

WESTINGHOUSE ID	LAB ID	ANALYSIS REQUESTED	MATRIX	pH
B06CY0	A2-06-024-01A	V	WATER	7
B06CP3	A2-06-024-02A	V	WATER	7
B06CP3	A2-06-024-02B	SV & P	WATER	
B06CP3 MS	A2-06-024-02C	SV & P	WATER	
B06CP3 MSD	A2-06-024-02D	SV & P	WATER	
B06CP5	A2-06-024-03A	V	WATER	7
B06CP5 MS	A2-06-024-03B	V	WATER	7
B06CP5 MSD	A2-06-024-03C	V	WATER	7
B06CN4	A2-06-024-04A	V	WATER	7
B06CN4	A2-06-024-04B	SV & P	WATER	
B06CN6	A2-06-024-05A	V	WATER	7
B06CT2	A2-06-024-06A	V	WATER	7

3.0 COMMENTS :

3.1 SHIPPING AND DOCUMENTATION :

All samples were received unbroken and properly documented.

3.2 ANALYSIS

3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were analyzed within the CLP SOW holding times. All of the QC results were within the limits specified by the EPA CLP SOW.

TUNES :

All of the BFB tunes are injected directly into the GC/MS instrument.

3.2.2 SEMIVOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. The matrix spike recoveries of 4-Nitrophenol and 2,4-Dinitrotoluene were slightly above the QC limit for sample B06CP3MSD.

All of the other QC results were within the limits specified by the EPA CLP SOW.

3.2.3 PESTICIDE/PCB ANALYSIS COMMENTS :

SEQUENCE NOTES :

The sequence was started on 6/22/92 and was analyzed in accordance with the EPA CLP SOW. The instrument blanks, PEMs and calibration verification standards all met the requirements established by the EPA CLP SOW.

SAMPLE NOTES :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. All of the QC results were within the limits specified by the EPA CLP SOW.

We certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data in this hardcopy data package and in the computer-readable data submitted on diskette is authorized by the Laboratory Manager or his designee, as verified by the following signatures.

Nicole Roth
CLP Program Manager

Widayati
Wida Ang
Organics Supervisor

9613442.0999

000004
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CN4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R09

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	27	
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1000

000005
EPA SAMPLE NO.

B06CN4

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R09

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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000006
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R10

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1002

000007
EPA SAMPLE NO.

B06CN6

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R10

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1003

000008
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R05

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	33	
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1004

000009
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R05

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1005

000010
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R06

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1006

000011
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CP5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R06

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1007

000012

EPA SAMPLE NO.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CT2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R11

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1008

000013
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CT2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R11

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CY0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R04

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1010

000015
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CY0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R04

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CN4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N12

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/09/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

9613442.1012

000017
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CN4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N12

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/09/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613442.1013

000018
EPA SAMPLE NO.

B06CN4

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N12

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/09/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown hydrocarbon	4.23	23	BJ
2.	Unknown hydrocarbon	7.93	3	J
3.	Unknown ketone	8.85	5	BJ
4.	Unknown alkane	23.13	2	J

9613442.1014

000019

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N09

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/09/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N09

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/09/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

B06CP3

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N09

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/09/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 12

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown hydrocarbon	4.22	21	BJ
2.	Unknown hydrocarbon	7.32	9	J
3.	Unknown alcohol	7.93	2	J
4.	Unknown ketone	8.85	5	BJ
5.	Unknown alkane	23.68	2	J
6.	Unknown alkane	25.47	3	J
7.	Unknown hydrocarbon	25.75	2	J
8.	Unknown alkane	26.98	2	J
9.	Unknown hydrocarbon	27.57	4	J
10.	Unknown hydrocarbon	27.78	4	J
11.	Unknown alkane	28.13	4	J
12.	Unknown hydrocarbon	28.87	3	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CN4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 06/05/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 06/09/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1018

000023
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 06/05/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 06/09/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1019
H4-14

N2-000002

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL 1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-3-92

Ice Chest No. SML-46

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 250986873-5

Offsite Property No. W92-0-0399-23

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

~~B0G[illegible]~~

~~3, 1L, P, WATER, CLP CYANIDE (NaOH)~~

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

B0GYO

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker	Received by: Refrigerator	Date/Time: 6-3-92 / 1500
Relinquished by:	Received by: B WHITEN	Date/Time: 6-4-92 0700
Relinquished by: B WHITEN	Received by: Kermit Blum	Date/Time: 6-5-92 1130
Relinquished by: Kermit Blum 6-5-92	Received by: C. Harris	Date/Time: 6/8/92 9[illegible]

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1020

000003

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-16E

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 6-3-92 Time 1038 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
~~B06CX9~~	~~3, 1L, P~~	~~w~~	~~CLP Cyanide (NaOH)~~
	~~2, 1L, P~~	~~w~~	~~Gross Gamma Spec, Alpha Spec (U 233/235/238, Pu 238/239/240, Am 241),~~
			~~Sr 90 (HNO_3)~~
	~~1, 500ml, P~~	~~w~~	~~P, H~~
	~~1, 250ml, G~~	~~w~~	~~Tritium~~
B06CY0	3, 40ml, Gs	W	CLP-VOA

Field Information** BOL #: 250986873-5
OPC #: W92-0-0399-23

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-3-92

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1021

000004

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARLI

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-3-92

Ice Chest No. SAL-87

Field Logbook No. EFL-~~100~~ LW 6-3-92 1018

Bill of Lading/Airbill No. 2509868735

Offsite Property No. W92-0-0399.22

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CP3

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CP4~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CP5

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
L.D. Walker	Refrigerator	6-3-92 / 1500
	B. WHITTEN	6-4-92 / 0700
B. WHITTEN	Kermit Blum	6-5-92 1130
Kermit Blum 6-5-92	C. Harris	6/8/92 900

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1022

000005

TASK NO 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6-3-92 Time 0850 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CP3	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO_3), unfiltered~~
	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
	3, 40M, Gs	W	CLP - VOA
	3, 2L, G	W	CLP - Semi-VOA/PCB7Pest
	1, 500 ml, G	W	ANions, pH
	1, 500ml, G	W	Cond.
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CP4	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO_3) filtered~~
B06CP5	3, 40 ml, Gs	W	CLP-VOA

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-5-92

Analysis Required

[illegible] #[illegible]9869873-5 OPC # W92-0-0399-22

9615442.1023
H4-45

000006

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-3-92

Ice Chest No. SML-8

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509868735

Offsite Property No. W92-0-0399-22

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CN4

3, ~~1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CN5~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CN6

3, 40ml, Gs, WATER, CLP-VOA

B06CT2

3, 40ml, Gs, Water, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 6-3-92 / 1500
Relinquished by:	Received by: B. WHITTEN	Date/Time: 6-4-92 0700
Relinquished by: B WHITTEN	Received by: Kermit Blum	Date/Time: 6-5-92 1130
Relinquished by: Kermit Blum 6-5-92	Received by: C. Harris	Date/Time: 6/8/92 9cc

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1024

000007

TASK NO 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6-3-92 Time 12:15 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CN4	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO3), unfiltered~~
	~~9, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
	3, 40M, Gs	W	CLP - VOA
	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
	1, 500 ml, G	W	ANions, pH
	1, 500ml, G	W	Cond.
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
~~B06CN5~~	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO3) filtered~~
B06CN6	3, 40 ml, Gs	W	CLP-VOA
B06CT2	3, 40 ML GS	W	CLP-VOA

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-5-92

Analysis Required _____

DOE # 250996573.5 OPC # W92-0-0399-22

9613442.1025

SAMPLE LOG-IN SHEET

000008

LAB NAME: TKA/ARLT

PAGE: 1 OF 1

RECEIVED BY (PRINT NAME): CAROLE HARRIS

LOG-IN-DATE: 6/8/92

RECEIVED BY (SIGNATURE): Carole Harris

CASE NUMBER:

SAMPLE DELIVERY GROUP NO.:

SAS NUMBER:

REMARKS:

1. Custody Seal(s) Present/Absent* Intact/Broken
2. Custody Seal Nos: _____
3. Chain of Custody Records Present/Absent*
4. Traffic Reports or Packing List Present/Absent*
5. Airbill Airbill/Sticker Present/Absent*
6. Airbill No.: _____
7. Sample Tags Present/Absent*
8. Sample Tags Numbers Listed/Not Listed on Chain of Custody
9. Sample Condition: Intact/Broken*/Leaking
10. Does information on custody records, traffic reports, and sample tags agree Yes/No*
11. Date Recieved at Lab: 6/8/92
12. Temp of ice chest 4.0 °C
13. Time Recieved: 9:00 AM

EPA SAMPLE #	CORRESPONDING SAMPLE TAG #	CORRESPONDING ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC
	B0L0L40	AB-06-024-01	
	B0L0LP3	AB-06-024-02	
	B0L0LP5	AB-06-024-03	
	B0L0LN4	AB-06-024-04	
	B0L0LN6	AB-06-024-05	
	B0L0GT2	AB-06-024-06	

SAMPLE TRANSFER

Fraction: _____ _____

Area #: _____ _____

By: _____ _____

On: _____ _____

* Contact SMO and attach record of resolution

Reviewed By: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

FORM DC-1

DOCS/LOGIN.TRL

9615442.1026

000009

TMA/ARLI
Thermo Analytical Inc.

RADIATION DOSE RATE SURVEY FORM

Date 6/8/92 COMPANY NORCAL (WHC) OTHER ORD # 252103447 1

Surveyor's Name MARK S. McCray

Model No. HP-210 / ESP-1 Model No. AC-3-7 / ESP-1

Serial Nos. 710289 / 02619 Serial Nos. 407726 / 02628

Calibration Date 3/25/92 Calibration Date 11/15/91

Instrument Calibration Factor 0.280 Instrument Calibration Factor 0.177

Sample	Location	HP-210 CPM	HP-210 Factor	HP-210 DPM	AC-3-7 CPM	AC-3-7 Factor	AC-3-7 DPM	Spillage or Breakage?	Activity, nCi/mL or nCi/g
Background		40.0			0				
Consistency		7,503	0.2896		5,006	0.1840			
Smears: WCFS(002)		44.0			1.0			NONE	
ESI		58.0			2.0			NONE	
SML-132		29.0			1.0				
Reported (WHC) 9 SA. each			<50	pCi/gr.					

Comments:

All OK ✓ Approved [signature]

Not OK Date 6/8/92

Form: ARLI RA-01
Rev: 06

01/15/92

GENERAL CHEMISTRY RESULTS

CASE NO. 06-024

Water Sample #:

B06CP3
B06CN4

CASE NARRATIVE

No problems were encountered during sample analysis.
All QC results were acceptable.

Ernesto Vazquez

Ernesto Vazquez

TRA Inc. REPORT Work Order # A2-06-024

Received: 06/05/92 08/05/92 09:20:10

REPORT TO: Westinghouse Hanford Company
2355 Stevens Dr.
Richland,WA,99352
MO-346/200 West/T6-08
ATTEN: Jeanette Duncan

PREPARED BY: Thermo Analytical, Inc.
160 Taylor Street
Monrovia, CA 91016
ATTEN: Ms. Carole Harris
PHONE: 818-357-3247

CERTIFIED BY: Ernesto Hygony

CONTACT: EVV CIH

CLIENT: WHC SAMPLES: 7
COMPANY: Westinghouse Hanford Company
FACILITY:

This report is for the sole and exclusive use of the client to whom it is addressed and represents only those samples herein described. Samples not destroyed in testing are retained a maximum of 30 days unless otherwise requested.

WORK ID: 100-HR-3
TAKEN: By Westinghouse Staff
TRANS: Federal Express
TYPE: Liquid
P.O. #: N2-06-032-SU-AR
INVOICE: under separate cover

SAMPLE IDENTIFICATION

01	B06CY0
02	B06CP3
02	B06CP3 MS
02	B06CP3 MSD
02	B06CP3
02	B06CP3 MS
02	B06CP3
03	B06CP5
03	B06CP5 MS
03	B06CP5 MSD
04	B06CN4
04	B06CN4 Duplicate
04	B06CN4
04	B06CN4 Duplicate
05	B06CN6
06	B06CT2
07	Wet Chemistry Blank

TEST CODES and NAMES used on this workorder

BNCLPW	CLP Semivol. Water WH020
PECLPL	CLP Pesticides Liq.-WH019
VOCLPL	CLP Volatile Org.Liq.WH018
WCCLPL	Anions & Wet Chem. - WH043
WCL L	Chloride - WH120
WCQCD	Quality Control Summary
WCQCS	Quality Control Summary
WF L	Fluoride in Water
WNO2 L	Nitrite (Liquids)
WNO3 L	Nitrate (water)
WPH L	pH of Liquid - WH121
WPO4 L	Phosphate in Liquids
WSO4 L	Sulfate (in Waters)
W COND	Conductivity-Water WH135

TMA Inc. REPORT Work Order # A2-06-024

Received: 06/05/92

Results by Sample

SAMPLE ID B06CP3 FRACTION 02E TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 06/03/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.3	mg/L	0.1
Chloride	300	5.4	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	1.5	mg/L	0.2
Sulfate	300	24	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
pH	150.1	8.1	pH	0.1

FORM 1

TMA Inc. REPORT Work Order # A2-06-024

Received: 06/05/92 Results by Sample

SAMPLE ID B06CP3 FRACTION 02G TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 06/03/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	212	umho/cm	6

FORM I

TMA Inc. REPORT Work Order # A2-06-024

Received: 06/05/92 Results by Sample

SAMPLE ID B06CN4 FRACTION 04C TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 06/03/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.2	mg/L	0.1
Chloride	300	4.9	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	2.6	mg/L	0.2
Sulfate	300	24	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
pH	150.1	8.1	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-06-024

Received: 06/05/92

Results by Sample

SAMPLE ID B06CM4 FRACTION 04E TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 06/03/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	226	umho/cm	6

FORM I

9613442.1033

TMA
Thermo Analytical Inc.

300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200
FAX (617) 890-3883

AUG 1992
RECEIVED
OSM DMO

July 13, 1992

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Quality Control Narrative

Scope
Three (3) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on June 06, 1992 from Westinghouse Hanford Company. The samples were analyzed for the USEPA CLP metals and cyanide as indicated on the chain of custody. The analysis was performed under TMA/Skinner and Sherman work order S206093.

Methodology
The samples were prepared, analyzed and reported in accordance with the USEPA Contract Laboratory Program Statement of Work 7/88 (CLP SOW788).

Discussion
All quality control requirements were met for the samples with the following exceptions:

The lead laboratory duplicates exceeded the control limit requirements.

The selenium matrix spike recovery exceeded the control limit requirements.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

i 1/16/96 M.H.

9613442.1034

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B06CN4

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-032SAS No.: SDG No.: B06CN4

Matrix (soil/water): WATER Lab Sample ID: 06093-01S

Level (low/med): LOW Date Received: 06/08/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	335.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	6.10	B		F
7440-39-3	Barium	26.70	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	39700.00			P
7440-47-3	Chromium	23.50			P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	B		P
7439-89-6	Iron	601.00			P
7439-92-1	Lead	2.00	U	*	F
7439-95-4	Magnesium	4960.00	B		P
7439-96-5	Manganese	13.40	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.80	B		P
7440-09-7	Potassium	2440.00	B		P
7782-49-2	Selenium	4.00	U	W N	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	4680.00	B		P
7440-28-0	Thallium	4.00	U		F
7440-62-2	Vanadium	3.00	B		P
7440-66-6	Zinc	13.90	B		P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613442.1035

WESTINGHOUSE/HANFORD

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CP3

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-032SAS No.: SDG No.: B06CN4

Matrix (soil/water): WATER Lab Sample ID: 06093-02S

Level (low/med): LOW Date Received: 06/08/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2170.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.60	B		F
7440-39-3	Barium	44.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	32100.00			P
7440-47-3	Chromium	30.80			P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	10.60	B		P
7439-89-6	Iron	2750.00			P
7439-92-1	Lead	5.20		*	F
7439-95-4	Magnesium	6690.00			P
7439-96-5	Manganese	48.50			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	14.00	B		P
7440-09-7	Potassium	3710.00	B		P
7782-49-2	Selenium	4.00	U	W J	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	6740.00			P
7440-28-0	Thallium	4.00	U	W	F
7440-62-2	Vanadium	8.60	B		P
7440-66-6	Zinc	274.00			P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613442.1036

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B06CX9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-032SAS No.: SDG No.: B06CN4

Matrix (soil/water): WATER Lab Sample ID: 06093-03S

Level (low/med): LOW Date Received: 06/08/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

FORM I - IN 04 Rev.6/89

9613442-1057

TMA/Skinner & Sherman Labs SAMPLE LOG-IN

WORKORDER 52-06-093 CLIENT Hanford-Ner No. SAMPLES: 3

PROTCL CLP TURNARND 33 days

COOLER TEMP: 4 oC, or NA (Soil) (Water) (Specify Other)

CUSTODIAN Antonio Benney SDG/BATCH N/A

CUSTODY SEAL: PRESENT/ABSENT/INTACT/NOT CLIENT CASE N2-C6-032

SHIPER & # Fedex #2521033126 PO/CONTRACT# ↓

TAGS: PRESENT/ABSENT/NA/SEE COC CONTACT Dolores Sanchez

CHAIN OF CUSTODY: PRESENT/ABSENT/NA, # N/A COMMENTS: None

SAMPLE CONTAINERS INTACT/BROKEN COMMENTS

CLIENT COMMENT? YES/NO

SAMPLE LABELS AGREE WITH CHAIN OF CUSTODY INFO? YES/NO (COMMENT)

CLIENT PAPERWORK AGREES WITH SAMPLES & COC? YES/NO (COMMENT)

SHIPMENT DATES 6.6.92

LIST ANY DATE WITH PAPERWORK/SHIPMENT PROBLEMS & SPECIFY THE PROBLEM:

N/A

	CLIENT ID	MATRIX	RECEIVED	QC	TEST(S)	HOLD TIME UP
1	BX6CN4	WATER	6.6.92	DS	TM/CN	
2	P3	↓	↓		↓	
3	↓ X9				CN only	CN dup
4						
5						
6						HG due
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

complete 6.6.92 [illegible]

Samples are from a site known to have Rad-Contamination: YES ___ NO X N/A ___

The samples have dectable amounts of Radioactive Material: YES ___ NO X N/A ___

SUBCONTRACT: YES/NO, TO: _____ DATE: _____

REVIEWED _____

*EPA/CLP Required Rev. 1.6

9613442.1038

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-3-92

Ice Chest No. SML-87

Field Logbook No. EFL-~~100~~ LW 6-3-92 1018

Bill of Lading/Airbill No. 2509866873 5

Offsite Property No. W92-0-0399.22

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CP3

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED
3, 1L, P, WATER, CLP-CYANIDE (NaOH)
~~3, 40ml, Gs, WATER, CLP-VOA~~
~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~
~~1, 500ml, G, WATER, ANIONS, pH~~
~~1, 500ml, G, WATER, CONDUCTIVITY~~
~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06CP4

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CP5~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
L.D. Walker	Refrigerator	6-3-92 / 1500
	B. WHITTEN	6-4-92 / 0700
B. WHITTEN	Kermit Blum	6-5-92 1130
Kermit Blum 6-5-92		6/6/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1039

TASK NO 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6-3-92 Time 0850 hours

Company Contact P H Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CP3	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	3, 1L, P	W	CLP - CN (NaOH)
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CP4	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CP5~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

142

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-5-92

Analysis Required _____

BOL # 250986873-5 OPC # W192-0-03399-22

9613442.1040

H4-45

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-3-92

Ice Chest No. SML-8

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 250986873-5

Offsite Property No. W92-0-0399-22

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CN4

1 ~~2~~, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED

1 ~~2~~, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~3, 40ml, Gs, WATER, CLP-VOA~~

~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~

~~1, 500ml, G, WATER, ANIONS, pH~~

~~1, 500ml, G, WATER, CONDUCTIVITY~~

~~2, 4L, P, WATER, GROSS-ALPHA/BETA, GAMMA-SPEC, ALPHA-SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

B06CN5

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CN6~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

~~B06CT2~~

~~3, 40ml, Gs, Water, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 6-3-92 / 1500
Relinquished by:	Received by: B. WHITTEN	Date/Time: 6-4-92 0700
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 6-5-92 1130
Relinquished by: 6-5-92 Kermit Blum	Received by:	Date/Time: 6/6/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1041

TASK NO 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6-3-92 Time 12:15 hours

Company Contact P H Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CN4	~~3~~, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	~~3~~, 1L, P	W	CLP - CN (NaOH)
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CN5	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CN6~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~
~~B06CT8~~	~~3, 40 ML, GS~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

144

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-5-92

Analysis Required

BOL # 250986873-5 OPC # 1N92-0-0399-22

9613442.1042

H4-14

N2-06-032

Westinghouse Hanford Company	CHAIN OF CUSTODY S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-3-92

Ice Chest No. SML-46

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 250986873-5

Offsite Property No. W92-0-0399-23

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CX9

1 ~~2~~, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CY0~~

~~3, 40ml, Gs, WATER, CLP VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker	Received by: Refrigerator	Date/Time: 6-3-92 / 1500
Relinquished by:	Received by: B. WHITTON	Date/Time: 6-4-92 0700
Relinquished by: B. WHITTON	Received by: Kermit Blum	Date/Time: 6-5-92 1130
Relinquished by: 6-5-92 Kermit Blum	Received by:	Date/Time: 6/6/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

145

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1043

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KD Lee / LD Walker Date Sampled 6-3-92 Time 1038 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CX9	3, 1L, P	W	CLP Cyanide (NaOH)
	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U 234/235/238, Pu 238/239/240, Am 241),~~
			~~Sr 90 (H_2O_2)~~
	~~1, 500ml, P~~	~~W~~	~~C 14~~
	~~1, 250ml, G~~	~~W~~	~~Tritium~~
~~B06CY0~~	~~3, 40ml, GS~~	~~W~~	~~CLP VOA~~

Field Information** BOL #: 250986873-5

OPC #: W92-0-0399-23

Special Handling and/or Storage

Possible Sample Hazards

148

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-3-92

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1044

TMA
Thermo Analytical Inc.

300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200
FAX (617) 890-3883

AUG 1992
RECEIVED
OSM DMO

July 10, 1992

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Quality Control Narrative

Scope
Two (2) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on June 6, 1992 from Westinghouse/Hanford Company. The samples were analyzed for the USEPA CLP Target Analyte List metals. The analysis was performed under Skinner and Sherman work order S206094.

Methodology
The samples were prepared, analyzed and reported in accordance with the USEPA Contract Laboratory Program Statement of Work 7/88 (CLP SOW788).

Discussion
All quality control requirements were met for the samples with the following exceptions:

The selenium and thallium digestion spike recovery exceeded the control limit requirements.

The selenium laboratory duplicates exceeded the control limit requirements.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

1/16/96 M.H.

9613442.1045

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CN5

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0103

Lab Code: SKINER Case No.: N2-06-0325A3 No.: SDG No.: B06CN5

Matrix (soil/water): WATER Lab Sample ID: 06094-013

Level (low/med): LOW Date Received: 06/06/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21.00	U		P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	4.50	B		P
7440-39-3	Barium	23.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	40300.00			P
7440-47-3	Chromium	3.30	B		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	52.60	B		P
7439-92-1	Lead	1.90	B		P
7439-95-4	Magnesium	4920.00	B		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.00	U		P
7440-09-7	Potassium	2610.00	B		P
7782-49-2	Selenium	6.50		+ * N	P
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	4530.00	B		P
7440-28-0	Thallium	2.00	U	W N	P
7440-62-2	Vanadium	4.50	B		P
7440-66-6	Zinc	8.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613442.1046

WESTINGHOUSE/HANFORD

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CP4

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-Se-0303A5 No.: SDG No.: B06CN5

Matrix (soil/water): WATER Lab Sample ID: 06094-025

Level (low/med): LOW Date Received: 06/06/93

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21.00	U		P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	3.20	B		F
7440-39-3	Barium	13.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	32200.00			P
7440-47-3	Chromium	7.50	B		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	37.70	B		P
7439-92-1	Lead	1.20	B	W	F
7439-95-4	Magnesium	6220.00			P
7439-96-5	Manganese	3.90	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.10	B		P
7440-09-7	Potassium	3460.00	B		P
7782-49-2	Selenium	4.00	U	W*N	F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	6390.00			P
7440-28-0	Thallium	2.00	U	W N	F
7440-62-2	Vanadium	6.20	B		P
7440-66-6	Zinc	8.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613442.1047

TMA/Skinner & Sherman Labs **SAMPLE LOG-IN**

WORKORDER 52-06-094 CLIENT Hanford-NOR No. SAMPLES:

PROTCL CLP TURNARND 33 days 2

COOLER TEMP: 4 oC, or NA (Soil) (Water) (Specify Other)

CUSTODIAN Bennett, A. SDG/BATCH N/A

CUSTODY SEAL: PRESENT/ABSENT/INTACT/NOT CLIENT CASE N2-06-037

SHIPER & # Fedex # 2521033126 PO/CONTRACT# ↓

TAGS: PRESENT/ABSENT/NA/SEE COC CONTACT Dolores Samera

CHAIN OF CUSTODY: PRESENT/ABSENT/NA, # N/A COMMENTS: NONE

SAMPLE CONTAINERS-INTACT/BROKEN COMMENTS

CLIENT COMMENT? YES/NO

SAMPLE LABELS AGREE WITH CHAIN OF CUSTODY INFO? YES/NO (COMMENT)

CLIENT PAPERWORK AGREES WITH SAMPLES & COC? YES /NO (COMMENT)

SHIPMENT DATES 6.6.92

LIST ANY DATE WITH PAPERWORK/SHIPMENT PROBLEMS & SPECIFY THE PROBLEM:

Field Filtered

	CLIENT ID	MATRIX	RECEIVED	QC	TEST(S)	HOLD TIME UP
1	B06CN5	WATER	6.6.92	DS	TM	Hg due
2	↓ P4	↓	↓		↓	
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

Complete 6.6.92

Samples are from a site known to have Rad-Contamination:YES X **NO** __ **N/A** __

The samples have dectable amounts of Radioactive Material:YES __ **NO** X **N/A** __

SUBCONTRACT: YES/NO TO: _____ DATE: _____

REVIEWED _____

105

*EPA/CLP Required Rev. 1.6 PAGE 000053

WESTON Analytics Use Only

9202L301 d 2-13-92

Custody Transfer Record/Lab Work Request

WESTON MANAGERS DESIGNERS/CONSULTANTS

Page ____ of ____

Client: WESTON
Est. Final Proj. Sampling Date:
Work Order #: 6168-02-01-0000
Project Contact/Phone #:
AD Project Manager: Josie King / D. Thomas
QC: CLP Del: CLP TAT: 35 day
Date Rec'd: 2-11-92 Date Due: 3-17-92
Account #:

Refrigerator #																	
#/Type Container	Liquid																
	Solid					1G											
Volume	Liquid																
	Solid					1L											
Preservatives																	
ANALYSES REQUESTED →		ORGANIC							INORG								
		VOA	BNA	Pest/PCB	Herb	Gamma Spec			Metal	CN							

MATRIX CODES:
S - Soil
SE - Sediment
SO - Solid
SL - Sludge
W - Water
O - Oil
A - Air
DS - Drum Solids
DL - Drum Liquids
L - EP/TCLP Leachate
WI - Wipe
X - Other
F - Fish

Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	WESTON Analytics Use Only												
0	B018C8			S	2-7-92	09:03					✓			RFW 9202L301-001					
	B018C9			⊥	⊥	10:19					✓						⊥ -002		

Run MS/MSD

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions:

Radio Chem = Gross Alpha/Beta, Gamma spec, U-235/238, PU-239/240, Am-241, Sr-90, TC-99, C-14

① MS/MSD Required

DATE/REVISIONS:
1.
2.
3.
4.
5.
6.

WESTON Analytics Use Only

Samples were:
1) Shipped ___ or Hand Delivered ___
Airbill # _____
2) Ambient or Chilled
3) Received in Good Condition Y or N
4) Labels Indicate Properly Preserved Y or N
5) Received Within Holding Times Y or N

COC Tape was:
1) Present on Outer Package Y or N
2) Unbroken on Outer Package Y or N
3) Present on Sample Y or N
4) Unbroken on Sample Y or N
COC Record Present Upon Sample Rec't Y or N

Discrepancies Between Samples Labels and COC Record? Y or N
NOTES:

Relinquished by	Received by	Date	Time	Relinquished by	Received by	Date	Time
[illegible]	Fed-X	2/6/92	6:30 pm				
[illegible] 2-11-92				FED EX	[illegible]	2/12/92	1200

RFW 21-21-001/A-7/91 ____ L372 ____ L373 ____ L375 ____ L377 ____ L378 Ref# _____ Cooler# _____ 381-596a

0401 2146 96

9613442.1049

X01516
000004
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CN4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R09

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	27	
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RB
10-29

9613442.1050

000005
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CN4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R09

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

R 3
10-25

9613442.1051

000006
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R10

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1052

000007
EPA SAMPLE NO.

B06CN6

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R10

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RB
10-13-92

9613442.1053

000008
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R05

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	33	
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

BG 10/2

PBD 5/19/

9613442.1054

000009
EPA SAMPLE NO.

B06CP3

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R05

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RA
10-23-92

9613442.1055

000010
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R06

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RB 10-2

PBD 5/19/9

9613442.1056

000011
EPA SAMPLE NO.

B06CP5

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R06

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RO
10-20-92

9613442.1057

000012

EPA SAMPLE NO.

B06CT2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R11

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

PBD 5/19/

9613442.1058

000013
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CT2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R11

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RB
6-22-92

9613442.1059

000014

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CY0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R04

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

PBD 5/19/

9613442.1060

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000015
EPA SAMPLE NO.

B06CY0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20609R04

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: not dec. ____ Date Analyzed: 06/09/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

KB
10/29/92

9615442.1061

000016

EPA SAMPLE NO.

B06CN4

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N12

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/09/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

RB

PBD 5/19/

9615442.1062

000017
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CN4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N12

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/09/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

RB 10-2 32

(1) - Cannot be separated from Diphenylamine

9613442.1063

000018
EPA SAMPLE NO.

B06CN4

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N12

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/09/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown hydrocarbon	4.23	23	~~BJ~~ a
2.	Unknown hydrocarbon	7.93	3	J
3.	Unknown ketone	8.85	5	~~BJ~~ a
4.	Unknown alkane	23.13	2	J

MB
10/27/92

9613442.1064

000019
EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N09

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/09/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

VRB

9613442.1065

000020
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N09

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/09/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9615442.1066

000021

EPA SAMPLE NO.

B06CP3

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N09

Level: (low/med) LOW Date Received: 06/05/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/09/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 12

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown hydrocarbon	4.22	21	~~BJ~~ u
2.	Unknown hydrocarbon	7.32	9	J
3.	Unknown alcohol	7.93	2	J
4.	Unknown ketone	8.85	5	~~BJ~~ u
5.	Unknown alkane	23.68	2	J
6.	Unknown alkane	25.47	3	J
7.	Unknown hydrocarbon	25.75	2	J
8.	Unknown alkane	26.98	2	J
9.	Unknown hydrocarbon	27.57	4	J
10.	Unknown hydrocarbon	27.78	4	J
11.	Unknown alkane	28.13	4	J
12.	Unknown hydrocarbon	28.87	3	J

RB 10/27/9

9613442.1067

000022

EPA SAMPLE NO.

B06CN4

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 06/05/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 06/09/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	UJ
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	UJ
58-89-9	gamma-BHC (Lindane)	0.050	UJ
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

BD 5/19/93

9613442.1068

000023
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06024 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206024-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 06/05/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 06/09/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	UJ
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	UJ
58-89-9	gamma-BHC (Lindane)	0.050	UJ
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

RB

RBD 5/19/92

9613442.1069

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CN4

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-032SAS No.: SDG No.: B06CN4

Matrix (soil/water): WATER Lab Sample ID: 06093-01S

Level (low/med): LOW Date Received: 06/08/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	335.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	6.10	B		F
7440-39-3	Barium	26.70	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	39700.00			P
7440-47-3	Chromium	23.50			P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	B	(U)	P
7439-89-6	Iron	601.00			P
7439-92-1	Lead	2.00	U	*(U)(J)	F
7439-95-4	Magnesium	4960.00	B		P
7439-96-5	Manganese	13.40	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.80	B		P
7440-09-7	Potassium	2440.00	B		P
7782-49-2	Selenium	4.00	U	~~N~~ N(J)	F (UJ)
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	4680.00	B		P
7440-28-0	Thallium	4.00	U		F
7440-62-2	Vanadium	3.00	B		P
7440-66-6	Zinc	13.90	B		P
	Cyanide	10.00	U		CA

10/27/92 fm

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

FORM I - IN 02 Rev.6/89

9613442.1070

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CN5

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-032SAS No.: SDG No.: B06CN5

Matrix (soil/water): WATER Lab Sample ID: 06094-01S

Level (low/med): LOW Date Received: 06/06/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21.00	U	(U)	P
7440-36-0	Antimony	11.00	U	(U)	P
7440-38-2	Arsenic	4.50	B		F
7440-39-3	Barium	23.60	B		F
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U	(U)	F
7440-70-2	Calcium	40300.00			P
7440-47-3	Chromium	8.80	B		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	52.60	B		P
7439-92-1	Lead	1.90	B	(U)	F
7439-95-4	Magnesium	4920.00	B		P
7439-96-5	Manganese	1.00	U	(U)	P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.00	U		P
7440-09-7	Potassium	2610.00	B		P
7782-49-2	Selenium	6.50		~~J~~	F J (J)(J)
7440-22-4	Silver	3.00	U	(U)	P
7440-23-5	Sodium	4530.00	B		P
7440-28-0	Thallium	2.00	U	~~UJ~~	F UJ (UJ)
7440-62-2	Vanadium	4.50	B	(U)	P
7440-66-6	Zinc	8.00	U		P
	Cyanide				NR

10/27/92 JW

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

Rev.6/89

9613442.1071

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CP3

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-032SAS No.: SDG No.: B06CN4

Matrix (soil/water): WATER Lab Sample ID: 06093-02S

Level (low/med): LOW Date Received: 06/08/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2170.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.60	B		F
7440-39-3	Barium	44.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	32100.00			P
7440-47-3	Chromium	30.80			P
7440-48-4	Cobalt	3.00	U	(U)	P
7440-50-8	Copper	10.60	B		P
7439-89-6	Iron	2750.00			P
7439-92-1	Lead	5.20		*(U)(J)	F
7439-95-4	Magnesium	6690.00			P
7439-96-5	Manganese	48.50			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	14.00	B		P
7440-09-7	Potassium	3710.00	B		P
7782-49-2	Selenium	4.00	U	~~(U)~~(J)	F (UJ)
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	6740.00			P
7440-28-0	Thallium	4.00	U	~~(U)~~(UJ)	F
7440-62-2	Vanadium	8.60	B		P
7440-66-6	Zinc	274.00			P
	Cyanide	10.00	U		CA

11/27/92

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

VT 9/93

9613442.1072

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CP4

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-0325AS No.: SDG No.: B06CN5

Matrix (soil/water): WATER Lab Sample ID: 06094-025

Level (low/med): LOW Date Received: 06/06/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21.00	U	(U)	P
7440-36-0	Antimony	11.00	U	(U)	P
7440-38-2	Arsenic	3.20	B		F
7440-39-3	Barium	23.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U	(U)	P
7440-70-2	Calcium	32200.00			P
7440-47-3	Chromium	7.50	B		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	37.70	B		P
7439-92-1	Lead	1.20	B	N(U)(J)	F
7439-95-4	Magnesium	6220.00			P
7439-96-5	Manganese	3.90	B	(U)	P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.10	B		P
7440-09-7	Potassium	3460.00	B		P
7782-49-2	Selenium	4.00	U	W*N	F (J)(J)(UJ)
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	6390.00			P
7440-28-0	Thallium	2.00	U	W	F (J)(UJ)
7440-62-2	Vanadium	6.20	B	(U)	P
7440-66-6	Zinc	8.00	U		P
	Cyanide				NR

10/27/92

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613442.1073

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CX9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-032SAS No.: SDG No.: B06CN4

Matrix (soil/water): WATER Lab Sample ID: 06093-03S

Level (low/med): LOW Date Received: 06/08/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

10/27/92

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

5/19/93

FORM I - IN 04 Rev.6/89

9613442.1074

000013

TRA Inc. REPORT Work Order # A2-06-024

Received: 06/05/92

Results by Sample

SAMPLE ID B06CN4 FRACTION 04C TEST CODE WCCLPL NAME Anions & Wet Chem. - VM043

Date & Time Collected 06/03/92 Category

N4

X01376

		CHEMISTRY - LIQUIDS RESULT	UNITS	LIMIT
		0.2	mg/L	0.1
		4.9	mg/L	0.2
		<0.1	mg/L	0.1
Nitrate	300	2.6	mg/L	0.2
Sulfate	300	24	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
pH	150.1	8.1 J	pH	0.1

FORM I

PBD
5/20/93

TMA Inc. REPORT Work Order # A2-06-024

Received: 06/05/92

Results by Sample

SAMPLE ID B06CW4 FRACTION 04E TEST CODE WCCLPL NAME Anions & Wet Chem. - WW043

Date & Time Collected 06/03/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	226	umho/cm	6

FORM I

PBD
5/20/13

9613442.1076

TMA Inc. REPORT Work Order # A2-06-024

Received: 06/05/92 Results by Sample

SAMPLE ID B06CP3 FRACTION 02E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 06/03/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.3	mg/L	0.1
Chloride	300	5.4	mg/L	0.2
Nitrite	300	<0.1 U	mg/L	0.1
Nitrate	300	1.5	mg/L	0.2
Sulfate	300	24	mg/L	1
Phosphate	300	<0.4 UA	mg/L	0.4
pH	150.1	8.1 J	pH	0.1

FORM I

PBD
5/20/93

9613442.1077

000014

TRA Inc. REPORT Work Order # A2-06-024

Received: 06/05/92

Results by Sample

SAMPLE ID B06CP3 FRACTION 02G TEST CODE WCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 06/03/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	212	umho/cm	6

FORM I

0-29-1256

PBN
5/20/93

9613442.1078

~~B06CS3-TMA-206~~
B06CV0-TMA-168

000002

CASE NARRATIVE

LABORATORY : TMA/ARLI

CASE : 06-021

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : June 4, 1992

1.0 DESCRIPTION OF CASE :

Six water samples were analyzed for TCL Organics-Volatiles, Semivolatiles, and Pesticide/PCBs according to the USEPA Contract Laboratory Program (CLP) Statement of Work for Organic Analysis, Revision OLM01.8.

2.0 SAMPLE LIST :

WESTINGHOUSE ID	LAB ID	ANALYSIS REQUESTED	MATRIX	pH
B06CS3	A2-06-021-01A	V	WATER	8
B06CS3	A2-06-021-01B	SV & P	WATER	
B06CS3 MS	A2-06-021-01C	SV & P	WATER	
B06CS3 MSD	A2-06-021-01D	SV & P	WATER	
B06CS5	A2-06-021-02A	V	WATER	8
B06CS5 MS	A2-06-021-02B	V	WATER	8
B06CS5 MSD	A2-06-021-02C	V	WATER	8
B06CS6	A2-06-021-03A	V	WATER	8
B06CS6	A2-06-021-03B	SV & P	WATER	
B06CS8	A2-06-021-04A	V	WATER	8
B06CS9	A2-06-021-05A	V	WATER	8
B06CS9	A2-06-021-05B	SV & P	WATER	
B06CT1	A2-06-021-06A	V	WATER	8

3.0 COMMENTS :

3.1 SHIPPING AND DOCUMENTATION :

All samples were received unbroken and properly documented. Samples B06CS3 and B06CS5 were received at TMA/Norcal in an ice chest that measured 13° C. Sample B06CT1 had an air bubble in one of the three VOA vials received at TMA/Norcal.

3.2 ANALYSIS

3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were analyzed within the CLP SOW holding times. All of the QC results were within the limits specified by the EPA CLP SOW.

TUNES :

All of the BFB tunes are injected directly into the GC/MS instrument.

3.2.2 SEMIVOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. Both the MS and MSD samples had spike recoveries of 4-Nitrophenol above the QC limit. No further action was required.

All of the other QC results were within the limits specified by the EPA CLP SOW.

3.2.3 PESTICIDE/PCB ANALYSIS COMMENTS :

SEQUENCE NOTES :

The sequence was started on 6/22/92 and was analyzed in accordance with the EPA CLP SOW. The instrument blanks, PEMs and calibration verification standards all met the requirements established by the EPA CLP SOW.

SAMPLE NOTES :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. Samples B06CS3MSD and method blank PBLK0608C had very low surrogate recoveries for TCX, yet their DCB recoveries were within QC limits. Sample B06CS3MSD also had low spike recoveries for gamma-BHC, Heptachlor, and Aldrin. The %RPD for these compounds between the MS and MSD also were above the QC limit. The surrogate and matrix spike limits are advisory and therefore no further action was required.

All of the other QC results were within the limits specified by the EPA CLP SOW.

We certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data in this hardcopy data package and in the computer-readable data submitted on diskette is authorized by the Laboratory Manager or his designee, as verified by the following signatures.

Nicole Roth
CLP Program Manager

Wida Ang
Organics Supervisor

9613442.1081

OFFICE OF SAMPLE MANAGEMENT

RECORD OF DISPOSITION

ROD-92-00146
Record of Disposition No.

DATE: 08/17/92

LABORATORY: TMA

PROJECT TITLE/NO.: 100-HR-3 Groundwater (Second Quarter)/92-244

NCR NO.: N/A

SAMPLE IDENTIFICATION NUMBERS:

-- B06CS3

DESCRIPTION OF EVENT:

The Anions portion of water sample B06CS3 (collected 06/02/92) from location 100-HR-3 was broken in transit to the laboratory. There was insufficient sample left to perform the Anions analysis.

DISPOSITION OF SAMPLES:

Per Steve Vukelich, the Anions portion of the analysis is to be canceled.

APPROVAL SIGNATURES:

K. N. Pool — 8/24/92
OSM Project Coordinator (Print/Sign Name) — Date

S. E. Vukelich — 9/1/92
Technical Representative (Print/Sign Name) — Date

Quality Assurance (Print/Sign Name) — Date

9613442.1082

000005

EPA SAMPLE NO.

B06CS3

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B03

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	49	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1083

000006
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CS3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B03

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1084

000007

EPA SAMPLE NO.

B06CS5

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B04

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1085

000008

EPA SAMPLE NO.

B06CS5

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B04

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1086

000009
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CS6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B07

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1087

000010

EPA SAMPLE NO.

B06CS6

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B07

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9615442.1088

000011

EPA SAMPLE NO.

B06CS8

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B08

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	8	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CS8

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B08

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1090

000013

EPA SAMPLE NO.

B06CS9

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B09

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CS9

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B09

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1092

000015

EPA SAMPLE NO.

B06CT1

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B10

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	3	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1093

000016

EPA SAMPLE NO.

B06CT1

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B10

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1094

000017

EPA SAMPLE NO.

B06CS3

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N03

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

9613442.1095

000018
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CS3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N03

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	2	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613442.1096

000019
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CS3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N03

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	24	BJ
2.	Unknown alcohol	8.03	28	J

9613442.1097

000020
EPA SAMPLE NO.

B06CS6

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N06

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CS6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N06

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	3	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613442.1099

000022
EPA SAMPLE NO.

B06CS6

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N06

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.23	34	BJ
2.	Unknown hydrocarbon	7.42	11	BJ
3.	Unknown alcohol	8.05	3	J
4.	Unknown ketone	8.98	6	J
5.	Unknown alkene	11.28	1	J
6.	Unknown carboxylic acid este	16.35	4	J
7.	Unknown hydrocarbon	30.03	5	J

9613442.1100

000023
EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CS9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N07

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

9613442.1101

000024
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CS9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N07

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	2	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613442.1102

000025

EPA SAMPLE NO.

B06CS9

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N07

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	18	BJ
2.	Unknown carboxylic acid este	16.22	2	J
3.	Unknown alcohol	29.93	3	J

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000026.
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CS3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 06/04/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 06/08/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CS6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 06/04/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 06/08/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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000028

EPA SAMPLE NO.

B06CS9

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 06/04/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 06/08/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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000002

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-2-92

Ice Chest No. SML-80

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509868746

Offsite Property No. W92-0-0399-20

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CS3

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

~~* 1, 500ml, G, WATER, ANIONS, pH~~

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CS4~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CS5

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L. D. Walker	Received by: Refrigerator	Date/Time: 6-2-92 / 1300
Relinquished by:	Received by: B. WHITTEN	Date/Time: 6-3-92 07:00
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 6-4-92 1100
Relinquished by: 6-4-92 Kermit Blum	Received by: Toby Bernard	Date/Time: 6/5/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments: Received @ TMA/NORCAL: icechest temperature was 13°C. KB

* ANIONS aliquot for B06CS3 broken in transit to TMA/NORCAL. KB

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1107

000003

TASK NO 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6-2-92 Time N/A hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CS3	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO3), unfiltered~~
	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
	3, 40M, Gs	W	CLP - VOA
	3, 2L, G	W	CLP - Semi-VOA/PCB7Pest
	~~1, 500 ml, G~~	~~W~~	~~Anions, pH~~ *
	1, 500ml, G	W	Cond.
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pu-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CS4	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO3) filtered~~
B06CS5	3, 40 ml, Gs	W	CLP-VOA

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-4-92

Analysis Required

BOL # 2509868716 OPC # W92-0-0399-20

9613442.1108

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARLI

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-2-92

Ice Chest No. SML-118

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509868746

Offsite Property No. W92-0-0399-21

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CS6

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS-ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CS7~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CS8

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker	Received by: Refrigerator	Date/Time: 6-2-92 / 1300
Relinquished by:	Received by: B. WHITTEN	Date/Time: 6-3-92 07:00
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 6-4-92 1100
Relinquished by: Kermit Blum 6-4-92	Received by: Tody Bennard	Date/Time: 6/5/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1109

000005

TASK NO 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6-2-92 Time N/A hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06C56	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO_3), unfiltered~~
	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
	3, 40M, Gs	W	CLP - VOA
	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
	1, 500 ml, G	W	ANions, pH
	1, 500ml, G	W	Cond.
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pu-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06C57	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO_3) filtered~~
B06C58	3, 40 ml, Gs	W	CLP-VOA

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-4-92

Analysis Required _____

BOL # 25C98656746 OPC # W92-0-0399-21

9613442.1110

000006

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL 1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-2-92

Ice Chest No. SML-15

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509868716

Offsite Property No. W92-0-0399-20

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CS9

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CT0~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CT1

3, 40ml, Gs, WATER, CLP-VOA *

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker	Received by: Refrigerator	Date/Time: 6-2-92 / 1300
Relinquished by:	Received by: B. Whitten	Date/Time: 6-3-92 / 07:00
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 6-4-92 1100
Relinquished by: Kermit Blum 6-4-92	Received by: Toby Bernard	Date/Time: 6/5/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments: * One vial of B06CT1 had bubbles when received @ TMA/NORCAL. KB

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1111

000007

TASK NO 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6-2-92 Time N/A hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CS9	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO_3), unfiltered~~
✓	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
✓	3, 40M, Gs	W	CLP - VOA
✓	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
✓	1, 500 ml, G	W	ANions, pH
✓	1, 500ml, G	W	Cond.
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
~~B06CT0~~	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO_3) filtered~~
B06CT1	3, 40 ml, Gs	W	CLP-VOA (some vial broke)

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-4-92

Analysis Required

2509568746 OPC # W92-0-0399-20

SAMPLE LOG-IN SHEET

LAB NAME : TMA/ARLI

PAGE : 1 OF 1

RECEIVED BY (PRINT NAME): Jody Bernard

LOG-IN-DATE : 6/5/98

RECEIVED BY (SIGNATURE): Jody Bernard

CASE NUMBER:
SAMPLE DELIVERY GROUP NO.:
SAS NUMBER:

REMARKS:

1. Custody Seal(s) — Present/Absent* — Intact/Broken
2. Custody Seal Nos: _____
3. Chain of Custody Records — Present/Absent*
4. Traffic Reports or Packing List — Present/Absent*
5. Airbill — Airbill/Sticker Present/Absent*
6. Airbill No.: 2501034487
7. Sample Tags — Present/Absent*
8. Sample Tags Numbers — Listed/Not Listed on Chain of Custody
9. Sample Condition: — Intact/Broken*/Leaking
10. Does information on custody records, traffic reports, and sample tags agree — Yes/No*
11. Date Recieved at Lab: 6/5/98
12. Temp of ice chest 4.0 °C
13. Time Recieved: 10:00 AM

SAMPLE TRANSFER

Fraction: _____
Area #: _____
By: _____
On: _____

EPA SAMPLE #	CORRESPONDING SAMPLE TAG #	CORRESPONDING ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC
	B06CS3	AZ-06-021-01	
	B06CS5	AZ-06-021-02	
	B06CS6	AZ-06-021-03	
	B06CS8	AZ-06-021-04	
	B06CS9	AZ-06-021-05	
	B06CT1	AZ-06-021-06	

* Contact SMO and attach record of resolution

Reviewed By: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

FORM DC-1

9613442.1113

000009

TMA/ARLI
Thermo Analytical Inc.

RADIATION DOSE RATE SURVEY FORM

Date 6/5/92 COMPANY NORCAL (WHC) OTHER ORD # 252103482

Surveyor's Name MARK S. McCRAY

Model No. HP-210 / ESP-1 Model No. AC-3-7 / ESP-1

Serial Nos. 710289 / 02619 Serial Nos. 407726 / 02628

Calibration Date 3/25/92 Calibration Date 11/15/91

Instrument Calibration Factor 0.280 Instrument Calibration Factor 0.177

Sample	Location	HP-210 CPM	HP-210 Factor	HP-210 DPM	AC-3-7 CPM	AC-3-7 Factor	AC-3-7 DPM	Spillage or Breakage?	Activity, uCi/mL or uCi/g
Background		31.0			2.0				
Consistency		7,400	0.2857		5,014	0.1843			
Smears: SML 45		50.0			2.0			NONE	
WHITE #1		38.0			2.0			NONE	
REPORTED	(WHC)	9 SA.	each	<50	pCi/gm.				

All OK ✓ Approved [signature] Comments:

Not OK Date 6/5/92

Form: ARLI RA-01
Rev: 06

01/15/92

9613442.1114

000010

FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL
PACKAGE TRACKING NUMBER 2521034482

2521034482

RECIPIENT'S COPY

1 Date 6-4-92

From (Your Name) Please Print: SAMPLE

Your Phone Number (Very important):

Company:

Department / Floor No:

Street Address:

City:

State:

ZIP Required:

2 To (Recipient's Name) Please Print: SAMPLE

Recipient's Phone Number (Very important):

Company: TRW / ARC

Department / Floor No:

Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes): 160 TAYLOR STREET

City: MOUNTAIN VIEW

State: CA

ZIP Required: 94016

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.): 2320 6406

H IF HOLD FOR PICK-UP, Print FEDEX Address Here
Street Address
City
State
ZIP Required

3 PAYMENT: 1 ☐ Bill Sender 2 ☐ Bill Recipient's FedEx Acct. No. 3 ☐ Bill 3rd Party FedEx Acct. No. 4 ☐ Bill Credit Card
5 ☐

4 SERVICES (Check only one box)

Priority Overnight	Standard Overnight
11 ☒ YOUR PACKAGING	51 ☐ YOUR PACKAGING
16 ☐ FEDEX LETTER *	56 ☐ FEDEX LETTER *
12 ☐ FEDEX PAK *	52 ☐ FEDEX PAK *
13 ☐ FEDEX BOX	53 ☐ FEDEX BOX
14 ☐ FEDEX TUBE	54 ☐ FEDEX TUBE
Economy Two-Day	**Government Overnight**
30 ☐ ECONOMY	46 ☐ GOVT LETTER
	41 ☐ GOVT PACKAGE

Freight Service
70 ☐ OVERNIGHT FREIGHT **
80 ☐ TWO-DAY FREIGHT **
†Density commitment may be slower in some areas
*Declared value over $100
**Call for delivery schedule

5 DELIVERY AND SPECIAL HANDLING (Check services required)
1 ☐ HOLD FOR PICK-UP
2 ☒ DELIVER WEEKDAY
3 DELIVER SATURDAY ☐
4 ☐ DANGEROUS GOODS
5 ☐
6 ☐ DRY ICE
7 ☐ OTHER SPECIAL SERVICE
8 ☐
9 ☐ SATURDAY PICK-UP (Extra charge)
10 ☐
11 ☐
12 ☐ HOLIDAY DELIVERY (Extra charge)

6 PACKAGES | WEIGHT in Pounds Only | YOUR DECLARED VALUE
Total 2 | Total 100 | Total

DIM SHIPMENT (Chargeable Weight)
☐ _____ lbs.
L x W x H = _____

Received At
1 ☐ Regular Stop
2 ☐ On-Call Stop
3 ☐ Drop Box
4 ☐ BSC
5 ☐ Station

Emp. No | Date
☐ Cash Received
☐ Return Shipment
☐ Third Party ☐ Chg. To Del. ☐ Chg. To Hold
Street Address
City | State | Zip
Received By: X
Date / Time Received | FedEx Employee Number

7 Release Signature
FedEx Emp. No | Date / Time

Federal Express Use
Base Charges
Declared Value Charge
Other 1
Other 2
Total Charges

REVISION DATE 6/91
PART #137204 FXEM 4/92
FORMAT #099
099
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GENERAL CHEMISTRY RESULTS

CASE NO. 06-021

Water Sample #:

B06CS3
B06CS6
B06CS9

CASE NARRATIVE

No problems were encountered during sample analysis.
All QC results were acceptable.

Ernesto Vazquez

Ernesto Vazquez

TMA Inc. REPORT Work Order # A2-06-021

Received: 06/04/92 08/05/92 10:29:03

REPORT TO: Westinghouse Hanford Company
2355 Stevens Dr.
Richland,WA,99352
MO-346/200 West/T6-08
ATTEN: Jeanette Duncan

PREPARED BY: Thermo Analytical, Inc.
160 Taylor Street
Monrovia, CA 91016
ATTEN: Ms. Carole Harris
PHONE: 818-357-3247

CERTIFIED BY: Ernesto Hernandez
CONTACT: EVV CIH

CLIENT: WHC SAMPLES: 7
COMPANY: Westinghouse Hanford Company
FACILITY:

This report is for the sole and exclusive use of the client to whom it is addressed and represents only those samples herein described. Samples not destroyed in testing are retained a maximum of 30 days unless otherwise requested.

WORK ID: 100-HR-3
TAKEN: By Westinghouse Staff
TRANS: Federal Express
TYPE: Liquid
P.O. #: N2-06-023 SU AR
INVOICE: under separate cover

SAMPLE IDENTIFICATION

01	B06CS3
01	B06CS3 MS
01	B06CS3 MSD
01	B06CS3
01	B06CS3 Duplicate
02	B06CS5
02	B06CS5 MS
02	B06CS5 MSD
03	B06CS6
03	B06CS6 MS
03	B06CS6
04	B06CS8
05	B06CS9
05	B06CS9 Duplicate
06	B06CT1
07	Wet Chemistry Blank

TEST CODES and NAMES used on this workorder

BNCLPW	CLP Semivol. Water WH020
PECLPL	CLP Pesticides Liq.-WH019
VOCLPL	CLP Volatile Org.Liq.WH018
WCCLPL	Anions & Wet Chem. - WH043
WCL L	Chloride - WH120
WCQCD	Quality Control Summary
WCQCS	Quality Control Summary
WF L	Fluoride in Water
WNO2 L	Nitrite (Liquids)
WNO3 L	Nitrate (water)
WPH L	pH of Liquid - WH121
WPO4 L	Phosphate in Liquids
WSO4 L	Sulfate (in Waters)
W COND	Conductivity-Water WH135

TMA Inc. REPORT Work Order # A2-06-021

Received: 06/04/92 Results by Sample

SAMPLE ID B06CS3 FRACTION 01E TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 06/02/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	<6	umho/cm	6

FORM I

9613442.1118

TMA Inc. REPORT Work Order # A2-06-021

Received: 06/04/92 Results by Sample

SAMPLE ID B06CS6 FRACTION 03C TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 06/02/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	<0.1	mg/L	0.1
Chloride	300	<0.2	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	<0.2	mg/L	0.2
Sulfate	300	<1	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
pH	150.1	7.1	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-06-021

Received: 06/04/92 Results by Sample

SAMPLE ID B06CS6 FRACTION 03E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 06/02/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	<6	umho/cm	<6

FORM I

TMA Inc. REPORT Work Order # A2-06-021

Received: 06/04/92

Results by Sample

SAMPLE ID B06CS9 FRACTION 05C TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 06/02/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	<0.1	mg/L	0.1
Chloride	300	<0.2	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	<0.2	mg/L	0.2
Sulfate	300	<1	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
pH	150.1	6.9	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-06-021

Received: 06/04/92 Results by Sample

SAMPLE ID B06CS9 FRACTION 05D TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 06/02/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	<6	umho/cm	<6

FORM I

9613442.1122

TMA
Thermo Analytical Inc.

300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200
FAX (617) 890-3883

AUG 1992
RECEIVED
OGM DMO

July 10, 1992

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Quality Control Narrative

Scope
Three (3) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on June 05, 1992 from Westinghouse Hanford Company. The samples were analyzed for the USEPA CLP metals and cyanide as indicated on the chain of custody. The analysis was performed under TMA/Skinner and Sherman work order S206072.

Methodology
The samples were prepared, analyzed and reported in accordance with the USEPA Contract Laboratory Program Statement of Work 7/88 (CLP SOW788).

Discussion
All quality control requirements were met for the samples with no exceptions.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

1/16/96 M.H.

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B06CS3

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-023SAS No.: SDG No.: B06CS3

Matrix (soil/water): WATER Lab Sample ID: 06072-01S

Level (low/med): LOW Date Received: 06/05/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	34.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	23.00	U		P
7439-92-1	Lead	1.00	U		F
7439-95-4	Magnesium	22.00	U		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.00	U		P
7440-09-7	Potassium	82.00	U		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	67.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	11.00	U		P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CS6

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-023SAS No.: SDG No.: B06CS3

Matrix (soil/water): WATER Lab Sample ID: 06072-02S

Level (low/med): LOW Date Received: 06/05/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	34.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	27.70	B		P
7439-92-1	Lead	1.00	U		F
7439-95-4	Magnesium	22.00	U		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.00	U		P
7440-09-7	Potassium	82.00	U		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	67.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	11.00	U		P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev.6/89

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CS9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-023SAS No.: SDG No.: B06CS3

Matrix (soil/water): WATER Lab Sample ID: 06072-03S

Level (low/med): LOW Date Received: 06/05/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	34.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	23.00	U		P
7439-92-1	Lead	1.00	U		F
7439-95-4	Magnesium	22.00	U		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.00	U		P
7440-09-7	Potassium	82.00	U		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	67.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	11.00	U		P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev.6/89

9613442.1126

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-2-92

Ice Chest No. SML-80

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509868746

Offsite Property No. W92-0-0399-20

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CS3

1 ~~2~~, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED

1 ~~2~~, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~3, 40ml, Gs, WATER, CLP-VOA~~

~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~

~~* 1, 500ml, G, WATER, ANIONS, pH~~

~~1, 500ml, G, WATER, CONDUCTIVITY~~

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

B06CS4

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CS5~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L. D. Walker	Received by: Refrigerator	Date/Time: 6-2-92 / 1300
Relinquished by:	Received by: B. WHITTEN	Date/Time: 6-3-92 07:00
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 6-4-92 1100
Relinquished by: 6-4-92 Kermit Blum	Received by:	Date/Time: 6-5-92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments: Received @ TMA/NORCAL: icechest temperature was 13°C. KB

* ANIONS aliquot for B06CS3 broken in transit to TMA/NORCAL. KB

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1127

TASK NO 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6-2-92 Time N/A hours

Company Contact P H Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CS3	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	3, 1L, P	W	CLP - CN (NaOH)
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~ *
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CS4	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CS5~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-4-~~92~~ 99

Analysis Required

BOL # 2509868796 OPC # W92-0-0399-20

9613442.1128

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-2-92

Ice Chest No. SML-118

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509868746

Offsite Property No. W92-0-0399-21

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CS6

1 ~~2~~, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED

1 ~~3~~, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~3, 40ml, Gs, WATER, CLP-VOA~~

~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~

~~1, 500ml, G, WATER, ANIONS, pH~~

~~1, 500ml, G, WATER, CONDUCTIVITY~~

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

B06CS7

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CS8~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L. D. Walker	Received by: Refrigerator	Date/Time: 6-2-92 / 1300
Relinquished by:	Received by: B. WHITTEN	Date/Time: 6-3-92 07:00
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 6-4-92 1100
Relinquished by: Kermit Blum 6-4-92	Received by:	Date/Time: 6/5/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1129

N'

TASK NO 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6-2-92 Time N/A hours

Company Contact P H Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06C56	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	3, 1L, P	W	CLP - CN (NaOH)
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-230/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06C57	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06C58~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-4-92

Analysis Required

BOL # 2509866746 OPG # W92-0-0399-21

151

9613442.1130

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-2-92

Ice Chest No. SML-15

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509868746

Offsite Property No. W92-0-0399-20

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CS9

1 ~~2~~, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED

1 ~~2~~, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~3, 40ml, Gs, WATER, CLP VOA~~

~~3, 2L, G, WATER, CLP SEMI VOA/PCB/PEST~~

~~1, 500ml, G, WATER, ANIONS, pH~~

~~1, 500ml, G, WATER, CONDUCTIVITY~~

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U 234/235/238, Pu 238/239/240, Am 241), Sr 90, Tc 99~~

~~1, 500ml, P, WATER, C 14~~

~~1, 250ml, G, WATER, TRITIUM~~

B06CT0

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CT1~~

~~3, 40ml, Gs, WATER, CLP VOA *~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker	Received by: Refrigerator	Date/Time: 6-2-92 / 1300
Relinquished by:	Received by: B. WHITTEN	Date/Time: 6-3-92 / 07:00
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 6-4-92 1100
Relinquished by: 6-4-92 Kermit Blum	Received by:	Date/Time: 6/5/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments: * One vial of B06CT1 had bubbles when received @ TMA/NORCAL. KB

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1131

TASK NO 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6-2-92 Time N/A hours

Company Contact P H Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CS9	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
✓	3, 1L, P	W	CLP - CN (NaOH)
✓	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
✓	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
✓	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
✓	~~1, 500ml, G~~	~~W~~	~~Cond.~~
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CT0	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CT1~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~ (one vial broke)

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-4-92

Analysis Required _____

BOL # 250986874-6 OPC # W92-0-0399-20

9613442.1132

TMA
Thermo Analytical Inc.

300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200
FAX (617) 890-3883

AUG 1992
RECEIVED
OSM DMO

July 10, 1992

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Quality Control Narrative

Scope
Three (3) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on June 5, 1992 from Westinghouse/Hanford Company. The samples were analyzed for the USEPA CLP Target Analyte List metals. The analysis was performed under Skinner and Sherman work order S206074.

Methodology
The samples were prepared, analyzed and reported in accordance with the USEPA Contract Laboratory Program Statement of Work 7/88 (CLP SOW788).

Discussion
All quality control requirements were met for the samples with no exceptions.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

i 1/16/96 M.H.

9613442.1133

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CS4

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-023SAS No.: SDG No.: B06CS4

Matrix (soil/water): WATER Lab Sample ID: 06074-01S

Level (low/med): LOW Date Received: 06/05/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		F
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	34.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	33.30	B		P
7439-92-1	Lead	2.20	B		F
7439-95-4	Magnesium	22.00	U		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.00	U		P
7440-09-7	Potassium	82.00	U		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.30	B		P
7440-23-5	Sodium	67.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	11.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev.6/89

9613442.1134

WESTINGHOUSE/HANFORD

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06C37

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0103

Lab Code: SKINER Case No.: NI-06-0233AS No.: SDG No.: B06C34

Matrix (soil/water): WATER Lab Sample ID: 06074-023

Level (low/med): LOW Date Received: 06/05/93

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	34.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	23.00	U		P
7439-92-1	Lead	1.60	B		F
7439-95-4	Magnesium	22.00	U		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.00	U		P
7440-09-7	Potassium	82.00	U		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.30	B		P
7440-23-5	Sodium	67.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	11.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613442.1135

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

806CT0

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-0233A5 No.: SDG No.: 806C54

Matrix (soil/water): WATER Lab Sample ID: 06074-035

Level (low/med): LOW Date Received: 06/05/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	34.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	40.40	B		P
7439-92-1	Lead	2.00	B		F
7439-95-4	Magnesium	22.00	U		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.00	U		P
7440-09-7	Potassium	82.00	U		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	67.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	11.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev.6/89

9613442.1136

TMA/Skinner & Sherman Labs **SAMPLE LOG-IN**

WORKORDER 52-06-074 CLIENT HANFORD_NOR No. SAMPLES:

PROTCL CLP TURNARND 33 days _____ 3 _____

COOLER TEMP: 4 oC, or NA (Soil) (Water) (Specify Other)

CUSTODIAN Benney, A. SDG/BATCH N/A

CUSTODY SEAL: PRESENT/ABSENT/INTACT/NOT CLIENT CASE 92-06-073

SHIPER & # Fedex # 2521034294 PO/CONTRACT# ↓

TAGS: PRESENT/ABSENT/NA/SEE COC CONTACT Dolores Sanchez

CHAIN OF CUSTODY: PRESENT/ABSENT/NA, # N/A COMMENTS: NONE

SAMPLE CONTAINERS-INTACT/BROKEN COMMENTS

CLIENT COMMENT? YES/NO

SAMPLE LABELS AGREE WITH CHAIN OF CUSTODY INFO? YES/NO (COMMENT)

CLIENT PAPERWORK AGREES WITH SAMPLES & COC? YES /NO (COMMENT)

SHIPMENT DATES 6.5.92

LIST ANY DATE WITH PAPERWORK/SHIPMENT PROBLEMS & SPECIFY THE PROBLEM:

N/A

Field Filtered

	CLIENT ID	MATRIX	RECEIVED	QC	TEST(S)	HOLD TIME UP
1	B06C54	WATER	06.05.92	D,S	TM	
2	↓ S7	↓	↓		↓	
3	↓ T0					HG dup 6.26.92
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

6-7-92

Complete

Samples are from a site known to have Rad-Contamination: YES ✗ NO __ N/A __

The samples have dectable amounts of Radioactive Material: YES __ NO ✗ N/A __

SUBCONTRACT: YES/NO TO: _____ DATE: _____

REVIEWED _____

*EPA/CLP Required Rev. 1.6

9613442.1137 Working Copy

000005

EPA SAMPLE NO.

B06CS3

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B03

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	49	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RB

10-Jr

No Change PSD 5/19/92

9613442.1138

000006
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CS3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B03

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1139

000007

EPA SAMPLE NO.

B06CS5

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B04

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L TB

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RB 11/93

RB 10-20-92

No Chan PBD 5/19/95

9613442.1140

000008

EPA SAMPLE NO.

B06CS5

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B04

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1141

000009
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CS6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B07

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

PJB 10/20

No Chg. PBN 5/19/95

9613442.1142

000010

EPA SAMPLE NO.

B06CS6

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B07

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1143

000011

EPA SAMPLE NO.

B06CS8

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B08

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	8	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RB

MB 10/20/92

No chan PRD 5/17/

9613442.1144

000012

EPA SAMPLE NO.

B06CS8

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B08

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1145

000013

EPA SAMPLE NO.

B06CS9

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B09

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

LB 10/2d.

No Change PBD 5/19/93

EPA SAMPLE NO.

B06CS9

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B09

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1147

000015

EPA SAMPLE NO.

B06CT1

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B10

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	3	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RB 10/20 92

No Change PBD 5/19/93

9613442.1148

000016

EPA SAMPLE NO.

B06CT1

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20608B10

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: not dec. ____ Date Analyzed: 06/08/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1149

000017
EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CS3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N03

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

RB 10-20

BD 5/19/93

9613442.1150

000018
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CS3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N03

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	2	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

AB
10-20-9

(1) - Cannot be separated from Diphenylamine

9613942.1151

000019
EPA SAMPLE NO.

B06CS3

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N03

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	24	~~BJ~~
2.	Unknown alcohol	8.03	28	J

u

PBD 5/19/93

9615442.1152

000020
EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CS6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N06

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

PBD 5/18/92

9613442.1153

000021

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CS6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N06

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	3	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

PBD 5/19/9

9613442.1154

000022
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CS6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N06

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.23	34	~~BJ~~ U
2.	Unknown hydrocarbon	7.42	11	~~BJ~~ U
3.	Unknown alcohol	8.05	3	J
4.	Unknown ketone	8.98	6	J
5.	Unknown alkene	11.28	1	J
6.	Unknown carboxylic acid este	16.35	4	J
7.	Unknown hydrocarbon	30.03	5	J

PBD 5/19/93

9613442.1155

000023
EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CS9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N07

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

PBM 5/19/

9613442.1156

000024
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CS9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N07

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	2	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

PBD 5/19/9

9613442.1157

000025

EPA SAMPLE NO.

B06CS9

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20625N07

Level: (low/med) LOW Date Received: 06/04/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/08/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/25/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	18	~~BJ~~ U
2.	Unknown carboxylic acid este	16.22	2	J
3.	Unknown alcohol	29.93	3	J

RB
10-20-92

9613442.1158

000026.
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CS3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 06/04/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 06/08/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U J
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	UJ
58-89-9	gamma-BHC (Lindane)	0.050	UJ
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

RSD not met

RB 10-20-93

9613442.1159

000027

EPA SAMPLE NO.

B06CS6

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 06/04/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 06/08/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	UJ
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	UJ
58-89-9	gamma-BHC (Lindane)	0.050	UJ
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

RSD

RB 10-20-9

PD 5/19/93

9613442.1160

000028
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CS9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06021 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206021-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 06/04/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 06/08/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	UJ
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	UJ
58-89-9	gamma-BHC (Lindane)	0.050	UJ
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

RSD
RB
10-20-

PD 5/19/95

9615442.1161

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B06CS3

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-023SAS No.: SDG No.: B06CS3

Matrix (soil/water): WATER Lab Sample ID: 06072-01S

Level (low/med): LOW Date Received: 06/05/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	34.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	23.00	U		P
7439-92-1	Lead	1.00	U		F
7439-95-4	Magnesium	22.00	U		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.00	U		P
7440-09-7	Potassium	82.00	U		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	67.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	11.00	U		P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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9613442.1162

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CS6

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-023SAS No.: SDG No.: B06CS3

Matrix (soil/water): WATER Lab Sample ID: 06072-02S

Level (low/med): LOW Date Received: 06/05/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	34.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	27.70	B		P
7439-92-1	Lead	1.00	U		F
7439-95-4	Magnesium	22.00	U		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.00	U		P
7440-09-7	Potassium	82.00	U		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	67.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	11.00	U		P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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9613442.1163

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CS9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-023SAS No.: SDG No.: B06CS3

Matrix (soil/water): WATER Lab Sample ID: 06072-03S

Level (low/med): LOW Date Received: 06/05/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	34.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	23.00	U		F
7439-92-1	Lead	1.00	U		F
7439-95-4	Magnesium	22.00	U		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.00	U		P
7440-09-7	Potassium	82.00	U		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	67.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	11.00	U		P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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9613442.1164

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: 806C54

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-0035AS No.: SDG No.: 806C54

Matrix (soil/water): WATER Lab Sample ID: 06074-018

Level (low/med): LOW Date Received: 06/05/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		F
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	34.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	33.30	B		P
7439-92-1	Lead	2.20	B		F
7439-95-4	Magnesium	22.00	U		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.00	U		P
7440-09-7	Potassium	82.00	U		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.30	B		P
7440-23-5	Sodium	67.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	11.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

PRJ 5/19/93

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9613442.1165

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06C57

ab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0103

ab Code: SKINER Case No.: N0-06-0235A5 No.: SDG No.: 806C54

atrix (soil/water): WATER Lab Sample ID: 06074-023

evel (low/med): LOW Date Received: 06/05/92

Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	34.00	U		P
7440-47-3	Chromium	3.00	U		F
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	23.00	U		P
7439-92-1	Lead	1.60	B		F
7439-95-4	Magnesium	22.00	U		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.00	U		P
7440-09-7	Potassium	82.00	U		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.30	B		P
7440-23-5	Sodium	67.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	11.00	U		P
	Cyanide				NR

olor Before: COLORLESS Clarity Before: CLEAR Texture:

olor After: COLORLESS Clarity After: CLEAR Artifacts:

omments:

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003 ✓

9613442.1166

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B06CT0

ab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

ab Code: SKINER Case No.: N2-06-0035AS No.: SDG No.: B06C54

atrix (soil/water): WATER Lab Sample ID: 06074-035

evel (low/med): LOW Date Received: 06/05/92

Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.00	U		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	1.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	34.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	40.40	B		P
7439-92-1	Lead	2.00	B		F
7439-95-4	Magnesium	22.00	U		P
7439-96-5	Manganese	1.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.00	U		P
7440-09-7	Potassium	82.00	U		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	67.00	U		P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	11.00	U		P
	Cyanide				NR

olor Before: COLORLESS Clarity Before: CLEAR Texture:

olor After: COLORLESS Clarity After: CLEAR Artifacts:

omments:

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PBA 5/19/93

004

TMA Inc. REPORT Work Order # A2-86-021

Received: 06/04/92 Results by Sample

SAMPLE ID 806CS3 FRACTION 01E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 06/02/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	<6 U	umho/cm	6

FORM I

no other analytes just elect. Conduc

all sampled

~~6/2/91~~

6/2/92

Rej 5/19/93

9613442.1168

000015

TMA Inc. REPORT Work Order # A2-06-021

Received: 06/04/92

Results by Sample

SAMPLE ID B06CS6 FRACTION 03C TEST CODE WCCLPL NAME Anions & Wet Chem. - WK043

Date & Time Collected 06/02/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	<0.1 U	mg/L	0.1
Chloride	300	<0.2 U	mg/L	0.2
Nitrite	300	<0.1 U	mg/L	0.1
Nitrate	300	<0.2 U	mg/L	0.2
Sulfate	300	<1 U	mg/L	1
Phosphate	300	<0.4 U	mg/L	0.4
pH	150.1	7.1	pH	0.1

FORM I

5/19/92

9613442.1169

TMA Inc. REPORT Work Order # A2-06-021

Received: 06/04/92

Results by Sample

SAMPLE ID B06CS6 FRACTION 03E TEST CODE VCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 06/02/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	<6	umho/cm	<6

FORM I

TMA Inc. REPORT Work Order # A2-06-021

Received: 06/04/92 Results by Sample

SAMPLE ID B06CS9 FRACTION 05C TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 06/02/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	<0.1 U	mg/L	0.1
Chloride	300	<0.2 U	mg/L	0.2
Nitrite	300	<0.1 U	mg/L	0.1
Nitrate	300	<0.2 U	mg/L	0.2
Sulfate	300	<1 U	mg/L	1
Phosphate	300	<0.4 U	mg/L	0.4
pH	150.1	6.9	pH	0.1

FORM I

RD 2/19/92

TMA Inc. REPORT Work Order # A2-06-021

Received: 06/04/92

Results by Sample

SAMPLE ID B06CS9 FRACTION 05D TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 06/02/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	<6 U	umho/cm	<6

FORM I

CASE NARRATIVE.

LABORATORY : TMA/ARLI

CASE : 05-071

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : May 21, 1992

1.0 DESCRIPTION OF CASE :

Ten water samples were analyzed for TCL Organics-Volatiles, Semivolatiles, and Pesticide/PCBs according to the USEPA Contract Laboratory Program (CLP) Statement of Work for Organic Analysis, Revision OLM01.8.

2.0 SAMPLE LIST :

WESTINGHOUSE ID	LAB ID	ANALYSIS REQUESTED	MATRIX	pH
B06CG1	A2-05-071-01A	V	WATER	6
B06CG1	A2-05-071-01B	SV & P	WATER	
B06CG3	A2-05-071-02A	V	WATER	5
B06CG3 MS	A2-05-071-02B	V	WATER	5
B06CG3 MSD	A2-05-071-02C	V	WATER	5
B06CH6	A2-05-071-03A	V - BROKEN		
B06CH6	A2-05-071-03B	SV & P	WATER	
B06CH6 MS	A2-05-071-03C	SV & P	WATER	
B06CH6 MSD	A2-05-071-03D	SV & P	WATER	
B06CH8	A2-05-071-04A	V	WATER	5
B06CJ2	A2-05-071-05A	V	WATER	5
B06CJ2	A2-05-071-05B	SV & P	WATER	
B06CJ4	A2-05-071-06A	V	WATER	5
B06CF2	A2-05-071-07A	V	WATER	5
B06CF2	A2-05-071-07B	SV & P	WATER	
B06CF3	A2-05-071-08A	V	WATER	5
B06CF4	A2-05-071-09A	V	WATER	6
B06CF4	A2-05-071-09B	SV & P	WATER	
B06CF5	A2-05-071-10A	V	WATER	5
B06CX8	A2-05-071-11A	V	WATER	5

3.0 COMMENTS :

3.1 SHIPPING AND DOCUMENTATION :

All samples were received unbroken and properly documented.

3.2 ANALYSIS

3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were analyzed within the CLP SOW holding times. The sample containers for B06CH6 were broken in storage and therefore could not be analyzed.

All of the QC results were within the limits specified by the EPA CLP SOW.

TUNES :

All of the BFB tunes are injected directly into the GC/MS instrument.

3.2.2 SEMIVOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. The MS and MSD samples had spike recoveries for 4-Nitrophenol slightly above the QC limit.

All of the other QC results were within the limits specified by the CLP SOW.

3.2.3 PESTICIDE/PCB ANALYSIS COMMENTS :

SEQUENCE NOTES :

The sequence was started on 6/22/92 and was analyzed in accordance with the EPA CLP SOW. The instrument blanks, PEMs and calibration verification standards all met the requirements established by the EPA CLP SOW.

SAMPLE NOTES :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. Sample B06CH6MSD had a TCX recovery on the DB-608 column slightly below the advisory QC limit. No further action was required.

All of the other QC results were within the limits specified by the EPA CLP SOW.

We certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data in this hardcopy data package and in the computer-readable data submitted on diskette is authorized by the Laboratory Manager or his designee, as verified by the following signatures.

Nicole Roth
CLP Program Manager

Wida Ang
Organics Supervisor

9613442.1175

OFFICE OF SAMPLE MANAGEMENT

RECORD OF DISPOSITION

ROD-92-00125
Record of Disposition No.

DATE: 6-22-92	LABORATORY: TMA
PROJECT TITLE/NO.: 100-HR-3/92-165	NCR NO.:

SAMPLE IDENTIFICATION NUMBERS:

B06CH6

DESCRIPTION OF EVENT:

THE VOLATILES PORTION OF WATER SAMPLE B06CH6,(RECEIVED 5/21/92) FROM LOCATION 100-HR-3, WAS BROKEN IN STORAGE. THERE IS NOT ENOUGH SAMPLE LEFT TO PERFORM THE VOLATILES ANALYSIS.

DISPOSITION OF SAMPLES:

PER STEVE VUKOLICH, THE VOLATILES PORTION OF THE ANALYSIS IS TO BE CANCELED.

APPROVAL SIGNATURES:

KARL POOL/ Karl N. Pool — 6/25/92
OSM Project Coordinator (Print/Sign Name) — Date

STEVE VUKOLICH/ Steve Vukolich — 7/13/92
Technical Representative (Print/Sign Name) — Date

Quality Assurance (Print/Sign Name) — Date

9613442.1176

MEMORANDUM

May 27,1992

TO: DAN STUERMER/DOLORES SANCHEZ
FROM: DENNIS WELLS

RE: BROKEN SAMPLE #B06CH6

The volatiles portion of water sample #B06CH6 ,received 5/21/92 from location 100-HR-3, was broken in storage. There is not enough sample left to perform the volatile analysis.

Please request disposition from WHC for this sample.

Dennis D. Wells

9613442.1177

Westinghouse Hanford Company

NONCONFORMANCE REPORT

1. Page 1 of ____

2. Preprinted No. 051707

QA Log No.

3. P. O., W. O., or Job Control No.	4. System/End Use	5. Item/Material	6. Dwg./Spec./Other No.	7. Rev.
N/A	RI/FS	WATER SAMPLE	N/A	N/A

8. Program/Project/Other: 100-HR-3/92-165; 100-KR-4/92-398

9. Safety Class: N/A

10. ASME Code Items: ☐ Yes ☒ No (If yes, notify authorized inspector)

11. Supplier Name/Address: ~~ENVIRONMENTAL~~ RCS 1/26/93 THERMO ANALYTICAL LAB

12. Notification of Potential Occurence Required: ☐ Yes ☒ No

13. Code: Lot/Heat/Serial	14. Lot Size	15. Sample	16. Qty. Acc.	17. Inspection Criteria
N/A	1	1	0	☐ Dwg. ☐ Spec. ☐ Insp. Plan ☒ Other CLP SOW

18. Item	19. Description of Nonconformance (list serial no. where applicable)	22. Disposition, Justification, and Instructions
	SAMPLE NUMBERS B06CH9, B06CJ0, B06CJ1, B06CJ4, B06CJ5, B06CJ6, B06CJ7, B06CL9, B06CM0, B06CM1 (100-HR-3) AND B06M18 (100-KR-4) WERE NOT STORED AT 4C ± 2C AS REQUIRED BY CLP STATEMENT OF WORK.	

20. Originator's Signature: R.C. SMITH — R C Clayton Smith — Date 1/26/93

21. Cognizant QA Manager's Signature — Date

23. Design Document Change Required? ☐ Yes, Doc. No. ____ ☐ No

24. Corrective Action Required? ☐ Yes, No. ____ ☐ No

Disp. App.

25. Cognizant Engineer	Date	26. Technical Rep.	Date	Signature/Org.	Date
QA Engineer	Date	Signature/Org.	Date	Signature/Org.	Date

Close

27. Accept ____ Reject ____ Follow on NCR ____ QA/C Personnel ____ Date

A-7310-104 (10/91)

9613442.1178

Westinghouse Hanford Company

NONCONFORMANCE REPORT

1. Page 1 of ____

2. Preprinted No. 051707

QA Log No. EQA-93-013

3. P. O., W. O., or Job Control No.	4. System/End Use	5. Item/Material	6. Dwg./Spec./Other No.	7. Rev.
N/A	RI/FS	WATER SAMPLE	N/A	N/A

8. Program/Project/Other
RCRA P.P. 100-HR-3/92-165
CERCLA 100-KR-4/92-398

9. Safety Class: N/A

10. ASME Code Items ☐ Yes ☒ No (If yes, notify authorized inspector)

11. Supplier Name/Address
~~ENVIRONMENTAL~~ RCS 1/26/93
THERMO ANALYTICAL LAB

12. Notification of Potential Occurence Required ☐ Yes ☒ No

13. Code: Lot/Heat/Serial	14. Lot Size	15. Sample	16. Qty. Acc.	17. Inspection Criteria
N/A	11 2-2-93	11 2-2-93	0	☐ Dwg. ☐ Spec. ☐ Insp. Plan ☒ Other CLP SOW

18. Item	19. Description of Nonconformance (list serial no. where applicable)	22. Disposition, Justification, and Instructions
	SAMPLE NUMBERS B06CH9, B06CJ0, B06CJ1, B06CJ4, B06CJ5, B06CJ6, B06CJ7, B06CL9, B06CM0, B06CM1 (100-HR-3) AND B06M18 (100-KR-4) WERE NOT STORED AT 4°C ± 2°C AS REQUIRED BY CLP STATEMENT OF WORK.	~~Analysis shall be performed. Data received from the analysis shall be flagged for all constituents.~~ RL 12/17/93 Use as is. These samples were not validated in a WHC Validation Report. Therefore, this NCR shall serve as the flag to identify potential problems with the data. R L Loggenstaff 12/17/93

20. Originator's Signature: R.C. SMITH — Date: 1/26/93

23. Design Document Change Required? ☐ Yes, Doc. No. ____ ☒ No

21. Cognizant QA Manager's Signature: W. Lockenby for F.L. Bonnington — Date: 2-3-93

24. Corrective Action Required? ☐ Yes, No. ____ ☒ No

Disp. App.

25. Cognizant Engineer	Date	26. Technical Rep.	Date	Signature/Org.	Date
J.W. Roberts	2/5/93	NA		NA	

QA Engineer	Date	Signature/Org.	Date	Signature/Org.	Date
GS Corrigan	2-5-93	NA		NA	

Close

27. Accept 11 Reject 0 Follow on NCR NA — QA/C Personnel — Date 12-17-93

A-7310-104 (10/91)

ENVIRONMENTAL RECORDS TRANSMITTAL

TRANSMITTAL NUMBER: X01332

DATE PREPARED: August 11, 1992

TO (check one box):	MAILING ADDRESS:	PREPARED BY:
[ ] EFS Field Files, N3-05 [ ] ERE Field Files, H4-55 [ ] Environmental Data Management Center, H4-22 [x] Environmental Administrative Records, H4-22	Westinghouse Hanford Company c/o EDMC, H4-22 P.O. Box 1970 Richland, WA 99352	NAME, AFFILIATION: J. M. Duncan, WHC BLDG, ROOM, AREA: MO-028, 200-W ADDRESS: Richland, WA 99352 ORG. TITLE: Office of Sample Management MSIN: T6-08 PHONE: 3-3351 ORG. CODE: 12500

TO BE COMPLETED BY SENDER, EXCEPT SHADED AREAS, WHICH ARE COMPLETED BY THE RECIPIENT

ITEM	DATE	ID NUMBER	TITLE/DESCRIPTION	OU	TSD	TASK/SUBTASK	PAGE COUNT	FILE NUMBER
1	8-03-92	05-071, N2-05-138	Thermo Analytical, Analytical Laboratory Data Package for the 100-HR-3 project. The OSM data package ID number is B06CG1-TMA-200. The sample and subset data reported is as follows: A) General Chemistry (case # 05-071) Analytical Laboratory Data Package Subset (sample numbers B06CG1, B06CH6 and B06CJ2). B) Organics (VOA, case # 05-071) Analytical Laboratory Data Package Subset (sample numbers B06CF2, B06CF3, B06CF4, B06CF5, B06CG1, B06CG3, B06CH8, B06CJ2, B06CJ4 and B06CX8). C) Organics (Semi-VOA and Pest, case # 05-071) Analytical laboratory Data Package Subset (sample numbers B06CF2, B06CF4, B06CG1, B06CH6 and B06CJ2). D) Metals (case # N2-05-138) Analytical Laboratory Data Package Subset (sample numbers B06CF2, B06CF4, B06CG1, B06CH6, B06CJ2 and B06CX7).	100-HR-3				

9613442.1179

COMMENTS: Data is being transmitted without OSM verification or validation. Data will be validated by an offsite contractor.

RECEIVED BY: Monica Ellingsworth DATE: 8/11/92

The signature below certifies that the documents submitted by this transmittal have been reviewed and are ready for processing.

SIGNATURE: SKO Janette M. Duncan DATE: 8/11/92

PROCESSED BY: DATE:

9613442.1180

000005
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CF2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R13

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1181

000006
EPA SAMPLE NO.

B06CF2

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R13

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1182

000007
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CF3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R14

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	24	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CF3

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R14

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CF4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R15

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	20	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	3	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1185

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000010
EPA SAMPLE NO.

B06CF4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R15

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CF5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-10A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R16

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	22	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CF5

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-10A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R16

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1188

000013
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R06

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	42	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1189

000014
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R06

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CG3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R07

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	51	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1191

000016

EPA SAMPLE NO.

B06CG3

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R07

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1192

000017
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CH8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R10

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	31	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1193

000018
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CH8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R10

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CJ2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R11

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	23	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	3	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1195

000020
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CJ2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R11

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1196

000021
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CJ4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R12

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	17	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1197

000022

EPA SAMPLE NO.

B06CJ4

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R12

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1199

1F

9613442.1198

000024
EPA SAMPLE NO.

000023
EPA SAMPLE NO.

B06CX8

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-11A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R17

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	16	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1199

000024
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CX8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-11A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R17

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CF2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N8

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

9613442.1201

1C

000026

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CF2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N8

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	0.6	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

B06CF2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N8

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	99	J
2.	Unknown hydrocarbon	7.45	8	BJ
3.	Unknown alcohol	8.07	2	J
4.	Unknown cyclic ketone	8.98	4	BJ

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CF4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N9

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

9615442.1204

000029
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CF4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N9

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	22	
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9615442.1205

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000030
EPA SAMPLE NO.

B06CF4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N9

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.23	120	J
2.	Unknown hydrocarbon	5.02	3	J
3.	Unknown hydrocarbon	7.65	8	BJ
4.	Unknown alcohol	8.27	2	J
5.	Unknown cyclic ketone	9.18	4	BJ

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

000031

B06CG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N3

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N3

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	J
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613442.1208

000033

EPA SAMPLE NO.

B06CG1

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N3

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	120	J
2.	Unknown hydrocarbon	5.02	16	BJ
3.	Unknown hydrocarbon	7.63	6	BJ
4.	Unknown cyclic ketone	9.18	4	BJ
5.	Unknown hydrocarbon	30.12	3	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CH6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N4

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

9613442.1210

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000035
EPA SAMPLE NO.

B06CH6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N4

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613442.1211

000036
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CH6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N4

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	110	J
2.	Unknown carboxylix acid este	4.83	11	J
3.	Unknown hydrocarbon	7.28	2	J
4.	Unknown hydrocarbon	7.48	6	J
5.	Unknown cyclic hydrocarbon	8.08	2	J
6.	Unknown cyclic ketone	9.02	3	BJ
7.	Unknown hydrocarbon	9.57	2	J

9613442.1212

000037
EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CJ2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N7

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CJ2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N7

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	2	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613442.1214

000039

EPA SAMPLE NO.

B06CJ2

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N7

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.25	150	J
2.	Unknown hydrocarbon	4.47	150	J
3.	Unknown hydrocarbon	7.75	11	BJ
4.	Unknown cyclic alcohol	8.38	2	J
5.	Unknown cyclic ketone	9.32	6	BJ
6.	Unknown compound	25.45	4	J
7.	Unknown compound	25.58	4	J
8.	Unknown hydrocarbon	28.62	3	J
9.	Unknown hydrocarbon	29.07	3	J

9613442.1215

000040
EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CF2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/21/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/22/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/24/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1216

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

000041
EPA SAMPLE NO.

B06CF4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/21/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/22/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/24/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1217

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

000042
EPA SAMPLE NO.

B06CG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/21/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/22/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/24/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1218

000043

EPA SAMPLE NO.

B06CH6

PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/21/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/22/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/24/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9615442.1219

1D

000044

EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CJ2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/21/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/22/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/24/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1220

ARLI

Westinghouse Hanford Company	CHAIN OF CUSTODY	000002

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5-19-92

Ice Chest No. Alpha 6

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509868108

Offsite Property No. W92-0-03996

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CG1

- ~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~
- ~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~
- 3, 40ml, Gs, WATER, CLP-VOA
- 3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST
- 1, 500ml, G, WATER, ANIONS, pH
- 1, 500ml, G, WATER, CONDUCTIVITY
- ~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~
- ~~1, 500ml, P, WATER, C-14~~
- ~~1, 250ml, G, WATER, TRITIUM~~

B06CG2

- ~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CG3

- 3, 40ml, Gs, WATER, CLP-VOA

~~B06CT4~~

~~3, 40ml, Gs, Water, CLP-VOA~~ LW 5-19-92

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 5-19-92 /
Relinquished by:	Received by: Bill Whitten B. WHITTEN	Date/Time: 5-20-92 0800
Relinquished by: Bill Whitten B. WHITTEN	Received by: Elby K. Yamamoto	Date/Time: 5/21/92 10:30 AM
Relinquished by: 5/21/92 Elby K. Yamamoto	Received by: Tony Bernard	Date/Time: 5/22/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1221

000003

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-19-92 Time 0916 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested*
B06CG1	~~3, 1L, P~~	~~W~~	~~CLP ICP/AA Metals & Hg (HNO_3),~~ unfiltered
	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
	3, 40M, Gs	W	CLP - VOA
	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
	1, 500 ml, G	W	ANions, pH
	1, 500ml, G	W	Cond.
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CG2	~~3, 1L, P~~	~~W~~	~~CLP ICP/AA Metals & Hg (HNO_3)~~ filtered
B06CG3	3, 40 ml, Gs	W	CLP-VOA

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Elly G. Yamamoto Title Sample Control Tech. Date 5/21/92

Analysis Required

BOL # 250986810 8 OPC # W92-0-0399-8

9613442.1222

000004

Westinghouse Hanford Company	CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5-19-92

Ice Chest No. SML-122

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509868108

Offsite Property No. W92-0-0399-G

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CH6

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CH7~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CH8

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 5-19-92 / 1246
Relinquished by:	Received by: Bill Whitten B WHITTEN	Date/Time: 5-20-92 0800
Relinquished by: Bill Whitten B WHITTEN	Received by: Elby H. Yamamoto	Date/Time: 5/21/92 10:30 AM
Relinquished by: 5/21/92 Elby H. Yamamoto	Received by: Tody Bennard	Date/Time: 5/22/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments: *B06CH6 all 3 VOA Vials prose & broke in storage refrigerator CH 7/30/92

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1223

000005

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-19-92 Time 1050 hours

Company Contact P H Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CH6	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO3),~~ unfiltered
	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
	3, 40M, Gs	W	CLP - VOA
	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
	1, 500 ml, G	W	ANions, pH
	1, 500ml, G	W	Cond.
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa 238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CH7	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO3)~~ filtered
B06CH8	3, 40 ml, Gs	W	CLP-VOA

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Elby H. Yamamoto Title Sample Control Technician Date 5/21/92

Analysis Required

BOL # 2509868108 OPC # W920-0399-6

9613442.1224

000006

Westinghouse Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Project Designation/Sampling Locations 100-HR-3

Ice Chest No. SML-111

Bill of Lading/Airbill No. 2509868108

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045

Collection Date 5/19/92

Field Logbook No. EFL 0057 p14

Offsite Property No. W92-0-0399-7

Sample Identification

B06CJ2

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CJ3~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CJ4

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody

Chain of Possession (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
C. Celiberti C. CELIBERTI	Refrib	5/19/92 1240
Relinquished by:	Received by: B. WHITTEN	Date/Time: 5-20-92 0800
Relinquished by: B. WHITTEN	Received by: Elby H. Yamamoto	Date/Time: 5/21/92 10:30 AM
Relinquished by: 5/21/92 Elby H. Yamamoto	Received by: Tody Bernard	Date/Time: 5/22/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1225

000007

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION TASK-92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-19-92 Time 0736 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CJ2	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	3, 1L, P	W	CLP - CN (NaOH)
	3, 40M, Gs	W	CLP - VOA
	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
	1, 500 ml, G	W	ANions, pH
	1, 500ml, G	W	Cond.
	2, 4L, P	W	Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99
	1, 500ml, P	W	C-14
	1, 250 ml, G	W	Tritium
B06CJ3	3, 1L, P	W	CLP ICP/AA Metals & Hg (HNO_3) filtered
B06CJ4	3, 40 ml, Gs	W	CLP-VOA

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Elby J. Yamamoto Title Sample Control Tech. Date 5/21/92

Analysis Required

BOL # 2509866108 OPC #W92-0-0399-7

9613442.1226

000008

Westinghouse Hanford Company	CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/19/92

Ice Chest No. SML-147

Field Logbook No. EFL-0057 p. 15

Bill of Lading/Airbill No. 2509868108

Offsite Property No. W92-0-0399-8

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CF2

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

B06CF3

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: Kathy O. Lee K.O. Lee	Received by: relinq. to refrigerator	Date/Time: 5/19/92 1240
Relinquished by:	Received by: Gail Butcher B. BUTCHER	Date/Time: 5-20-92 08 00
Relinquished by: Gail Butcher B. BUTCHER	Received by: Elby J. Yamamoto	Date/Time: 5/21/92 10:30 AM
Relinquished by: 5/21/92 Elby J. Yamamoto	Received by: Tody Bennard	Date/Time: 5/22/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1227

000009

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-19-92 Time 1104 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CF2	~~3, 1L, P~~	~~W~~	~~CCP-CN (NaOH)~~
	3, 40 ml, Gs	W	CCP-VOA
	3, 2L, G	W	CCP-Semi-VOA/PCB/PEST
	~~2, 4L, P~~	~~W~~	~~Gamma Spec, Alpha Spec (U-234/235/~~
			~~238, Pu-238/239/240, Am-241) Sr-90,~~
			~~Tc-99~~
	~~1, 500 Ml, P~~	~~W~~	~~C-14~~
B06CF3	3, 40 ml, Gs	W	CLP-VOA

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Eby J. Yamamoto Title Sample Control Tech. Date 5/21/92

Analysis Required

BOL # Q509868108 OPC # W92-0-0399-8

Westinghouse Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/19/92

Ice Chest No. SML-66

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 2509866810 8

Offsite Property No. W92-0-0399-6

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CF4

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

B06CF5

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: C. Ciliberti C. Ciliberti	Received by: Bofrido	Date/Time: 5/19/92 1240
Relinquished by:	Received by: Bill Whitton B. WHITTON	Date/Time: 5-20-92 08:00
Relinquished by: Bill Whitton B. WHITTON	Received by: Elroy G. Yamamoto	Date/Time: 5/21/92 10:30 AM
Relinquished by: 5/21/92 Elroy G. Yamamoto	Received by: Tody Bernard	Date/Time: 5/22/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

9613442.1229

000011

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-19-92 Time 0901 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CF4	~~3, 1L, P~~	~~W~~	~~CCP-CN (NaOH)~~
	3, 40 ml, Gs	W	CCP-VOA
	3, 2L, G	W	CCP-Semi-VOA/PCB/PEST
	~~2, 4L, P~~	~~W~~	~~Gamma Spec, Alpha Spec (U-234/235/~~
			~~238, Pu-238/239/240, Am-241) Sr-90,~~
			~~Tc-99~~
	~~1, 500 Ml, P~~	~~W~~	~~C-14~~
B06CF5	3, 40 ml, Gs	W	CLP-VOA

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Elby H. Yamamoto Title Sample Control Tech. Date 5/21/92

Analysis Required

BOL # 2509868108 OPC # W92-0-0399-6

9613442.1230

ARLP 000012

Westinghouse Hanford Company	CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5-19-92

Ice Chest No. SML-158

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509668108

Offsite Property No. W92-0-0399-7

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

~~B06C×7~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~
~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06C×8

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 5-19-92 1240
Relinquished by:	Received by: Bill Whitten B. WHITTEN	Date/Time: 5-20-92 0800
Relinquished by: Bill Whitten B WHITTEN	Received by: Elby H. Yamamoto	Date/Time: 5/21/92 10:30 AM
Relinquished by: 5/21/92 Elby H. Yamamoto	Received by: Tody Bennett	Date/Time: 5/22/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 5-19-92 Time 1245 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CX7	3, 1L, P	W	~~CLP Cyanide (NaOH)~~
	~~2, 1L, P~~	W	~~Gross Gamma Spec, Alpha Spec (U-234, 235/238, Pu-238/239/240, Am-241), Sr-90 (HNO_3)~~
	~~1, 500ml, P~~	W	~~C-14~~
	~~1, 250ml, G~~	W	~~Tritium~~
B06CX8	3, 40ml, Gs	W	CLP-VOA

Field Information** DOC #: 8509868108
OPC #: W92-0-0399-7

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Elby J. Yamamoto Title Sample Control Tech. Date 5/21/92

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

SAMPLE LOG-IN SHEET

LAB NAME : TMA/ARLI

PAGE : 1 OF 1

RECEIVED BY (PRINT NAME): Teddy Bernard

LOG-IN-DATE : 5/22/92

RECEIVED BY (SIGNATURE): Teddy Bernard

CASE NUMBER:

SAMPLE DELIVERY GROUP NO.:

SAS NUMBER:

REMARKS:

1. Custody Seal(s) — Present/Absent* Intact/Broken
2. Custody Seal Nos: _____
3. Chain of Custody Records — Present/Absent*
4. Traffic Reports or Packing List — Present/Absent*
5. Airbill — Airbill/Sticker Present/Absent*
6. Airbill No.: _____
7. Sample Tags — Present/Absent*
8. Sample Tags Numbers — Listed/Not Listed on Chain of Custody
9. Sample Condition: — Intact/Broken*/Leaking
10. Does information on custody records, traffic reports, and sample tags agree — Yes/No*
11. Date Recieved at Lab: 5/22/92
12. Temp of ice chest 4.0 °C
13. Time Recieved: 10:00 AM

EPA SAMPLE #	CORRESPONDING SAMPLE TAG #	CORRESPONDING ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC
	BOLCG1	A2-05-071-01	
	BOLCG3	A2-05-071-02	
	BOLCH6	A2-05-071-03	
	BOLCH8	A2-05-071-04	
	BOLCJ2	A2-05-071-05	
	BOLCJ4	A2-05-071-06	
	BOLCF2	A2-05-071-07	
	BOLCF3	A2-05-071-08	
	BOLCF4	A2-05-071-09	
	BOLCF5	A2-05-071-10	
	BOLCX8	A2-05-071-11	

SAMPLE TRANSFER

Fraction: _____

Area #: _____

By: _____

On: _____

* Contact SMO and attach record of resolution

Reviewed By: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

FORM DC-1

TMA/ARLI
Thermo Analytical Inc.

RADIATION DOSE RATE SURVEY FORM

Date 5/22/92 COMPANY None (WHC) OTHER ORD # 2521033071 ~~212~~

Surveyor's Name [illegible]

Model No. HP-210 / ESP-1 Model No. AC-3-7 / ESP-1

Serial Nos. 710289 / 02619 Serial Nos. 407726 / 02628

Calibration Date 3/25/92 Calibration Date 11/15/91

Instrument Calibration Factor 0.280 Instrument Calibration Factor 0.177

Sample	Location	HP-210 CPM	HP-210 Factor	HP-210 DPM	AC-3-7 CPM	AC-3-7 Factor	AC-3-7 DPM	Spillage or Breakage?	Activity, nCi/mL or nCi/g
Background		33.0			2.0				
Consistency		7340	0.2834		5140	0.1869			
Smears: 04BTV		39.0			0.0			None	
KT-3		39.0			1.0			None	
SMC-142		43.0			2.0			None	
Reported	(WHC)	16 sa	each	250 pCi/g.					

Comments:

All OK ✓ Approved [illegible]

Not OK Date 5/22/92

GENERAL CHEMISTRY RESULTS

CASE NO. 05-071

Water Sample #:

B06CG1
B06CH6
B06CJ2

CASE NARRATIVE

No problems were encountered during sample analysis.
All QC results were acceptable.

Ernesto Vazquez

Ernesto Vazquez

TMA Inc. REPORT Work Order # A2-05-071

Received: 05/21/92 07/31/92 12:50:41

REPORT TO: Westinghouse Hanford Company
2355 Stevens Dr.
Richland,WA,99352
MO-346/200 West/T6-08
ATTEN: Jeanette Duncan

PREPARED BY: Thermo Analytical, Inc.
160 Taylor Street
Monrovia, CA 91016
ATTEN: Ms. Carole Harris
PHONE: 818-357-3247

CERTIFIED BY: Ernesto Hayney

CONTACT: EVV CIH

CLIENT: WHC SAMPLES: 12
COMPANY: Westinghouse Hanford Company
FACILITY:

This report is for the sole and exclusive use of the client to whom it is addressed and represents only those samples herein described. Samples not destroyed in testing are retained a maximum of 30 days unless otherwise requested.

WORK ID: 100-HR-3
TAKEN: By Westinghouse Staff
TRANS: Federal Express
TYPE: Liquid
P.O. #: N2-05-138-SU-AR
INVOICE: under separate cover

SAMPLE IDENTIFICATION

01	B06CG1
02	B06CG3
02	B06CG3 MS
02	B06CG3 MSD
03	B06CH6
03	B06CH6 MS
03	B06CH6 MSD
03	B06CH6
03	B06CH6 MS
04	B06CH8
05	B06CJ2
05	B06CJ2 Duplicate
05	B06CJ2
05	B06CJ2 Duplicate
06	B06CJ4
07	B06CF2
08	B06CF3
09	B06CF4
10	B06CF5
11	B06CX8
12	Wet Chemistry Blank

TEST CODES and NAMES used on this workorder

BNCLPW	CLP Semivol. Water WH020
PECLPL	CLP Pesticides Liq.-WH019
VOCLPL	CLP Volatile Org.Liq.WH018
WCCLPL	Anions & Wet Chem. - WH043
WCL L	Chloride - WH120
WCQCD	Quality Control Summary
WCQCS	Quality Control Summary
WF L	Fluoride in Water
WNO2 L	Nitrite (Liquids)
WNO3 L	Nitrate (water)
WPH L	pH of Liquid - WH121
WPO4 L	Phosphate in Liquids
WSO4 L	Sulfate (in Waters)
W COND	Conductivity-Water WH135

9613442.1236

000019

TMA Inc. REPORT Work Order # A2-05-071

Received: 05/21/92

Results by Sample

SAMPLE ID B06CG1 FRACTION 01C TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 05/19/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.6	mg/L	0.1
Chloride	300	5.4	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	1.9	mg/L	0.2
Sulfate	300	32	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	269	umho/cm	6
pH	150.1	8.1	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-05-071

Received: 05/21/92

Results by Sample

SAMPLE ID B06CM6 FRACTION 03E TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 05/19/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.4	mg/L	0.1
Chloride	300	14.7	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	3.2	mg/L	0.2
Sulfate	300	57	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	305	umho/cm	6
pH	150.1	7.6	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-05-071

Received: 05/21/92

Results by Sample

SAMPLE ID B06CJ2 FRACTION 05C TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 05/19/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.4	mg/L	0.1
Chloride	300	22.2	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	13.5	mg/L	0.2
Sulfate	300	115	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	507	umho/cm	6
pH	150.1	7.9	pH	0.1

FORM I

9613442.1239

TMA
Thermo Analytical Inc.

300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200
FAX (617) 890-3883

June 25, 1992

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Quality Control Narrative

Scope
Six (6) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on May 22,1992 from Westinghouse Hanford Company. The samples were analyzed for the USEPA CLP metals and cyanide as indicated on the chain of custody. The analysis was performed under Skinner and Sherman work order S205241.

Methodology
The samples were prepared, analyzed and reported in accordance with the USEPA Contract Laboratory Program Statement of Work 7/88 (CLP SOW788).

Discussion
All quality control requirements were met for the samples with the following exceptions:

The selenium, thallium and cyanide digestion spike recovery exceeded the control limit requirements.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

1/19/96 M.H.

9613442.1240

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CF2

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-138SAS No.: SDG No.: B06CF2

Matrix (soil/water): WATER Lab Sample ID: 05241-04S

Level (low/med): LOW Date Received: 05/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613442.1241

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CF4

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-138SAS No.: SDG No.: B06CF2

Matrix (soil/water): WATER Lab Sample ID: 05241-05S

Level (low/med): LOW Date Received: 05/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613442.1242

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CG1

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-138SAS No.: SDG No.: B06CF2

Matrix (soil/water): WATER Lab Sample ID: 05241-01S

Level (low/med): LOW Date Received: 05/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2970.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	11.50			F
7440-39-3	Barium	68.30	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	29400.00			P
7440-47-3	Chromium	63.30			P
7440-48-4	Cobalt	4.40	B		P
7440-50-8	Copper	27.60			P
7439-89-6	Iron	4540.00			P
7439-92-1	Lead	3.00			F
7439-95-4	Magnesium	11400.00			P
7439-96-5	Manganese	204.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	33.50	B		P
7440-09-7	Potassium	5180.00			P
7782-49-2	Selenium	20.00	U	WN	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	21200.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	22.90	B		P
7440-66-6	Zinc	395.00			P
	Cyanide	10.00	U	N	CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613442.1245

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B06CH6

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-138SAS No.: SDG No.: B06CF2

Matrix (soil/water): WATER Lab Sample ID: 05241-02S

Level (low/med): LOW Date Received: 05/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25.00	B		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.10	B		F
7440-39-3	Barium	43.10	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	40400.00			P
7440-47-3	Chromium	82.60			P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	3.90	B		P
7439-89-6	Iron	1450.00			P
7439-92-1	Lead	2.80	B		F
7439-95-4	Magnesium	10100.00			P
7439-96-5	Manganese	23.80			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	27.90	B		P
7440-09-7	Potassium	3360.00	B		P
7782-49-2	Selenium	4.00	U	WN	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	12800.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	22.30			P
	Cyanide	10.00	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev. 6/90

9615442.1244

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CJ2

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-138SAS No.: SDG No.: B06CF2

Matrix (soil/water): WATER Lab Sample ID: 05241-03S

Level (low/med): LOW Date Received: 05/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	51.10	B		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.00	B		F
7440-39-3	Barium	60.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	75000.00			P
7440-47-3	Chromium	156.00			P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	4.10	B		P
7439-89-6	Iron	323.00			P
7439-92-1	Lead	3.20			F
7439-95-4	Magnesium	16500.00			P
7439-96-5	Manganese	98.20			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	22.70	B		P
7440-09-7	Potassium	4740.00	B		P
7782-49-2	Selenium	8.10		+N	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	11600.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	4.10	B		P
7440-66-6	Zinc	18.60	B		P
	Cyanide	10.00	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev.6/89

9613442.1245

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CX7

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-138SAS No.: SDG No.: B06CF2

Matrix (soil/water): WATER Lab Sample ID: 05241-06S

Level (low/med): LOW Date Received: 05/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

Rev 6/89

TMA/Skinner & Sherman Labs **SAMPLE LOG-IN**

WORKORDER 92-05-241 CLIENT HANFORD-NOR No. SAMPLES:

PROTCL CLP TURNARND 33 days (Soil) 6 (Water) (Specify Other)

COOLER TEMP: 4 oC, or NA

CUSTODIAN Benney A. SDG/BATCH N/A

CUSTODY SEAL: PRESENT/ABSENT/INTACT/NOT CLIENT CASE N2-05-138

SHIPER & # Fedex # 2521033093 PO/CONTRACT# ↓

TAGS: PRESENT/ABSENT/NA/SEE COC CONTACT Dolores Sanchez

CHAIN OF CUSTODY: PRESENT/ABSENT/NA, # N/A COMMENTS: NONE

SAMPLE CONTAINERS INTACT/BROKEN COMMENTS

CLIENT COMMENT? YES/NO

SAMPLE LABELS AGREE WITH CHAIN OF CUSTODY INFO? YES/NO (COMMENT)

CLIENT PAPERWORK AGREES WITH SAMPLES & COC? YES/NO (COMMENT)

SHIPMENT DATES 5.22.92

LIST ANY DATE WITH PAPERWORK/SHIPMENT PROBLEMS & SPECIFY THE PROBLEM:

unfiltered

	CLIENT ID	MATRIX	RECEIVED	QC	TEST(S)	HOLD TIME UP
1	B06CG1	WATER	5.22.92	D,S	TM/CN	5/19
2	H6	↓	↓		↓	↓
3	J2	↓	↓		↓	↓
4	F2	↓	↓		CN only	↓
5	F4	↓	↓		↓	↓
6	X7	↓	↓		↓	↓
7						
8						
9						
10						
11						
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14						
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17						
18						
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21						
22						
23						
24						
25						
26						
27						

complete

Samples are from site known to have Rad-Contamination: YES X NO

Samples have detectable amounts of Radioactive Material: YES NO X

SUBCONTRACT: YES/NO TO: DATE:

REVIEWED Rev. 1.4 PAGE

9613442.1247

SS_1

Westinghouse Hanford Company	CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5-19-92

Ice Chest No. Alpha G

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509868108

Offsite Property No. W92-0-0399-6

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CG1

1 ~~3~~, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED

1 ~~3~~, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~3, 40ml, Gs, WATER, CLP-VOA~~

~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~

~~1, 500ml, G, WATER, ANIONS, pH~~

~~1, 500ml, G, WATER, CONDUCTIVITY~~

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

B06CG2

1 ~~3~~, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CG3~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

~~B06CT4~~

~~3, 40ml, Gs, Water, CLP-VOA~~ LW 5-19-92

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 5-19-92
Relinquished by:	Received by: Bill Whitten B. WHITTEN	Date/Time: 5-20-92 0800
Relinquished by: Bill Whitten B. WHITTEN	Received by: Elby S. Yamamoto	Date/Time: 5/21/92 10:30 AM
Relinquished by: 5/21/92 Elby S. Yamamoto	Received by: [illegible]	Date/Time: 5/22/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

142

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613942.1298

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-19-92 Time 0916 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CG1	1~~3~~, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	1~~3~~, 1L, P	W	CLP - CN (NaOH)
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	2, 4L, P	W	Gross Alpha/Beta, Gamma Spec, Alpha ~~Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CG2	1~~3~~, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CG3~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Elby J. Yamamoto Title Sample Control Tech. Date 5/21/92

Analysis Required

143

BOL # 250986810 6 OPC # W92-0-0399-8

9613442.1249

Westinghouse Hanford Company	CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5-19-92

Ice Chest No. SML-122

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509868108

Offsite Property No. W92-0-0399-G

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CH6

13, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED

13, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~3, 40ml, Gs, WATER, CLP-VOA~~

~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~

~~1, 500ml, G, WATER, ANIONS, pH~~

~~1, 500ml, G, WATER, CONDUCTIVITY~~

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

B06CH7

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CH8~~

3, ~~40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
L.D. Walker LD Walker	Refrigerator	5-19-92 / 1246
	B. WHITTEN	5-20-92 0800
B. WHITTEN	Elby G. Yamamoto	5/21/92 10:30 AM
5/21/92 Elby G. Yamamoto		5/22/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613942.1250

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-19-92 Time 1050 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CH6	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered — 2
	3, 1L, P	W	CLP - CN (NaOH) — 2
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C 14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CH7	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered — 2
~~B06CH8~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Y. Yamamoto Title Sample Control Technician Date 5/21/92

Analysis Required

BOL # 250986810 8 OPC # W920-0399-6

145

9613442.1251

Westinghouse Hanford Company	CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Project Designation/Sampling Locations 100-HR-3

Ice Chest No. 5ML-111

Bill of Lading/Airbill No. 2509868108

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045

Collection Date 5/19/92

Field Logbook No. EFL 0057 p14

Offsite Property No. W92-0-0399-7

Sample Identification

B06CJ2

1 ~~3~~, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED

1 ~~3~~, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~3, 40ml, Gs, WATER, CLP-VOA~~

~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~

~~1, 500ml, G, WATER, ANIONS, pH~~

~~1, 500ml, G, WATER, CONDUCTIVITY~~

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

B06CJ3

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CJ4~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: C. Celiberti C. CELIBERTI	Received by: RefRib	Date/Time: 5/19/92 1240
Relinquished by: Elby H. Yamamoto	Received by: Bill Whitten B. WHITTEN	Date/Time: 5-20-92 0800
Relinquished by: Bill Whitten B WHITTEN	Received by: Elby H. Yamamoto	Date/Time: 5/21/92 10:30 AM
Relinquished by:	Received by: [illegible]	Date/Time: 5/22/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1252

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION TASK-92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-19-92 Time 0736 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CJ2	1 ~~3~~, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	1 ~~3~~, 1L, P	W	CLP - CN (NaOH)
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CJ3	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CJ4~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Elby J. Yamamoto Title Sample Control Tech. Date 5/21/92

Analysis Required

BOL # 2509866108 OPC # W92-0-0399-7

147

9613442.1253

Westinghouse Hanford Company	CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/19/92

Ice Chest No. SML-147

Field Logbook No. EFL-0057 p. 15

Bill of Lading/Airbill No. 2509866108

Offsite Property No. W92-0-0399-8

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CF2

1 ~~2~~, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~3, 40ml, Gs, WATER, CLP-VOA~~

~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~B06CF3~~

3, ~~40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: Kathy D. Lee K.D. Lee	Received by: relinq. to refrigerator	Date/Time: 5/19/92 1240
Relinquished by:	Received by: B. WHITTEN	Date/Time: 5-20-92 08 00
Relinquished by: B. WHITTEN 5/21/92	Received by: Elby H. Yamamoto	Date/Time: 5/21/92 10:30 AM
Relinquished by: Elby H. Yamamoto	Received by:	Date/Time: 5/22/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1254

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-19-92 Time 1104 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CF2	1, 1L, P	W	CCP-CN (NaOH)
	~~3, 40 ml, Gs~~	~~W~~	~~CCP-VOA~~
	~~3, 2L, G~~	~~W~~	~~CCP-Semi-VOA/PCB/PEST~~
	~~2, 4L, P~~	~~W~~	~~Gamma Spec, Alpha Spec (U-234/235/~~
			~~238, Pu-238/239/240, Am-241) Sr-90,~~
			~~Tc-99~~
	~~1, 500 Ml, P~~	~~W~~	~~C-14~~
~~B06CF3~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Elby G. Yamamoto Title Sample Control Tech Date 5/21/92

Analysis Required

149

BOL # 0509868108 OPC # W92-0-0399-8

9613442.1255

Westinghouse Hanford Company	CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Project Designation/Sampling Locations 100-HR-3

Ice Chest No. SML-66

Bill of Lading/Airbill No. 2509666810 6

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045

Collection Date 5/19/92

Field Logbook No. EFL-0057

Offsite Property No. W92-0-0399-6

Sample Identification

B06CF4

1 ~~3~~, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~3, 40ml, Gs, WATER, CLP VOA~~

~~3, 2L, G, WATER, CLP SEMI VOA/PCB/PEST~~

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/~~ 238, Pu-238/239/240, Am-241), Sr-90, Tc-99

~~1, 500ml, P, WATER, C 14~~

~~B06CF5~~

3, ~~40ml, Gs, WATER, CLP VOA~~

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
C. Ciliberti C. Ciliberti	R. Fridy	5/21/92 1240
Relinquished by:	Received by: B. WHITTON	Date/Time: 5-20-92 08:00
Relinquished by: B. WHITTON	Received by: Elby G. Yamamoto	Date/Time: 5/21/92 10:30 AM
Relinquished by: 5/21/92 Elby G. Yamamoto	Received by:	Date/Time: 5/22/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1256

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-19-92 Time 0921 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CF4	1 ~~3~~, 1L, P	W	CCP-CN (NaOH)
	~~3, 40 ml, Gs~~	~~W~~	~~CCP-VOA~~
	~~3, 2L, G~~	~~W~~	~~CCP Semi VOA/PCB/PEST~~
	~~2, 4L, P~~	~~W~~	~~Gamma Spec, Alpha Spec (U-234/235/~~
			~~238, Pu-238/239/240, Am-241) Sr-90,~~
			~~Tc-99~~
	~~1, 500 Ml, P~~	~~W~~	~~C-14~~
~~B06CF5~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Elby H. Yamamoto Title Sample Control Tech. Date 5/21/92

Analysis Required

BOL # 2509868108 OPC # W92-0-0399-6

150A

9613442.1257

S3-1

Westinghouse Hanford Company	CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5-19-92

Ice Chest No. SML-158

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509668108

Offsite Property No. W92-0-0399-7

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CX7

1 ~~2~~, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CX8~~

~~3, 40ml, Gs, WATER, CLP VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 5-19-92 1240
Relinquished by:	Received by: Bill Whitten B. WHITTEN	Date/Time: 5-20-92 0800
Relinquished by: Bill Whitten B. WHITTEN	Received by: Elby J. Yamamoto	Date/Time: 5/21/92 10:30 AM
Relinquished by: 5/21/92 Elby J. Yamamoto	Received by:	Date/Time: 5/22/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1258

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KD Lee / LD Walker Date Sampled 5-19-92 Time 1245 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CX7	1, 1L, P	W	CLP Cyanide (NaOH)
	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U-234/235/238, Pu-238/239/240, Am-241), Sr 90 (HNO3)~~
	~~1, 500ml, P~~	~~W~~	~~C 14~~
	~~1, 250ml, G~~	~~W~~	~~Tritium~~
B06CX8	3, 40ml, G	W	CLP VOA

Field Information** BOL #: 2509868108
OPC #: W92-0-0399-7

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Elby G. Yamamoto Title Sample Control Tech. Date 5/21/92

Analysis Required

152

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1259

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000005
EPA SAMPLE NO.

B06CF2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R13

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	15	~~B~~ U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

10-5-92 MM

5/18/92

9613442.1260

000006
EPA SAMPLE NO.

B06CF2

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R13

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10-5-92

9613442.1261

000007
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CF3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R14

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	24	~~B~~ UB
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RB 1.1.19 10-5-92 MM

BD 5/8/

9613442.1262

000008

EPA SAMPLE NO.

B06CF3

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R14

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10-5-92

9613442.1263

000009
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CF4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R15

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	20	~~B~~ U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	3	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

10-5-92

5/18/

9613442.1264

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000010
EPA SAMPLE NO.

B06CF4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R15

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10-5-92

9613442.1265

000011

EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CF5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-10A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R16

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	22	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RB 1/1/93
10-5-92
MY

PBD
5/18/92

9613442.1266

000012

EPA SAMPLE NO.

B06CF5

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-10A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R16

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10-5-92

9613442.1267

000013
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R06

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	42	~~B~~ U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

10-5-92

5/18/9

9613442.1268

000014
EPA SAMPLE NO.

B06CG1

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R06

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10-5-92

9613442.1269

000015
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CG3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R07

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	51	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RB 1/11/93
10-5-92

5/18/92

9613942.1270

000016
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CG3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R07

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10-5-92
MM

9613942.1271

000017
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CH8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R10

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	31	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RB 1/11/93
10-5-92

BD 5/18/95

9613442.1R72

000018
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CH8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R10

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10-5-92
NM

9613442.1273

000019

EPA SAMPLE NO.

B06CJ2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R11

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	23	~~B~~ U.
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	3	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

10-5-92

5/18/8

9615442.1274

000020
EPA SAMPLE NO.

B06CJ2

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R11

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10-5-92
MM

9613442.1275

000021
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CJ4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R12

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	17	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RB 1/1/93
10-5-92
MM

PBD 5/18/92

9613442.1276

000022

EPA SAMPLE NO.

B06CJ4

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R12

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10-5-92
MM

9615442.1277

000023

EPA SAMPLE NO.

B06CX8

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-11A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R17

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	16	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RB 10-5-92

PBD 5/18/

9613442.1278

000024
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CX8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-11A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527R17

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10-5-92
MM

9613442.1279

000025

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CF2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N8

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

10-6-92 MY

PBD 5/12/92

9613942.1280

000026

EPA SAMPLE NO.

B06CF2

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N8

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	0.6	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

10-6-92

(1) - Cannot be separated from Diphenylamine

9613442.1281

000021

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CF2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N8

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	99	J
2.	Unknown hydrocarbon	7.45	8	~~BJ~~ U
3.	Unknown alcohol	8.07	2	J
4.	Unknown cyclic ketone	8.98	4	~~BJ~~ U

10-6-92

9613442.1282

000028

EPA SAMPLE NO.

B06CF4

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N9

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

10-6-92 KM

5/18/93

9613442.1283

000029
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CF4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N9

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	22	
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

10-6-92

(1) - Cannot be separated from Diphenylamine

9615442.1284

000030
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CF4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N9

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.23	120	J
2.	Unknown hydrocarbon	5.02	3	J
3.	Unknown hydrocarbon	7.65	8	~~BJ~~ U
4.	Unknown alcohol	8.27	2	J
5.	Unknown cyclic ketone	9.18	4	~~BJ~~ U

10-6-92
MM

9613442.1285

000031

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N3

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

10-6-92 MY

5/18/93

9613442.1286

000032

EPA SAMPLE NO.

B06CG1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N3

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	J
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

10-6-92 MY

(1) - Cannot be separated from Diphenylamine

9615442.1287

000033

EPA SAMPLE NO.

B06CG1

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N3

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	120	J
2.	Unknown hydrocarbon	5.02	16	~~BJ~~ U
3.	Unknown hydrocarbon	7.63	6	~~BJ~~ U
4.	Unknown cyclic ketone	9.18	4	~~BJ~~ U
5.	Unknown hydrocarbon	30.12	3	J

10-6-92
MM

9613442.1288

000034

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CH6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N4

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

10-6-92

BD 5/18/92

9615442.1289

000035

EPA SAMPLE NO.

B06CH6

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N4

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

10-6-92 MM

(1) - Cannot be separated from Diphenylamine

9613442.1290

000036
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CH6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N4

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	110	J
2.	Unknown carboxylix acid este	4.83	11	J
3.	Unknown hydrocarbon	7.28	2	J
4.	Unknown hydrocarbon	7.48	6	J
5.	Unknown cyclic hydrocarbon	8.08	2	J
6.	Unknown cyclic ketone	9.02	3	BJ
7.	Unknown hydrocarbon	9.57	2	J

10-6-92
MY

TMA/Skinner & Sherman Labs **SAMPLE LOG-IN**

WORKORDER S2-06-072 CLIENT HANFORD-NOR No. SAMPLES:

PROTCL CLP TURNARND 33 day 3

COOLER TEMP: 4 oC, or NA (Soil) (Water) (Specify Other)

CUSTODIAN Benney, A. SDG/BATCH N/A

CUSTODY SEAL: PRESENT/ABSENT/INTACT/NOT CLIENT CASE N2-06-023

SHIPER & # Fedex # 2522034294 PO/CONTRACT# L

TAGS: PRESENT/ABSENT/NA/SEE COC CONTACT Dolores Sanchez

CHAIN OF CUSTODY: PRESENT/ABSENT/NA, # N/A COMMENTS: NONE

SAMPLE CONTAINERS INTACT/BROKEN COMMENTS

CLIENT COMMENT? YES/NO

SAMPLE LABELS AGREE WITH CHAIN OF CUSTODY INFO? YES/NO (COMMENT)

CLIENT PAPERWORK AGREES WITH SAMPLES & COC? YES /NO (COMMENT)

SHIPMENT DATES 6.5.92

LIST ANY DATE WITH PAPERWORK/SHIPMENT PROBLEMS & SPECIFY THE PROBLEM:

N/A

	CLIENT ID	MATRIX	RECEIVED	QC	TEST(S)	HOLD TIME UP
1	B06C53	WATER	6.5.92	D,S	TM/CN	
2	56					
3	59					CN due 06.15.92
4						
5						Hg due 6.26.92
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

Completed 6.7.92

Samples are from a site known to have Rad-Contamination: YES ___ NO X N/A ___

The samples have dectable amounts of Radioactive Material: YES ___ NO X N/A ___

SUBCONTRACT: YES/NO TO: _____ DATE: _____

REVIEWED _____

*EPA/CLP Required Rev. 1.6

9613442.1292

000037
EPA SAMPLE NO.

B06CJ2

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N7

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

10-6-92 NM

BD 5/18/93

9613442.1295

000038
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CJ2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N7

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	2	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

10-6-92
MY

9613442.1294

000039

EPA SAMPLE NO.

B06CJ2

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20615N7

Level: (low/med) LOW Date Received: 05/21/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/22/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.25	150	J
2.	Unknown hydrocarbon	4.47	150	J
3.	Unknown hydrocarbon	7.75	11	~~BJ~~ U
4.	Unknown cyclic alcohol	8.38	2	J
5.	Unknown cyclic ketone	9.32	6	~~BJ~~ U
6.	Unknown compound	25.45	4	J
7.	Unknown compound	25.58	4	J
8.	Unknown hydrocarbon	28.62	3	J
9.	Unknown hydrocarbon	29.07	3	J

10-6-92
MY

9613442.1295

000040
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CF2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/21/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/22/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/24/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U J
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U J
58-89-9	gamma-BHC (Lindane)	0.050	U J
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

10-12-92

5/8/93

9615442.1296

000041

EPA SAMPLE NO.

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CF4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/21/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/22/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/24/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	UJ
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	UJ
58-89-9	gamma-BHC (Lindane)	0.050	UJ
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

10-12-92 MM

PBD 5/13/93

9613442.1297

000042
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/21/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/22/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/24/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

10-12-92 MM

PBD 5/18/93

9613442.1298

000043

EPA SAMPLE NO.

B06CH6

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/21/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/22/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/24/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

10-12-92

PBD 5/18/93

9615442.1299

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

000044
EPA SAMPLE NO.

B06CJ2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05071 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205071-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Moisture: _____ decanted: (Y/N) ___ Date Received: 05/21/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/22/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/24/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

10-12-92

5/18/93

9613442.1500

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CF2

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-138SAS No.: SDG No.: B06CF2

Matrix (soil/water): WATER Lab Sample ID: 05241-04S

Level (low/med): LOW Date Received: 05/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U	~~N~~ J.	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CF4

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-138SAS No.: SDG No.: B06CF2

Matrix (soil/water): WATER Lab Sample ID: 05241-05S

Level (low/med): LOW Date Received: 05/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U	~~N~~ J.	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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PBJ 5/12/93

9613442.1302

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CG1

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-138SAS No.: SDG No.: B06CF2

Matrix (soil/water): WATER Lab Sample ID: 05241-01S

Level (low/med): LOW Date Received: 05/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2970.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	11.50			F
7440-39-3	Barium	68.80	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	29400.00			P
7440-47-3	Chromium	63.30			P
7440-48-4	Cobalt	4.40	B		P
7440-50-8	Copper	27.60			P
7439-89-6	Iron	4540.00			P
7439-92-1	Lead	3.00			F
7439-95-4	Magnesium	11400.00			P
7439-96-5	Manganese	204.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	33.50	B		P
7440-09-7	Potassium	5180.00			P
7782-49-2	Selenium	20.00	U	~~WN~~ J	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	21200.00			P
7440-28-0	Thallium	2.00	U	~~WN~~ J	F
7440-62-2	Vanadium	22.90	B		P
7440-66-6	Zinc	395.00			P
	Cyanide	10.00	U	~~N~~ J	CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

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WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CH6

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-138SAS No.: SDG No.: B06CF2

Matrix (soil/water): WATER Lab Sample ID: 05241-02S

Level (low/med): LOW Date Received: 05/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25.00	B		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.10	B		F
7440-39-3	Barium	43.10	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	40400.00			P
7440-47-3	Chromium	82.60			P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	3.90	B		P
7439-89-6	Iron	1450.00			P
7439-92-1	Lead	2.80	B		F
7439-95-4	Magnesium	10100.00			P
7439-96-5	Manganese	23.80			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	27.90	B		P
7440-09-7	Potassium	3360.00	B		P
7782-49-2	Selenium	4.00	U	~~WN~~ J	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	12800.00			P
7440-28-0	Thallium	2.00	U	~~WN~~ J	F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	22.30			P
	Cyanide	10.00	U	~~N~~ J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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9613442.1304

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CJ2

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-138SAS No.: SDG No.: B06CF2

Matrix (soil/water): WATER Lab Sample ID: 05241-03S

Level (low/med): LOW Date Received: 05/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	51.10	B		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.00	B		F
7440-39-3	Barium	60.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	75000.00			P
7440-47-3	Chromium	156.00			P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	4.10	B		P
7439-89-6	Iron	323.00			P
7439-92-1	Lead	3.20			F
7439-95-4	Magnesium	16500.00			P
7439-96-5	Manganese	98.20			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	22.70	B		P
7440-09-7	Potassium	4740.00	B		P
7782-49-2	Selenium	8.10		~~N~~ J	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	11600.00			P
7440-28-0	Thallium	2.00	U	~~UN~~ J	F
7440-62-2	Vanadium	4.10	B		P
7440-66-6	Zinc	18.60	B		P
	Cyanide	10.00	U	~~N~~ J.	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev.6/89

006

9615442.1505

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CX7

ab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

.ab Code: SKINER Case No.: N2-05-138SAS No.: SDG No.: B06CF2

1atrix (soil/water): WATER Lab Sample ID: 05241-06S

.evel (low/med): LOW Date Received: 05/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U	~~N~~ J.	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

5/18/93

Rev 6/89

007

TMA Inc. REPORT Work Order # A2-05-071

Received: 05/21/92

Results by Sample

SAMPLE ID B06CG1 FRACTION 01C TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 05/19/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT	
Fluoride	300	0.6	mg/L	0.1	
Chloride	300	5.4	mg/L	0.2	
Nitrite	300	<0.1	mg/L	0.1	U
Nitrate	300	1.9	mg/L	0.2	
Sulfate	300	32	mg/L	1	
Phosphate	300	<0.4	mg/L	0.4	U
Elect. Conductivity	120.1	269	umho/cm	6	
pH	150.1	8.1	pH	0.1	J

FORM I

5/18/93

TMA Inc. REPORT Work Order # A2-05-071

Received: 05/21/92 Results by Sample

SAMPLE ID B06CM6 FRACTION 03E TEST CODE WCCLPL NAME Anions & Wet Chem. - VM043

Date & Time Collected 05/19/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT	
Fluoride	300	0.4	mg/L	0.1	
Chloride	300	14.7	mg/L	0.2	
Nitrite	300	<0.1	mg/L	0.1	U
Nitrate	300	3.2	mg/L	0.2	
Sulfate	300	57	mg/L	1	
Phosphate	300	<0.4	mg/L	0.4	U
Elect. Conductivity	120.1	305	umho/cm	5	
pH	150.1	7.6	pH	0.1	J

FORM I

5/12/92

TNA Inc. REPORT Work Order # A2-05-071

Received: 05/21/92 Results by Sample

SAMPLE ID B06CJ2 FRACTION 05C TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 05/19/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT	
Fluoride	300	0.4	mg/L	0.1	
Chloride	300	22.2	mg/L	0.2	
Nitrite	300	<0.1	mg/L	0.1	U
Nitrate	300	13.5	mg/L	0.2	
Sulfate	300	115	mg/L	1	
Phosphate	300	<0.4	mg/L	0.4	U
Elect. Conductivity	120.1	507	umho/cm	6	
pH	150.1	7.9	pH	0.1	J

FORM I

PBD 5/18/93

9613442.1309

B06CV0-TMA-168

TMA
Thermo Analytical Inc.

300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200
FAX (617) 890-3883

JUN 1992
RECEIVED
OSM DMO

June 23, 1992

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Quality Control Narrative

Scope

Three (3) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on May 19,1992 from Westinghouse Hanford Company. The sample was analyzed for cyanide only. The analysis was performed under Skinner and Sherman work order S205202.

Methodology

The samples were prepared, analyzed and reported in accordance with the USEPA Contract Laboratory Program Statement of Work 7/88 (CLP SOW788).

Discussion

All quality control requirements were met for the samples.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

1-16-96
MC

9613442.1510

TMA
Thermo Analytical Inc.

TMA/Norcal
2030 Wright Avenue
P.O. Box 4040
Richmond, CA 94804-0040
(415) 235-2633 Fax No. (415) 235-0438

AUG 1992
RECEIVED
OSM DMO

August 18, 1992

Jeanette Duncan
Westinghouse Hanford Company
2355 Stevens Drive
Richland, WA 99352

Reference: Organics Case 05-056 and Metals Case N2-05-108
WHC Samples B0GCV0, B0GCV6, B0GCW4, B0GCT9, B0GCV5 and B0GCW3

Dear Jeannette:

This will confirm that the WHC sample identification numbers on the above cases should have read B06CV0, B06CV6, B06CW4, B06CT9, B06CV5 and B06CW3.

Sincerely,

Dolores Sanchez
Program Coordinator

9613442.1311

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B0GCT9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-108SAS No.: SDG No.: B0GCT9

Matrix (soil/water): WATER Lab Sample ID: 05202-01S

Level (low/med): LOW Date Received: 05/19/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev.6/89

001A

9613442.1312

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B0GCV5

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-108SAS No.: SDG No.: B0GCT9

Matrix (soil/water): WATER Lab Sample ID: 05202-02S

Level (low/med): LOW Date Received: 05/19/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev.6/89

9613442.1313

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B0GCW3

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-108SAS No.: SDG No.: B0GCT9

Matrix (soil/water): WATER Lab Sample ID: 05202-03S

Level (low/med): LOW Date Received: 05/19/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev.6/89

9615442.1314

TMA/Skinner & Sherman Labs **SAMPLE LOG-IN**

WORKORDER S205202 CLIENT HANFORD NOR No. SAMPLES:

PROTCL CLP TURNARND 33 Day 3

COOLER TEMP: 4 oC, or NA (Soil) (Water) (Specify Other)

CUSTODIAN Antonia Benney SDG/BATCH N/A

CUSTODY SEAL: PRESENT/ABSENT/INTACT/NOT CLIENT CASE N205108

SHIPER & # Fed Ex 2126597150 PO/CONTRACT# N205108

TAGS: PRESENT/ABSENT/NA/SEE COC CONTACT Dolores Sanchez

CHAIN OF CUSTODY: PRESENT/ABSENT/NA,# N/A COMMENTS: NONE

SAMPLE CONTAINERS-INTACT/BROKEN COMMENTS

CLIENT COMMENT? YES/NO

SAMPLE LABELS AGREE WITH CHAIN OF CUSTODY INFO? YES/NO (COMMENT)

CLIENT PAPERWORK AGREES WITH SAMPLES & COC? YES /NO (COMMENT)

SHIPMENT DATES 5-19-92

LIST ANY DATE WITH PAPERWORK/SHIPMENT PROBLEMS & SPECIFY THE PROBLEM:

	CLIENT ID	MATRIX	RECEIVED	QC	TEST(S)	HOLD TIME UP
1	BOGCT9	water	5-19-92	D,S	CN	
2	BOGCV5	↓	↓		↓	due 5/27/92
3	BOGCW3					
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

Contd 5/21/92 AB

Samples are from site known to have Rad-Contamination: YES ✓ NO

Samples have detectable amounts of Radioactive Material: YES ✓ NO

SUBCONTRACT: YES/NO, TO: DATE:

REVIEWED Rev. 1.4 PAGE

9613442.1515

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5-14-92

Ice Chest No. RM 82

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 2509868031

Offsite Property No. W92-0-0345-42

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B0 6CT9

3, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu 238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CV0~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

2 KT 5/15/92

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 5-14-92 / 1600
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 5/15/92 0737
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: 5-18-92 * 0800
Relinquished by: Kermit Blum 5-18-92	Received by: [illegible]	Date/Time: 5/19/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* Received @ TMA/NORCAL 5-16-92 @ 1330; opened 5-18-92 - KB

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1316

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 5/14/92 Time 1220 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CT9	3, 1L, P	W	CLP Cyanide (NaOH)
	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U-234, 235/238, Pu-238/239/240, Am-241), Sr-90 (HNO_3)~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250ml, G~~	~~W~~	~~Tritium~~
~~B06CV0~~	~~2, 40ml, GS~~	~~W~~	~~CLP-VOA~~
	2 KB 5/15/92		

Field Information** BOC #: 2509869031
OPC #: W92-0-034-42

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-18-92

Analysis Required

028

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1317

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5-14-92

Ice Chest No. SMC-94

Field Logbook No. EFC-0057

Bill of Lading/Airbill No. 250986803 1

Offsite Property No. W92-0-0345-42

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CV5

3, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CV6~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker D Walker	Received by: Refrigerator	Date/Time: 5-14-92 / 1600
Relinquished by: Kermit Blum 5-18-92	Received by: K. Trapp / K. Trapp	Date/Time: 5/15/92 0737
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: * 5-18-92 0800
Relinquished by:	Received by: [illegible]	Date/Time: 5/19/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* Received @ TMA/NORCAL 5-16-92 @ 1330; opened 5-18-92. KB

029

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1318

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 5/14/92 Time 0925 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CV5	3, 1L, P	W	CLP-Cyanide (NaOH)
	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250ml, G~~	~~W~~	~~Tritium~~
B06CV6	3, 40ml, GS	W	CLP-VOA

Field Information** BOL #: 2509868031
OPC #: W92-0-0345-42

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-18-92

Analysis Required

030

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1319

Westinghouse Hanford Company	CHAIN OF CUSTODY	S & S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5-14-92

Ice Chest No. UGLY ONE

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 2509868031

Offsite Property No. W92-0-0345-43

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CW3

3, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CW4~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
J.D. Walker	Refrigerator	5-14-92 / 1600
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 5/15/92 0737
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: * 5-18-92 0800
Relinquished by: Kermit Blum 5-18-92	Received by:	Date/Time: 5/19/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* Received @ TMA/NorCal 5-16-92 @ 1330; opened 5-18-92. KB

031

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1320

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 5/14/92 Time 1325 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B0GCW3	3, 1L, P	W	CLP-Cyanide (NaOH)
	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U 234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO_3)~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250ml, G~~	~~W~~	~~Tritium~~
~~B0GCW4~~	~~3, 40ml, GS~~	~~W~~	~~CLP-VOA~~

Field Information** BOC #: 2509868031
OPC #: W92-0-0345-43

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-18-92

Analysis Required

032

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1321

01

TMA

WESTINGHOUSE HANFORD COMPANY

Results of Analyses For:

ORGANICS
Case No. 05-056
(TMA/ARLI Work Order # A2-05-056)

METALS
Case No. N2-05-108
(TMA/Skinner & Sherman W.O. # S2-05-202)

JUN 1992
RECEIVED
OSM

June 23, 1992

TMA Master Work Order N2-05-108

CASE NARRATIVE

LABORATORY : TMA/ARLI

CASE : 05-056

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : May 18, 1992

1.0 DESCRIPTION OF CASE :

Three water samples were analyzed for TCL Organics-Volatiles according to the USEPA Contract Laboratory Program (CLP) Statement of Work for Organic Analysis, Revision OLM01.8.

2.0 SAMPLE LIST :

WESTINGHOUSE ID	LAB ID	ANALYSIS REQUESTED	MATRIX	pH
BOGCV0	A2-05-056-01A	V	WATER	6
BOGCV6	A2-05-056-02A	V	WATER	6
BOGCV6 MS	A2-05-056-02B	V	WATER	6
BOGCV6 MSD	A2-05-056-02C	V	WATER	6
BOGCW4	A2-05-056-03A	V	WATER	6

3.0 COMMENTS :

3.1 SHIPPING AND DOCUMENTATION :

All samples were received unbroken and properly documented.

3.2 ANALYSIS

3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were analyzed within the CLP SOW holding times. All of the QC results were within the limits specified by the EPA CLP SOW.

TUNES :

All of the BFB tunes are injected directly into the GC/MS instrument.

We certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data in this hardcopy data package and in the computer-readable data submitted on diskette is authorized by the Laboratory Manager or his designee, as verified by the following signatures.

Nicole Roth
CLP Program Manager

Dennis D. Wells
Technical Director

9613442.1324

000010
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B0GCV0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05056 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205056-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20521B16

Level: (low/med) LOW Date Received: 05/18/92

% Moisture: not dec. ____ Date Analyzed: 05/21/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B0GCV0

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05056 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205056-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20521B16

Level: (low/med) LOW Date Received: 05/18/92

% Moisture: not dec. ____ Date Analyzed: 05/21/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0GCV6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05056 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205056-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20521B17

Level: (low/med) LOW Date Received: 05/18/92

% Moisture: not dec. ____ Date Analyzed: 05/21/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1327

000024
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B0GCV6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05056 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205056-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20521B17

Level: (low/med) LOW Date Received: 05/18/92

% Moisture: not dec. ____ Date Analyzed: 05/21/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0GCW4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05056 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205056-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20521B20

Level: (low/med) LOW Date Received: 05/18/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B0GCW4

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05056 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205056-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20521B20

Level: (low/med) LOW Date Received: 05/18/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1330

000023

EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B0CCV6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05056 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205056-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20521B17

Level: (low/med) LOW Date Received: 05/18/92

% Moisture: not dec. ____ Date Analyzed: 05/21/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1/22/92

5/18/92

9613442.1331

000024
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B0GCV6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05056 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205056-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20521B17

Level: (low/med) LOW Date Received: 05/18/92

% Moisture: not dec. ____ Date Analyzed: 05/21/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10/22/92

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0GCW4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05056 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205056-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20521B20

Level: (low/med) LOW Date Received: 05/18/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

5/18/93

9613442.1533

000035
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B0GCW4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05056 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205056-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20521B20

Level: (low/med) LOW Date Received: 05/18/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10/22/92
MA

9613442.1334

000010

EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B0~~5~~6CV0

RB 5/26/93

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05056 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205056-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20521B16

Level: (low/med) LOW Date Received: 05/18/92

% Moisture: not dec. ____ Date Analyzed: 05/21/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

10/22/92

PBD 5/18/93

9613442.1335

000011
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B0GCV0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05056 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205056-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20521B16

Level: (low/med) LOW Date Received: 05/18/92

% Moisture: not dec. ____ Date Analyzed: 05/21/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

10/22/92

9613442.1356

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B0~~6~~CT9 6

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-108SAS No.: SDG No.: B0~~6~~CT9 6

Matrix (soil/water): WATER Lab Sample ID: 05202-01S

Level (low/med): LOW Date Received: 05/19/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

PBD 5/12/93

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev.6/89

001A

9613442.1557

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B0~~6~~CV5 6

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-108SAS No.: SDG No.: B0~~6~~CT9 6

Matrix (soil/water): WATER Lab Sample ID: 05202-02S

Level (low/med): LOW Date Received: 05/19/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev.6/89

9613442.1548

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B0GCW3
6
RB 5/26/93

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-108SAS No.: SDG No.: B0GCT9

Matrix (soil/water): WATER Lab Sample ID: 05202-03S

Level (low/med): LOW Date Received: 05/19/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

BJ 5/18/93

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN Rev.6/89

CASE NARRATIVE

LABORATORY : TMA/ARLI

CASE : 06-025

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : June 8, 1992

1.0 DESCRIPTION OF CASE :

Five water samples were analyzed for TCL Organics-Volatiles, Semivolatiles, and Pesticide/PCBs according to the USEPA Contract Laboratory Program (CLP) Statement of Work for Organic Analysis, Revision OLM01.8.

2.0 SAMPLE LIST :

WESTINGHOUSE ID	LAB ID	ANALYSIS REQUESTED	MATRIX	pH
B06CV2	A2-06-025-01A	V	WATER	7
B06CW0	A2-06-025-02A	V	WATER	7
B06CW0 MS	A2-06-025-02B	V	WATER	7
B06CW0 MSD	A2-06-025-02C	V	WATER	7
B06CX0	A2-06-025-03A	V	WATER	7
B06CP6	A2-06-025-04A	V	WATER	7
B06CP6	A2-06-025-04B	SV & P	WATER	
B06CP6 MS	A2-06-025-04C	SV & P	WATER	
B06CP6 MSD	A2-06-025-04D	SV & P	WATER	
B06CP8	A2-06-025-05A	V	WATER	7

3.0 COMMENTS :

3.1 SHIPPING AND DOCUMENTATION :

All samples were received unbroken and properly documented. One of the three VOA vials for sample B06CV2 contained an air bubble upon receipt.

3.2 ANALYSIS

3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were analyzed within the CLP SOW holding times. All of the QC results were within the limits specified by the EPA CLP SOW.

TUNES :

All of the BFB tunes are injected directly into the GC/MS instrument.

3.2.2 SEMIVOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. The Base Neutral (BN) surrogate recoveries for the samples, MS, MSD and the blank were above the QC limits. The BN surrogates that were above the limit included Nitrobenzene, 2-Fluorobiphenyl, and the advisory surrogate 1,2-Dichlorobenzene-d4. It has been determined that the BN surrogate lot had become more concentrated over a period of time after the original QC of the lot. The samples could not be re-extracted since the sample was consumed in the original extraction. The acid surrogate recoveries were within the QC limits. There were no TCL analytes detected in the sample.

Both the MS and MSD samples had matrix spike recoveries for 4-Nitrophenol that were above the QC limit. No further action was required.

All of the other QC results were within the limits specified by the EPA CLP SOW.

3.2.3 PESTICIDE/PCB ANALYSIS COMMENTS :

SEQUENCE NOTES :

The sequence was started on 6/22/92 and was analyzed in accordance with the EPA CLP SOW. The instrument blanks, PEMs and calibration verification standards all met the requirements established by the EPA CLP SOW.

SAMPLE NOTES :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. All of the QC results were within the limits specified by the EPA CLP SOW.

We certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data in this hardcopy data package and in the computer-readable data submitted on diskette is authorized by the Laboratory Manager or his designee, as verified by the following signatures.

Nicole Roth
CLP Program Manager

Wida Ang
Organics Supervisor

9613442.1342

Westinghouse Hanford Company

NONCONFORMANCE REPORT

1. Page 1 of 1

2. Preprinted No. 050506

QA Log No. EQA-92-121

3. P. O., W. O., or Job Control No.	4. System/End Use	5. Item/Material	6. Dwg./Spec./Other No.	7. Rev.
N/A	RI/FS	Water Samples	N/A	N/A

8. Program/Project/Other	9. Safety Class	10. ASME Code Items
100-HR-3	N/A	☐ Yes ☒ No (If yes, notify authorized inspector)

11. Supplier Name/Address	12. Notification of Potential Occurence Required
Environmental Field Services	☐ Yes ☒ No

13. Code: Lot/Heat/Serial	14. Lot Size	15. Sample	16. Qty. Acc.	17. Inspection Criteria
N/A	1	1	N/A	☐ Dwg. ☐ Spec. ☐ Insp. Plan ☒ Other EII 5.8 App. A, Section 5.0

18. Item	19. Description of Nonconformance (list serial no. where applicable)	22. Disposition, Justification, and Instructions
1	IHA Received sample B06CV2 for VOA analyses. The VOA vial was received with air bubbles (the vial is supposed to be 12-16-92 and have zero head space).	~~SR 3-4-93 THE LAB ONLY ANALYZED THE VIALS WITHOUT HEADSPACE.~~ The laboratory shall discard any VOA vial that contains air bubbles. The VOA analysis shall be performed utilizing the remaining vials.

20. Originator's Signature	Date	23. Design Document Change Required?
Kurt N. Pool	12/16/92	☐ Yes, Doc. No. ____ ☒ No
21. Cognizant QA Manager's Signature	**Date**	**24. Corrective Action Required?**
[signature]	1-19-93	☐ Yes, No. ____ ☒ No

Disp. App.	25. Cognizant Engineer	Date	26. Technical Rep.	Date	Signature/Org.	Date
	SE Vukelich [signature]	3-4-93				
	QA Engineer	Date	Signature/Org.	Date	Signature/Org.	Date
	GS Clerigan [signature]	3-4-93				

Close

27. Accept ____ Reject X Follow on NCR NA

[signature] 3-4-93
QA/C Personnel Date

A-7310-104 (10/91)

9613442.1343

OFFICE OF SAMPLE MANAGEMENT

RECORD OF DISPOSITION

ROD-92-00124
Record of Disposition No.

DATE: 6-22-92

LABORATORY: TMA

PROJECT TITLE/NO.: 100-HR-3

NCR NO.: ~~B08342~~ 050506 JMD 12-16-92

SAMPLE IDENTIFICATION NUMBERS:

B06CV2

DESCRIPTION OF EVENT:

TMA LABORATORY RECEIVED SAMPLE B06CV2 FOR VOA ANALYSIS.
THE VOA VIAL WAS RECEIVED WITH AIR BUBBLES(THE VIAL IS
SUPPOSED TO HAVE ZERO HEAD SPACE).

DISPOSITION OF SAMPLES:

PER STEVE VUKOLICH,THE VOA ANALYSIS IS TO CONTINUE.
TMA LABORATORY HAS BEEN NOTIFIED.

APPROVAL SIGNATURES:

KARL POOL/ Karl N. Pool — 6/25/92
OSM Project Coordinator (Print/Sign Name) — Date

STEVE VUKOLICH/ Steve Vukolich — 7/13/92
Technical Representative (Print/Sign Name) — Date

Quality Assurance (Print/Sign Name) — Date

9613442.1344

N206037

Westinghouse Hanford Company	CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-4-92

Ice Chest No. SML-90

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509866702

Offsite Property No. W92-0-0399-24

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CV1
- 3, 1L, P, WATER, CLP-CYANIDE (NaOH)
- 2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)
- 1, 500ml, P, WATER, C-14
- 1, 250ml, G, WATER, TRITIUM

B06CV2
- 3, 40ml, Gs, WATER, CLP-VOA*

Karl this need does this need any type of documentation?

STU - what do you think? NCR against the samplers

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
L.D. Walker	Refrigerator	6-4-92 / 1600
	B. WHITEN	6-5-92 - 0700
B. WHITEN	Kermit Blum	6-8-92 0800

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* One vial, B06CV2, received @ TMA/NORCAL with air bubbles. KB

** Received @ TMA/NORCAL 6-6-92; opened 6-8-92. KB

9613442.1345

Re

RECEIVED

JAN 19 1992

T.L. BENNINGTON

QUALITY ASSURANCE

NONCONFORMANCE REPORT DISTRIBUTION

1. FROM:	2. MSIN:	3. DATE:
Environmental QA	H4-16	1-19-93

4. NCR No.:	5. Initiation, Disposition, or Closure (I, D, C):
050506 / EQA-92-121	I

6. TO:		MSIN	I	D	C
Cognizant Engineer	S. E. Vukelich	H6-02			
Cognizant Quality Engineer	G. S. Corrigan	H4-16			
Originator	K. N. Pool	H4-23			
Q. A. Manager	NA	NA			
Cognizant QE Manager	T. L. Bennington	H4-16			
Facility Manager	NA	NA			
Engineering Records	L. M. McDaniel	H6-08			
Safety	NA	NA			
QSDM		L4-86			
Other: JCS Package	NA	NA			
Q. C.	NA	NA			
Buyer (Procurement)	NA	NA			
P.O. File (Procurement)	NA	NA			
Vendor File (Procurement)	NA	NA			
EQA File		H4-16			
	J H Kessner	H4-23			

7. QST Codes

Subject:	Cause:	Contr. Factor:	PPG:
AD-08	PN-002		

8. Responsible Action Party:	Org Code:
S. E. Vukelich	81310

A-6000-816 (09/91)

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CP6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R12

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	12	
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CP6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R12

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1548

000007
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R13

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1349

000008
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CP8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R13

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9615442.1550

000009

EPA SAMPLE NO.

B06CV2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R05

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CV2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R05

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1352

000011
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CW0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R06

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1353

000012

EPA SAMPLE NO.

B06CW0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R06

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CX0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R10

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	55	
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1355

000014
EPA SAMPLE NO.

B06CX0

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R10

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CP6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20626N3

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/11/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

9613442.1357

000016
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20626N3

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/11/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CP6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20626N3

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/11/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown hydrocarbon	4.23	18	BJ
2.	Unknown hydrocarbon	7.40	2	BJ
3.	Unknown cyclic hydrocarbon	20.33	3	J

9613442.1359

000018
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CP6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 06/08/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 06/11/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1569

000002

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARLI

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-4-92

Ice Chest No. SML-90

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509868702

Offsite Property No. W92-0-0399-24

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

~~B06CV1~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

B06CV2

3, 40ml, Gs, WATER, CLP-VOA*

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker	Received by: Refrigerator	Date/Time: 6-4-92 / 1600
Relinquished by:	Received by: B WHITEN	Date/Time: 6-5-92 - 0700
Relinquished by: B WHITEN	Received by: Kermit Blum	Date/Time: 6-8-92 0800
Relinquished by: Kermit Blum 6-8-92	Received by: C. Harris	Date/Time: 6/9/92 900

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* One vial, B06CV2, received @ TMA/NORCAL with air bubbles. KB

** Received @ TMA/NORCAL 6-6-92; opened 6-8-92. KB

9615442.1561

000003

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 6-4-92 Time 1400 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
~~B06CV1~~	~~3, 1L, P~~	~~W~~	~~CLP Cyanide (NaOH)~~
✓	~~2, 1L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U 234/235/238, Pu 238/239/240, Am 241), Sr 90 (HNO_3)~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250ml, G~~	~~W~~	~~Tritium~~
B06CV2	3, 40ml, Gs	W	CLP-VOA (one vial bubble)

Field Information** BOC #: 2509868702

OPC #: W92-0-0399-24

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-8-92

Analysis Required

9613442.1362

000004

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARLI

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-4-92

Ice Chest No. 14 NM 2

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509866702

Offsite Property No. W92-0-0399-24

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

~~B06CV0~~
~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~
~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06CW0
3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
L D Walker LD Walker	Refrigerator	6/4/92 1600
	B Whitton	6-5-92 0700
B WHITTON	Kermit Blum	6-8-92 * 0800
Kermit Blum 6-8-92	C. Harris	6/9/92 9 00

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* Received @ TMA/NORCAL 6-6-92; opened 6-8-92. KB

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 6-4-92 Time 1205 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
~~B06CV7~~	~~3, 1L, P~~	~~w~~	~~CLP Granic (10w0H)~~
✓	~~2, 4L, P~~	~~w~~	~~Gross Gamma Spec, Alpha Spec (U 234/235/238, Pu 238/239/240, Am-241), Sr-90 (11003)~~
✓	~~1, 500ml, P~~	~~w~~	~~Cyn~~
✓	~~1, 250ml, G~~	~~w~~	~~Tritium~~
B06CW0	3, 40ml, Gs	W	CLP-VOA

Field Information** BOL #: 2509868702

OPC #: W92-0-0399-24

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-8-92

Analysis Required

9613442.1364

000006

H4-11

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARLI

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-4-92

Ice Chest No. 55

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509969702

Offsite Property No. W92-0-0399-25

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

~~B06G4~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~
~~2, 4L, P, WATER, GAMMA-SPEC, ALPHA-SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06CX0

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 6-4-92 / 1600
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 6/5/92 / 0700
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: * 6-8-92 0800
Relinquished by: Kermit Blum 6-8-92	Received by: C. Harris	Date/Time: 6/9/92 9^00

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* Received 6-6-92; opened 6-8-92 @ TMA/NORCAL. KB

9613442.1365

000007

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task # 9-165

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 6/4/92 Time 0955 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
~~B0GCW9~~	~~3, 1L, P~~	~~W~~	~~CLP-Cyanide (NaOH)~~
✓	~~2, 1L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U 234, 235/238, Pu 238/239/240, Am 241), Sr-90 (HNO3)~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250ml, G~~	~~W~~	~~Tritium~~
✓ B0GCX0	3, 40ml, Gs	W	CLP-VOA

Field Information** BOC #: 2509869702
OPC #: W92-0-0399-25

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-8-92

Analysis Required

9613442.1366

000008

H4-49

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-4-92

Ice Chest No. SML-17

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509869702

Offsite Property No. W92-0-0399-25

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CP6

~~3, 1L, P, WATER, CLP-IGP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CP7~~

~~3, 1L, P, WATER, CLP-IGP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CP8

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 6/4/92 - 1600
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 6/5/92 0700
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: * 6-8-92 0800
Relinquished by: Kermit Blum 6-8-92	Received by: C. Hanes	Date/Time: 6/9/92 9[illegible]

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* Received @ TMA/NORCAL 6-6-92; opened 6-8-92 • KB

9615492.1367

000009

Task #: 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6/4/92 Time 1025 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ B0GCP6	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO_3), unfiltered~~
✓	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
✓	3, 40M, Gs	W	CLP - VOA
✓	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
✓	1, 500 ml, G	W	ANions, pH
✓	1, 500ml, G	W	Cond.
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
✓ B0GCP7	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO_3) filtered~~
✓ B0GCP8	3, 40 ml, Gs	W	CLP-VOA

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

PART II: LABORATORY SECTION

Received by: Kermit Blum Title Sample Control Supervisor Date 6-8-92

SAMPLE LOG-IN SHEET

LAB NAME : TMA/ARLI

PAGE : 1 OF 1

RECEIVED BY (PRINT NAME): CAROLE HARRIS

LOG-IN-DATE : 6/9/98

RECEIVED BY (SIGNATURE) Carole Harris

CASE NUMBER:

SAMPLE DELIVERY GROUP NO.:

SAS NUMBER:

REMARKS:

1. Custody Seal(s) Present/Absent* Intact/Broken
2. Custody Seal Nos: _____
3. Chain of Custody Records Present/Absent*
4. Traffic Reports or Packing List Present/Absent*
5. Airbill Airbill/Sticker Present/Absent*
6. Airbill No.: 2521034456
7. Sample Tags Present/Absent*
8. Sample Tags Numbers Listed/Not Listed on Chain of Custody
9. Sample Condition: Intact/Broken*/Leaking
10. Does information on custody records, traffic reports, and sample tags agree Yes/No*
11. Date Recieved at Lab: 6/9/98
12. Temp of ice chest 4.0 °C
13. Time Recieved: 9:00 AM

SAMPLE TRANSFER

Fraction: _____

Area #: _____

By: _____

On: _____

EPA SAMPLE #	CORRESPONDING SAMPLE TAG #	CORRESPONDING ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC
	BO6CV7	AZ-06-035-01	
	BO6CW0	AZ-06-035-02	
	BO6CX0	AZ-06-035-03	
	BO6CP6	AZ-06-035-04	
	BO6CP8	AZ-06-035-05	

* Contact SMO and attach record of resolution

Reviewed By: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

FORM DC-1

TMA/ARLI
Thermo Analytical Inc.

RADIATION DOSE RATE SURVEY FORM

Date 6/9/92 COMPANY NORCAL (WHC) OTHER ORD # 2521034456

Surveyor's Name MARK S. McCray

Model No. HP-210 / ESP-1 Model No. AC-3-7 / ESP-1

Serial Nos. 710289 / 02619 Serial Nos. 407726 / 02628

Calibration Date 3/25/92 Calibration Date 11/15/91

Instrument Calibration Factor 0.280 Instrument Calibration Factor 0.177

Sample	Location	HP-210 CPM	HP-210 Factor	HP-210 DPM	AC-3-7 CPM	AC-3-7 Factor	AC-3-7 DPM	Spillage or Breakage?	Activity, nCi/mL or nCi/g
Background		38.0			0				
Consistency		7,330	0.2830		5,005	0.1840			
Smears: HILLS		31.0			1.0			NONE	
Reported (WHC) 9 SA. each <50 pCi/gr.									

Comments:

All OK ✓ Approved MSK

Not OK Date 6/9/92

9613442.1570

000012

FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5355 TOLL FREE

AIRBILL
PACKAGE
TRACKING NUMBER

2521034456

2521034456

RECIPIENT'S COPY

1 Date 6.4.92

From (Your Name) Please Print: SAM

Your Phone Number (very important)

Company

Department/Floor No

Street Address

City

State

ZIP Required

2 To (Recipient's Name) Please Print: SAM

Recipient's Phone Number (very important)

Company: TMAJ ARI

Department/Floor

Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes): 160 TAMAL

City: MARIN

State: CA.

ZIP Required: 94016

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice): 2320.6400

H IF HOLD FOR PICK-UP, Print FEDEX Address Here

Street Address

City

State

ZIP Required

3 PAYMENT 1 ☐ Bill Sender 2 ☐ Bill Recipient's FedEx Acct No 3 ☐ Bill 3rd Party FedEx Acct No 4 ☐ Bill Credit Card

5 ☐ Cash/Check

4 SERVICES (Check only one box)

Priority Overnight
- 11 ☑ YOUR PACKAGING
- 16 ☐ FEDEX LETTER *
- 12 ☐ FEDEX PAK *
- 13 ☐ FEDEX BOX
- 14 ☐ FEDEX TUBE

Standard Overnight
- 51 ☐ YOUR PACKAGING
- 56 ☐ FEDEX LETTER *
- 52 ☐ FEDEX PAK *
- 53 ☐ FEDEX BOX
- 54 ☐ FEDEX TUBE

Economy Two-Day
- 30 ☐ ECONOMY

Government Overnight
- 46 ☐ GOVT LETTER
- 41 ☐ GOVT PACKAGE

Freight Service
- 70 ☐ OVERNIGHT FREIGHT **
- 80 ☐ TWO-DAY FREIGHT **

† Delivery commitment time is based on business days.
* Declared value limit $100.
** Call for delivery schedule.

5 DELIVERY AND SPECIAL HANDLING (Check services required)
- 1 ☐ HOLD FOR PICK-UP
- 2 ☑ DELIVER WEEKDAY
- 3 DELIVER SATURDAY (Extra charge) ☐
- 4 ☐ DANGEROUS GOODS (Extra charge)
- 5 ☐
- 6 ☐ DRY ICE
- 7 ☐ OTHER SPECIAL SERVICE
- 8 ☐
- 9 ☐ SATURDAY PICK-UP (Extra charge)
- 10 ☐
- 11 ☐
- 12 ☐ HOLIDAY DELIVERY (Extra charge)

6 PACKAGES | WEIGHT in Pounds Only | YOUR DECLARED VALUE

Total | Total | Total: 1

DIM SHIPMENT (Chargeable Weight)

☐ _____ lbs

_____ x _____ x _____ = _____

Received At
- 1 ☐ Regular Stop
- 2 ☐ On Call Stop
- 3 ☐ Drop Box
- 4 ☐ BSC
- 5 ☐ Station

Emp. No | Date

☐ Cash Received
☐ Return Shipment
☐ Third Party ☐ Chg. To Del ☐ Chg. To Hold

Street Address

City | State | Zip

Received By: X

Date Time Received | FedEx Employee Number

7 Release Signature

FedEx Emp. No | Date/Time

Federal Express Use
- Base Charges
- Declared Value Charge
- Other 1
- Other 2
- Total Charges

REVISION DATE 6/91
PART #137254 FXEM 4.9
FORMAT #094

099

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GENERAL CHEMISTRY RESULTS

CASE NO. 06-025

Water Sample #:

B06CP6

CASE NARRATIVE

No problems were encountered during sample analysis.
All QC results were acceptable.

Ernesto Vazquez

Ernesto Vazquez

9613442.1372

000015

TMA Inc. REPORT Work Order # A2-06-025

Received: 06/08/92 08/10/92 13:43:21

REPORT TO: Westinghouse Hanford Company
2355 Stevens Dr.
Richland,WA,99352
MO-346/200 West/T6-08
ATTEN: Jeanette Duncan

PREPARED BY: Thermo Analytical, Inc.
160 Taylor Street
Monrovia, CA 91016
ATTEN: Ms. Carole Harris
PHONE: 818-357-3247

CERTIFIED BY: Ernesto Vizguez
CONTACT: EVV CIH

CLIENT: WHC SAMPLES: 6
COMPANY: Westinghouse Hanford Company
FACILITY:

This report is for the sole and exclusive use of the client to whom it is addressed and represents only those samples herein described. Samples not destroyed in testing are retained a maximum of 30 days unless otherwise requested.

WORK ID: 100-HR-3
TAKEN: By Westinghouse Staff
TRANS: Federal Express
TYPE: Liquid
P.O. #: N2-06-037-SU-AR
INVOICE: under separate cover

SAMPLE IDENTIFICATION

01	B06CV2
02	B06CW0
02	B06CW0 MS
02	B06CW0 MSD
03	B06CX0
04	B06CP6
04	B06CP6 MS
04	B06CP6 MSD
04	B06CP6
04	B06CP6 MS
04	B06CP6 Duplicate
04	B06CP6
04	B06CP6 Duplicate
05	B06CP8
06	Wet Chemistry Blank

TEST CODES and NAMES used on this workorder

BNCLPW	CLP Semivol. Water WH020
PECLPL	CLP Pesticides Liq.-WH019
VOCLPL	CLP Volatile Org.Liq.WH018
WCCLPL	Anions & Wet Chem. - WH043
WCL L	Chloride - WH120
WCQCD	Quality Control Summary
WCQCS	Quality Control Summary
WF L	Fluoride in Water
WNO2 L	Nitrite (Liquids)
WNO3 L	Nitrate (water)
WPH L	pH of Liquid - WH121
WPO4 L	Phosphate in Liquids
WSO4 L	Sulfate (in Waters)
W COND	Conductivity-Water WH135

TMA Inc. REPORT Work Order # A2-06-025

Received: 06/08/92

Results by Sample

SAMPLE ID B06CP6 FRACTION 04E TEST CODE WCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 06/04/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.3	mg/L	0.1
Chloride	300	9.8	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	4.5	mg/L	0.2
Sulfate	300	46	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	372	umho/cm	6
pH	150.1	7.9	pH	0.1

FORM I

9615442.1374

TMA
Thermo Analytical Inc.

300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200
FAX (617) 890-3883

AUG 1992
RECEIVED
OSM DMO

July 20, 1992

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Quality Control Narrative

Scope
Four (4) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on June 09, 1992 from Westinghouse Hanford Company. The samples were analyzed for the USEPA CLP metals and cyanide as indicated on the chain of custody. The analysis was performed under TMA/Skinner and Sherman work order S206113.

Methodology
The samples were prepared, analyzed and reported in accordance with the USEPA Contract Laboratory Program Statement of Work 7/88 (CLP SOW788).

Discussion
All quality control requirements were met for the samples with the following exceptions:

- The ICP serial dilution for barium exceeded the control limit requirements.
- The thallium and cyanide matrix spike recovery exceeded the control limit requirements.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

(for)
David N. Peterson
Assistant Laboratory Manager

1/17/96 M.H.

9613442.1375

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CP6

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-037SAS No.: SDG No.: B06CP6

Matrix (soil/water): WATER Lab Sample ID: 06113-01S

Level (low/med): LOW Date Received: 06/09/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	272.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.20	B	W	F
7440-39-3	Barium	52.50	B	E	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	48800.00			P
7440-47-3	Chromium	87.90			P
7440-48-4	Cobalt	3.20	B		P
7440-50-8	Copper	2.50	B		P
7439-89-6	Iron	825.00			P
7439-92-1	Lead	1.80	B		F
7439-95-4	Magnesium	12200.00			P
7439-96-5	Manganese	139.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	38.50	B		P
7440-09-7	Potassium	6080.00			P
7782-49-2	Selenium	18.00	U	W	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	21800.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	5.60	B		P
7440-66-6	Zinc	168.00			P
	Cyanide	10.00	U	N	CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613442.1376

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B06CV1

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-037SAS No.: SDG No.: B06CP6

Matrix (soil/water): WATER Lab Sample ID: 06113-02S

Level (low/med): LOW Date Received: 06/09/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U	N	CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613442.1577

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B06CV9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-037SAS No.: SDG No.: B06CP6

Matrix (soil/water): WATER Lab Sample ID: 06113-03S

Level (low/med): LOW Date Received: 06/09/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U	N	CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613442.1578

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CW9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-037SAS No.: SDG No.: B06CP6

Matrix (soil/water): WATER Lab Sample ID: 06113-04S

Level (low/med): LOW Date Received: 06/09/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U	N	CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9615442.1579

TMA/Skinner & Sherman Labs **SAMPLE LOG-IN**

WORKORDER 52-06-113 CLIENT Hanford-NOR No. SAMPLES: 4 (Soil) (Water) (Specify Other)

PROTCL CLP TURNARND 33 days

COOLER TEMP: 4 oC, or NA

CUSTODIAN Benney, A. SDG/BATCH N/A

CUSTODY SEAL: PRESENT/ABSENT/INTACT/NOT CLIENT CASE N2-06-037

SHIPER & # Fedex # 2521033874 PO/CONTRACT# ↓

TAGS: PRESENT/ABSENT/NA/SEE COC CONTACT Dolores Sanchez

CHAIN OF CUSTODY: PRESENT/ABSENT/NA, # N/A COMMENTS: NONE

SAMPLE CONTAINERS-INTACT/BROKEN COMMENTS

CLIENT COMMENT? YES/NO

SAMPLE LABELS AGREE WITH CHAIN OF CUSTODY INFO? YES/NO (COMMENT)

CLIENT PAPERWORK AGREES WITH SAMPLES & COC? YES /NO (COMMENT)

SHIPMENT DATES 6.9.92

LIST ANY DATE WITH PAPERWORK/SHIPMENT PROBLEMS & SPECIFY THE PROBLEM:

NONE

	CLIENT ID	MATRIX	RECEIVED	QC	TEST(S)	HOLD TIME UP
1	BEEC06	WATER	6.9.92	D,S	TM/CN	
2	V1	↓	↓		CN only	CN due
3	V9				↓	6.17.92
4	W9					Hg due
5						6.29.92
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

complete 6.11.92 AB

Samples are from a site known to have Rad-Contamination: YES ✓ NO __ N/A __

The samples have dectable amounts of Radioactive Material: YES __ NO ✓ N/A __

SUBCONTRACT: YES/NO, TO: _____ DATE: _____

REVIEWED _____

124

*EPA/CLP Required Rev. 1.6 PAGE: 000062

9615442.1580 H4349

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-4-92

Ice Chest No. SML-17

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509869702

Offsite Property No. W92-0-0399-25

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CP6

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED

3, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~3, 40ml, Gs, WATER, CLP-VOA~~

~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~

~~1, 500ml, G, WATER, ANIONS, pH~~

~~1, 500ml, G, WATER, CONDUCTIVITY~~

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

B06CP7

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CP8~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 6/4/92 - 16:00
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 6/5/92 0700
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: * 6-8-92 0800
Relinquished by: Kermit Blum 6-8-92	Received by: [illegible]	Date/Time: 6/9/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* Received @ TMA/NORCAL 6-6-92; opened 6-8-92 - KB

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1381

Task#: 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6/4/92 Time 1025 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CP6	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	3, 1L, P	W	CLP - CN (NaOH)
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha~~
			~~Spec (U-234/235/238, Pa-238/239/240~~
			~~Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CP7	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CP8~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-8-92

Analysis Required

BOL # 250986870 2 OPC # W92-0-0399-25

126

9613442.1382

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-4-92

Ice Chest No. SML-90

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509866702

Offsite Property No. W92-0-0399-24

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CV1

3, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~2, 4L, P, WATER, GAMMA-SPEC, ALPHA-SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CV2~~

~~3, 40ml, Gs, WATER, CLP-VOA~~ *

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker	Received by: Refrigerator	Date/Time: 6-4-92 / 1600
Relinquished by:	Received by: B WHITEN	Date/Time: 6-5-92 - 0700
Relinquished by: B. WHITEN	Received by: Kermit Blum	Date/Time: 6-8-92 0800
Relinquished by: Kermit Blum 6-8-92	Received by:	Date/Time: 6/9/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* One vial, B06CV2, received @ TMA/NORCAL with air bubbles. KB

** Received @ TMA/NORCAL 6-6-92; opened 6-8-92. KB

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1583

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 6-4-92 Time 1400 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CV1	3, 1L, P	W	CLP Cyanide (NaOH)
✓	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U 234/235/238, Pu 238/239/240, Am 241), Sr 90 (HNO3)~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250ml, G~~	~~W~~	~~Tritium~~
B06CV2	~~3, 40ml, GS~~	~~W~~	~~CLP VOA (one vial bubble)~~

Field Information** BOL #: 2509868702
OPC #: W92-0-0399-24

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-8-92

Analysis Required

128

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1384

Westinghouse Hanford Company	CHAIN OF CUSTODY	S & S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-4-92

Ice Chest No. 14 Nm 2

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 250986670 2

Offsite Property No. W92-0-0399-24

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CV9

3, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~2, 4L, P, WATER, GAMMA-SPEC, ALPHA-SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CW0~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
L.D. Walker LD Walker	Refrigerator	6/4/92 1600
Relinquished by:	Received by:	Date/Time:
	B. WHITTON	6-5-92 0700
Relinquished by:	Received by:	Date/Time:
B. WHITTON	Kermit Blum	6-8-92 * 0800
Relinquished by:	Received by:	Date/Time:
Kermit Blum 6-8-92		6/9/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* Received @ TMA/NORCAL 6-6-92; opened 6-8-92. KB

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9615442.1585

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 6-4-92 Time 1205 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ B06CV9	3, 1L, P	W	CLP Cyanide (NaOH)
✓	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U 234/235/238, Pu 238/239/240, Am 241),~~
			~~Sr-90 (HNO_3)~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250ml, G~~	~~W~~	~~Tritium~~
~~B06CW0~~	~~3, 40ml, G~~	~~W~~	~~CLP VOA~~

Field Information** BOL #: 2509868702
OPC #: W92-0-0399-24

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-8-92

Analysis Required

130

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1086 #4 - 11

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6-4-92

Ice Chest No. 55

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509869702

Offsite Property No. W92-0-0399-25

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CW9

3, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~2, 4L, P, WATER, GAMMA-SPEC, ALPHA-SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CX0~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 6-4-92 / 1600
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 6/5/92 / 0700
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: * 6-8-92 0800
Relinquished by: Kermit Blum 6-8-92	Received by: [illegible]	Date/Time: 6/9/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* Received 6-6-92; opened 6-8-92 @ TMA/NORCAL. KB

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9615442.1587

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task # 92-165

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 6/4/92 Time 0855 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CW9	3, 1L, P	W	CLP Cyanide (NaOH)
	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U 234/235/238, Pu 238/239/240, Am 241), Sr 90 (HNO3)~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250ml, G~~	~~W~~	~~Tritium~~
~~B06CX0~~	~~3, 40ml, GS~~	~~W~~	~~CLP VOA~~

Field Information** BOL #: 2509868702
OPC #: W92-0-0399-25

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-8-92

Analysis Required

137

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1388

TMA
Thermo Analytical Inc.

300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200
FAX (617) 890-3883

AUG 1992
RECEIVED
OSM DMO

July 20, 1992

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Quality Control Narrative

Scope
One (1) water sample was submitted to TMA/Skinner & Sherman Laboratories, Inc. on June 9, 1992 from Westinghouse/Hanford Company. The samples were analyzed for the USEPA CLP Target Analyte List metals. The analysis was performed under Skinner and Sherman work order S206114.

Methodology
The samples were prepared, analyzed and reported in accordance with the USEPA Contract Laboratory Program Statement of Work 7/88 (CLP SOW788).

Discussion
All quality control requirements were met for the samples with the following exceptions:

- The ICP serial dilutions for manganese and sodium exceeded the control limit requirements.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

(for)

David N. Peterson
Assistant Laboratory Manager

1/17/96 M.H.

9613942.1589

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B06CP7

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-037SAS No.: SDG No.: B06CP7

Matrix (soil/water): WATER Lab Sample ID: 06114-01S

Level (low/med): LOW Date Received: 06/09/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21.00	U		P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	4.70	B		F
7440-39-3	Barium	44.20	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	45200.00			P
7440-47-3	Chromium	26.50			P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	25.00	U		P
7439-92-1	Lead	1.90	B		F
7439-95-4	Magnesium	11400.00			P
7439-96-5	Manganese	112.00		E	P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	B		P
7440-09-7	Potassium	5940.00			P
7782-49-2	Selenium	2.80	U	W	F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	21300.00		E	P
7440-28-0	Thallium	0.90	U		F
7440-62-2	Vanadium	4.20	B		P
7440-66-6	Zinc	9.60	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9615442.1590

TMA/Skinner & Sherman Labs **SAMPLE LOG-IN**

WORKORDER 52-06-114 CLIENT Hanford-NDV No. SAMPLES:

PROTCL CLP TURNARND 33 days 1

COOLER TEMP: 4 oC, or NA (Soil) (Water) (Specify Other)

CUSTODIAN Benny, A. SDG/BATCH N/A

CUSTODY SEAL: PRESENT/ABSENT/INTACT/NOT CLIENT CASE N2-06-037

SHIPER & # Fedex #2521033874 PO/CONTRACT#

TAGS: PRESENT/ABSENT/NA/SEE COC CONTACT Dolores Sanchez

CHAIN OF CUSTODY: PRESENT/ABSENT/NA, # N/A COMMENTS: None

SAMPLE CONTAINERS-INTACT/BROKEN COMMENTS

CLIENT COMMENT? YES/NO

SAMPLE LABELS AGREE WITH CHAIN OF CUSTODY INFO? YES/NO (COMMENT)

CLIENT PAPERWORK AGREES WITH SAMPLES & COC? YES /NO (COMMENT)

SHIPMENT DATES 6.9.92

LIST ANY DATE WITH PAPERWORK/SHIPMENT PROBLEMS & SPECIFY THE PROBLEM:

(Field Filtered)

	CLIENT ID	MATRIX	RECEIVED	QC	TEST(S)	HOLD TIME UP
1	B06CP7	WATER	6.9.92	D,S	TM	Hg due 6.29.92
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

Complete 6.11.92 AB

Samples are from a site known to have Rad-Contamination: YES X NO __ N/A __

The samples have dectable amounts of Radioactive Material: YES __ NO X N/A __

SUBCONTRACT: YES/NO TO: DATE:

REVIEWED

*EPA/CLP Required Rev. 1.6

9615442.1391

TMA
Thermo Analytical Inc.

TMA/Norcal
2030 Wright Avenue
P. O. Box 4040
Richmond, CA 94804-0040
(510) 235-2633 Fax No. (510) 235-0438

4/04/92 000001
DIS
OCT 1992
RECEIVED
OSM DMO

October 14, 1992

SENT BY FEDERAL EXPRESS

Ref. TMA/Norcal N2-06-036-7049

Mr. John Bourgeault
Westinghouse Hanford Company
2355 Stevens Drive
Richland, WA 99352

Dear Mr. Bourgeault:

Enclosed on the Summary Data Section, are the gross alpha, gross beta, ^{3}H, ^{14}C, ^{90}Sr, ^{99}Tc, isotopic uranium, isotopic plutonium, ^{241}Am, and gamma scan results for the water sample from 100-HR-3 Location, we received 8 June 1992. The QA/QC results are also given in the Summary Data Section.

The pages are numbered 1 through 319.

Please call if you have any questions concerning this data.

Sincerely,

D. P. Kharkar

Dinkar P. Kharkar, Ph.D.
Manager, Nuclear Programs

DPK/ss

Enclosures: Section 1 and 2
Appendices 1 through 17

RECORD COPY

SDG 7049	Client Westinghouse Hanford
Contact Dinkar P. Kharkar	Contract MBH-SVV-069262

CASE NARRATIVE

1.0 GENERAL

Water sample results from Location 100-HR-3 (TMA/Norcal Group 7049) are reported herein. TMA/Norcal Group 7049 is comprised of the one sample listed on the Chain-of-Custody documents and is identified as Sample 1.

1.1 CHAINS-OF-CUSTODY

This report includes data from samples delivered under Chain-of-Custody documents Field Logbook No. EFL-018.

1.2 SAMPLE VOLUME

4000, 500, and 250 mL bottles of sample were received for the analyses.

1.3 MISSING SAMPLES

The sample was accounted for in an undamaged condition.

1.4 HOLDING TIMES

The collection was made on 6/04/92 and the sample processing was initiated within 180 days of collection.

2.0 QUALITY CONTROL

The internal quality control consisted of one sample each of a laboratory control, a blank, and a replicate. All original analyses were performed with QC samples 7049-2 through 8.

The QC samples were prepared and labelled by the quality control officer. Copies of The QC notebook pages are included in the data package.

2.1 LABORATORY CONTROL SAMPLES

LCS recoveries for all nuclides were good, except for ^{14}C, which was 58%, The recoveries for ^{14}C are still low and the reason for low recoveries are under investigation as part of TMA/Norcal CAR NSD-289. The MDA's for all the nuclides meet the RDL requirement except for ^{59}Fe in the gamma scan analysis. The higher MDA for ^{59}Fe is due to slightly high background for the detector.

SDG 7049	Client Westinghouse Hanford
Contact Dinkar P. Kharkar	Contract MBH-SVV-069262

CASE NARRATIVE

2.2 BLANKS

MDA's for all the analyses meet the RDL requirements, except for ^{14}C and ^{59}Fe. The reason for high MDA's are given Section 2.1.

2.3 REPLICATES

Results were satisfactory for all replicate analyses. The MDA's for strontium, plutonium, americium, and ^{59}Fe nuclides are underlined in the data sheets because the MDA exceed RDL due to the small aliquot (0.5 L) available for analysis, instead of 1 L required to attain RDL.

3.0 ANALYTICAL NOTES

3.1 Gross Alpha Analyses: The average MDA for gross alpha was 2.1 ± 0.44 pCi/L. Positive gross alpha concentration was not found in the sample. The result was less than MDA.

3.2 Gross Beta Analyses: The average MDA for gross beta was 2.3 ± 1.4 pCi/L. Positive gross beta concentration was not found in the sample.

3.3 Carbon-14 Analyses: The average MDA was 32 ± 37 pCi/L. The result was less than MDA. No positive ^{14}C was found in the sample. The recovery for the ^{14}C LCS sample is still low, and the cause is still being investigated as part of TMA CAR NSD-289.

The data sheets were manually entered and double-checked rather than by the automated data calculation routine. This leads to the slightly different format of the data sheet.

The raw data is from a slightly different counting procedure than usual due to the testing and evaluation we have been doing. The channels used from the LCS spectrum are 3.0 - 75 KeV. This corresponds to the "B" channel for the sample data and the "A" channel for the spiked sample data.

3.4 Strontium-90 Analyses: The average yield for four analyses was (61 ± 45%). The lowest yield was 29% and the highest was 78%. The average MDA was 1.0 ± 0.53 pCi/L. Positive ^{90}Sr concentration was not found in the sample. The sample result was below MDA.

3.5 Uranium-233, 234, 234, and 238 Analyses: The average yield for four analyses was (68 ± 13%). The lowest yield was 59% and the highest was 74%. The average MDA was 0.14 ± 0.050 pCi/L. Concentration of isotopic U above MDA was found in the sample.

SDG 7055	Client Westinghouse Hanford
Contact Dinkar P. Kharkar	Contract MBH-SVV-069262

CASE NARRATIVE

3.6 Plutonium-238, 239/240 Analyses: The average yield for four analyses was (60 ± 31%). The lowest yield was 40% and the highest was 78%. The average MDA was 0.066 ± 0.071 pCi/L. Positive plutonium concentration was not found the sample. The sample result was below MDA.

3.7 Americium-241 Analyses: The average yield for four analyses was (25 ± 14%). The lowest yield was 18% and the highest was 32%. The average MDA was 0.043 ± 0.020 pCi/L. Positive americium concentration was not found in the sample. The sample result was below MDA.

3.8 Technetium-99: The average yield for four analyses was (65 ± 39%). The lowest yield was 41% and the highest was 83%. the average MDA was 6.6 ± 2.4 pCi/L. Positive ^{99}Tc concentration was not found in the sample. The sample result was below MDA.

3.9 Tritium Analyses: Positive ^{3}H concentration was found in the sample.

3.10 Gamma Scan Analyses: Gamma scan analysis did not find positive concentration of gamma nuclides.

N206036-01

TMA NORCAL
REPORTING GROUP 7049

DATA SHEET

B06CP6

SDG	7049	Client	Westinghouse Hanford
Contact	Dinkar Kharkar	Contract	MBH-SVV-069262
Lab sample id	N206036-01	Client sample id	B06CP6
Dept sample id	7049-001	Matrix	WATER
Received	06/08/92	Collected	06/04/92
% moisture		Chain of custody id	EFL-1018

PARAMETER	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Gross Alpha	Alpha	2.1	1.9	2.2	3.0	U	80A
Gross Beta	Beta	5.6	1.5	1.9	4.0		80B
Uranium 233/234		2.1	0.43	0.14	0.20		U
Uranium 235	15117-96-1	0.16	0.11	0.14	0.20	J	U
Uranium 238	7440-61-1	1.4	0.34	0.11	0.20		U
Plutonium 238	13981-16-3	0.026	0.053	0.095	0.050	U	PU
Plutonium 239/240		0	0.026	0.063	0.050	U	PU
Americium 241	14596-10-2	0.14	0.061	0.056	0.050		AM
Strontium 90	10098-97-2	0.39	0.31	0.94	1.0	U	Y
Technetium 99	14133-76-7	0.44	0.90	4.1	5.0	U	TC
Tritium	10028-17-8	9300	290	100	400		H
Carbon 14	14762-75-5	-32	25	20	50	U	C
GAMMA SCAN ANALYTES							
Potassium 40	13966-00-2	U		130		U	GAM
Iron 59		U		69	30	U	GAM
Chromium 51	14392-02-0	U		390		U	GAM
Cobalt 60	10198-40-0	U		9.0	25	U	GAM
Zinc 65	17982-39-3	U		24		U	GAM
Ruthenium 106	13967-48-1	U		100		U	GAM
Cesium 134	17967-70-9	U		11		U	GAM
Cesium 137	10045-97-3	U		10	15	U	GAM
Europium 152	14683-23-9	U		21	40	U	GAM
Europium 154	15585-10-1	U		14	40	U	GAM
Radium 226	13982-67-7	U		22		U	GAM
Thorium 228	14274-82-9	U		20		U	GAM
Thorium 232	7440-29-1	U		44		U	GAM

Lab id	TMAN
Protocol	WHC-HEIS
Version	Ver 1.0
Form	DVD-DS
Version	2.20
Report date	10/19/92

Westinghouse Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 6 4-92

Ice Chest No. SML-17

Field Logbook No. EFL-1018

Bill of Lading/Airbill No. 2509969702

Offsite Property No. W92-0-0399-25

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CP6
- 3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED
- 3, 1L, P, WATER, CLP-CYANIDE (NaOH)
- 3, 40ml, Gs, WATER, CLP-VOA
- 3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST
- 1, 500ml, G, WATER, ANIONS, pH
- 1, 500ml, G, WATER, CONDUCTIVITY
- 2, 4L, P , WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99
- 1, 500ml, P, WATER, C-14
- 1, 250ml, G, WATER, TRITIUM

B06CP7
- 3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

B06CP8
- 3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker LD Walker	Received by: Refrigerator	Date/Time: 6/4/92 - 1600
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 6/5/92 0700
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: * 6-8-92 0800
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* Received @ TMA/NORCAL 6-6-92; opened 6-8-92 . KB

9613442.1397

Task #: 92-165 000060

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 6/4/92 Time 1025 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ B06CP6	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
✓	3, 1L, P	W	CLP - CN (NaOH)
✓	3, 40M, Gs	W	CLP - VOA
✓	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
✓	1, 500 ml, G	W	ANions, pH
✓	1, 500ml, G	W	Cond.
✓	2, 4L, P	W	Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99
✓	1, 500ml, P	W	C-14
✓	1, 250 ml, G	W	Tritium
✓ B06CP7	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
✓ B06CP8	3, 40 ml, Gs	W	CLP-VOA

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 6-8-92

Analysis Required

BOL # 250996970 2 OPC # W92-0-0399-25

051

*Indicate whether sample is soil, sludge, water, etc.

9613442.1398

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000005
EPA SAMPLE NO.

B06CP6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-04A

Sample w X01412 g/mL) ML Lab File ID: 20612R12

Level: Date Received: 06/08/92

% Moistu HR-3 Date Analyzed: 06/12/92

GC Colum 2nd .00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	12	
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CP6

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R12

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

NA
6-25-92

9613442.1400

000007
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R13

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L TB

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1401

000008
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CP8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R13

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1402

000009

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CV2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R05

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1403

000010

EPA SAMPLE NO.

B06CV2

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R05

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

KB
6-8-92

9613442.1404

000011
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CW0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R06

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

RR

BD 9/19/92

9613942.1405

000012
EPA SAMPLE NO.

B06CW0

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R06

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1406

000013

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CX0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R10

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	55	
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

5/19/9

9613442.1407

000014
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CX0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20612R10

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: not dec. ____ Date Analyzed: 06/12/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

KB
10-8-92

9613442.1408

000015

EPA SAMPLE NO.

B06CP6

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20626N3

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 06/11/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

(B)N

RB 10-28

PB 5/19

9613442.1409

000016
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CP6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20626N3

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/11/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

RB

PDD 5/19/

EPA SAMPLE NO.

B06CP6

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20626N3

Level: (low/med) LOW Date Received: 06/08/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 06/11/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown hydrocarbon	4.23	18	~~BJ~~ n
2.	Unknown hydrocarbon	7.40	2	~~BJ~~ n
3.	Unknown cyclic hydrocarbon	20.33	3	J

A B

9613442.1411

000018
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CP6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06025 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A206025-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 06/08/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 06/11/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	UJ
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	UJ
58-89-9	gamma-BHC (Lindane)	0.050	UJ
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

PBD 5/19/93

9613442.1412

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B06CP6

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-037SAS No.: SDG No.: B06CP6

Matrix (soil/water): WATER Lab Sample ID: 06113-01S

Level (low/med): LOW Date Received: 06/09/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	272.00			P
7440-36-0	Antimony	16.00	U	(U)	P
7440-38-2	Arsenic	3.20	B	~~W~~ (J)	F
7440-39-3	Barium	52.50	B	~~E~~ (J)	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U	(U)	P
7440-70-2	Calcium	48800.00			P
7440-47-3	Chromium	87.90			P
7440-48-4	Cobalt	3.20	B	(U)	P
7440-50-8	Copper	2.50	B		P
7439-89-6	Iron	825.00			P
7439-92-1	Lead	1.80	B		F
7439-95-4	Magnesium	12200.00			P
7439-96-5	Manganese	139.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	38.50	B		P
7440-09-7	Potassium	6080.00			P
7782-49-2	Selenium	18.00	U	~~W~~ (UJ)	F
7440-22-4	Silver	2.00	U	(U)	P
7440-23-5	Sodium	21800.00			P
7440-28-0	Thallium	1.00	U	~~WN~~ (UJ)	F (UJ)
7440-62-2	Vanadium	5.60	B		P
7440-66-6	Zinc	168.00			P
	Cyanide	10.00	U	~~N~~ (UJ)	CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

FORM I - IN Rev. 8/89

002

9613442.1413

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CV1

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-037SAS No.: SDG No.: B06CP6

Matrix (soil/water): WATER Lab Sample ID: 06113-02S

Level (low/med): LOW Date Received: 06/09/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U	N(UJ)	CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

FORM I - IN Rev.6/89

003

9613442.1414

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CV9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-037SAS No.: SDG No.: B06CP6

Matrix (soil/water): WATER Lab Sample ID: 06113-03S

Level (low/med): LOW Date Received: 06/09/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U	~~N~~(UJ)	CA

10/20/92

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613442.1415

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CW9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-037SAS No.: SDG No.: B06CP6

Matrix (soil/water): WATER Lab Sample ID: 06113-04S

Level (low/med): LOW Date Received: 06/09/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U	~~N~~(UJ)	CA

10/28/92

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

FORM I - IN

005

Rev.6/89

9613442.1416

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CP7

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-06-037SAS No.: SDG No.: B06CP7

Matrix (soil/water): WATER Lab Sample ID: 06114-01S

Level (low/med): LOW Date Received: 06/09/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21.00	U	U	P
7440-36-0	Antimony	11.00	U	U	P
7440-38-2	Arsenic	4.70	B		F
7440-39-3	Barium	44.20	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U	U	P
7440-70-2	Calcium	45200.00			P
7440-47-3	Chromium	26.50			P
7440-48-4	Cobalt	2.00	U	U	P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	25.00	U		P
7439-92-1	Lead	1.90	B	U	F
7439-95-4	Magnesium	11400.00			P
7439-96-5	Manganese	112.00		~~E~~J	P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	B	U	P
7440-09-7	Potassium	5940.00			P
7782-49-2	Selenium	2.80	U	~~W~~ UJ	F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	21300.00		~~E~~J	P
7440-28-0	Thallium	0.90	U		F
7440-62-2	Vanadium	4.20	B	U	P
7440-66-6	Zinc	9.60	B		P
	Cyanide				NR

10/27/92 JM

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

002

Rev.6/89

TMA Inc. REPORT Work Order # A2-06-025

Received: 06/08/92 Results by Sample

SAMPLE ID B06CP6 FRACTION 04E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 06/04/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.3	mg/L	0.1
Chloride	300	9.8	mg/L	0.2
Nitrite	300	<0.1 U	mg/L	0.1
Nitrate	300	4.5	mg/L	0.2
Sulfate	300	46	mg/L	1
Phosphate	300	<0.4 U	mg/L	0.4
Elect. Conductivity	120.1	372	umho/cm	6
pH	150.1	7.9 J	pH	0.1

FORM I

9613442.1418

N206036-01

TMA NORCAL
REPORTING GROUP 7049

DATA SHEET

B06CP6

SDG 7049
Contact Dinker Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N206036-01
Dept sample id 7049-001
Received 06/08/92
% moisture

Client sample id B06CP6
Matrix WATER
Collected 06/04/92
Chain of custody id EFL-1018

PARAMETER	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALIFIERS	TEST
Gross Alpha	Alpha	2.1	1.9	2.2	3.0	U, P	80A
Gross Beta	Beta	5.6	1.5	1.9	4.0		80B
Uranium 233/234		2.1	0.43	0.15	0.20		U
Uranium 235	15117-96-1	0.16	0.11	0.14	0.20	U	U
Uranium 238	7440-61-1	1.4	0.34	0.11	0.20	J	U
Plutonium 238	13981-16-3	0.026	0.053	0.093	0.050	U	PU
Plutonium 239/240		0	0.026	0.063	0.050	U	PU
Americium 241	14596-10-2	0.14	0.061	0.084	0.050	R	AM
Strontium 90	10098-97-2	0.39	0.31	0.94	1.0	U	Y
Technetium 99	14133-76-7	0.44	0.90	4.1	5.0	U	TC
Tritium	10028-17-8	9300	290	100	400		H
Carbon 14	14762-75-5	32	25	20	50	~~U~~ 12.J	C
GAMMA SCAN ANALYTES							
Potassium 40	13966-00-2	0		130		U	GAM
Iron 59		0		69	30	U	GAM
Chromium 51	14392-02-0	0		390		U	GAM
Cobalt 60	10198-40-0	0		9.0	25	U	GAM
Zinc 65	17982-39-3	0		25		U	GAM
Ruthenium 106	13967-48-1	0		100		U	GAM
Cesium 134	17967-70-9	0		11		U	GAM
Cesium 137	10045-97-3	0		10	15	U	GAM
Europium 152	14683-23-9	0		21	40	U	GAM
Europium 154	15585-10-1	0		16	40	U	GAM
Radium 226	13982-67-7	0		22		U	GAM
Thorium 228	14274-82-9	0		20		U	GAM
Thorium 232	7440-29-1	0		44		U	GAM

RB 1/12/93

Lab id TMAN
Protocol WHC-HEIS
Version Ver 1.0
Form DVD-DS
Version 2.20
Report date 10/19/92

9613442.1418 ~~B06CK4-TMA-195~~ B06CV0-TMA-168

000034

CASE NARRATIVE

LABORATORY : TMA/ARLI

CASE : 05-063

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : May 19, 1992

1.0 DESCRIPTION OF CASE :

Twenty-five water samples were analyzed for TCL Organics-Volatiles, Semivolatiles, and Pesticide/PCBs according to the USEPA Contract Laboratory Program (CLP) Statement of Work for Organic Analysis, Revision OLM01.8.

2.0 SAMPLE LIST :

WESTINGHOUSE ID	LAB ID	ANALYSIS REQUESTED	MATRIX	pH
B06CK4	A2-05-063-01A	V	WATER	7
B06CK4	A2-05-063-01B	P & SV	WATER	
B06CK6	A2-05-063-02A	V	WATER	6
B06CK6 MS	A2-05-063-02B	V	WATER	6
B06CK6 MSD	A2-05-063-02C	V	WATER	6
B06CN1	A2-05-063-03A	V	WATER	7
B06CN1	A2-05-063-03B	P & SV	WATER	
B06CN1 MS	A2-05-063-03C	P & SV	WATER	
B06CN1 MSD	A2-05-063-03D	P & SV	WATER	
B06CN3	A2-05-063-04A	V	WATER	6
B06CS0	A2-05-063-05A	V	WATER	7
B06CS0	A2-05-063-05B	P & SV	WATER	
B06CS2	A2-05-063-06A	V	WATER	6
B06CJ8	A2-05-063-07A	V	WATER	7
B06CJ8	A2-05-063-07B	P & SV	WATER	
B06CK0	A2-05-063-08A	V	WATER	6
B06CT3	A2-05-063-09A	V	WATER	6
B06CL6	A2-05-063-10A	V	WATER	7
B06CL6	A2-05-063-10B	P & SV	WATER	
B06CL8	A2-05-063-11A	V	WATER	6
B06CL0	A2-05-063-12A	V	WATER	7
B06CL0	A2-05-063-12B	P & SV	WATER	
B06CL2	A2-05-063-13A	V	WATER	6
B06CM5	A2-05-063-14A	V	WATER	7
B06CM5	A2-05-063-14B	P & SV	WATER	
B06CM7	A2-05-063-15A	V	WATER	6

WESTINGHOUSE ID	LAB ID	ANALYSIS REQUESTED	MATRIX	pH
B06CM8	A2-05-063-16A	V	WATER	7
B06CM8	A2-05-063-16B	P & SV	WATER	
B06CM8 MS	A2-05-063-16C	V	WATER	7
B06CM8 MSD	A2-05-063-16D	V	WATER	7
B06CN0	A2-05-063-17A	V	WATER	6
B06CX2	A2-05-063-18A	V	WATER	6
B06CL3	A2-05-063-19A	V	WATER	7
B06CL3	A2-05-063-19B	P & SV	WATER	
B06CL5	A2-05-063-20A	V	WATER	6
B06CM2	A2-05-063-21A	V	WATER	7
B06CM2	A2-05-063-21B	P & SV	WATER	
B06CM4	A2-05-063-22A	V	WATER	6
B06CV8	A2-05-063-23A	V	WATER	6
B06CW8	A2-05-063-24A	V	WATER	6
B06CX4	A2-05-063-25A	V	WATER	6

3.0 COMMENTS :

3.1 SHIPPING AND DOCUMENTATION :

All samples were received unbroken and properly documented.

3.2 ANALYSIS

3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

All of the samples were analyzed within the CLP SOW holding times. Between scans 103 and 107 a peak identified as carbon dioxide was detected in most of the sample analyses. This TIC is not reported on the Form 1E.

All of the QC results were within the limits specified by the EPA CLP SOW.

TUNES :

All of the BFB tunes are injected directly into the GC/MS instrument.

3.2.2 SEMIVOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. Sample B06CN1MSD had a matrix spike recovery for 4-Nitrophenol that was above the advisory QC limit. No further action was required.

All of the other QC results were within the limits specified by the CLP SOW.

3.2.3 PESTICIDE/PCB ANALYSIS COMMENTS :

SEQUENCE NOTES :

The sequence was started on 6/22/92 and was analyzed in accordance with the EPA CLP SOW. The instrument blanks, PEMs and calibration verification standards all met the requirements established by the EPA CLP SOW.

SAMPLE NOTES :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. All of the QC results were within the limits specified by the EPA CLP SOW.

We certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data in this hardcopy data package and in the computer-readable data submitted on diskette is authorized by the Laboratory Manager or his designee, as verified by the following signatures.

Nicole L. Roth

Nicole Roth
CLP Program Manager

Widayati

Wida Ang
Organics Supervisor

9613442.1422

TMA
Thermo Analytical Inc.

TMA/Norcal
2030 Wright Avenue
P.O. Box 4040
Richmond, CA 94804-0040
(415) 235-2633 Fax No. (415) 235-0438

August 18, 1992

AUG 1992
RECEIVED
OSM DMO

Jeanette Duncan
Westinghouse Hanford Company
2355 Stevens Drive
Richland, WA 99352

Reference: Organics Case 06-005
WHC Sample B06CK7

Dear Jeannette:

This will confirm that the WHC sample B06CK4 reported on page 33 of the Data Summary Report and on page 492 of the Data Package, referenced above, was a misprint. It should have been written as B06CK7.

Sincerely,

Dolores Sanchez
Program Coordinator

9613442.1423

DEA 8-18-92

Organics Case 05-056 and Metals Case N2-05-108

Sample B0GCV0 should be B06CV0
Sample B0GCV6 should be B06CV6
Sample B0GCW4 should be B06CW4
Sample B0GCT9 should be B06CT9
Sample B0GCV5 should be B06CV5
Sample B0GCW3 should be B06CW3

Organics Case 06-025

pH was requested on the COC but was not reported

Metals Case 10/14 (Received by lab on 10-14-91)

Sample B015L4 should be B015C4

Metals Case N1-07-266

Sample B00NY1 should be B00YN1

Organics Case 06-005

Sample B06CK7 was reported as B06CK4 on page 33 of the Data Summary Report and also on page 492 of the data package.

Metals Case N2-02-106 and Radiochemistry Case N2-01-111-7024

Sample B01751 should be B017S1
Sample B01752 should be B017S2
Sample B01753 should be B017S3
Sample B01754 should be B017S4
Sample B01755 should be B017S5
Sample B01756 should be B017S6

Radiochemistry Case N2-01-056-7001

Sample B01CG4 is reported on both page 3 and page 4 of Attachment 1 Data Table. It is possible that the one on page 4 should be B01CG6.

Organics Case 04-072 and Metals Case N2-04-130

Sample B062D0 should be B06200

ENVIRONMENTAL RECORDS TRANSMITTAL

TRANSMITTAL NUMBER: X01317

DATE PREPARED: August 11, 1992

TO (check one box):	MAILING ADDRESS:	PREPARED BY:
[ ] EFS Field Files, N3-05 [ ] ERE Field Files, H4-55 [ ] Environmental Data Management Center, H4-22 [x] Environmental Administrative Records, H4-22	Westinghouse Hanford Company c/o EDMC, H4-22 P.O. Box 1970 Richland, WA 99352	NAME, AFFILIATION: J. M. Duncan, WHC BLDG, ROOM, AREA: MO-028, 200-W ADDRESS: Richland, WA 99352 ORG. TITLE: Office of Sample Management MSIN: T6-08 PHONE: 3-3351 ORG. CODE: 12500

TO BE COMPLETED BY SENDER, EXCEPT SHADED AREAS, WHICH ARE COMPLETED BY THE RECIPIENT

ITEM	DATE	ID NUMBER	TITLE/DESCRIPTION	OU	TSD	TASK/SUBTASK	PAGE COUNT	FILE NUMBER
1	7-30-92	05-064, N2-05-119	Thermo Analytical, Analytical Laboratory Data Package for the 100-HR-3 project. The OSM data package ID number is B06CK4-TMA-195. The sample and subset data reported is as follows: A) General Chemistry (case # 05-064) Analytical Laboratory Data Package Subset (sample numbers B06CK4, B06CN1, B06CS0, B06CJ8, B06CL6, B06CL0, B06CM5, B06CM2, B06CM8 and B06CL3). B) Organics (VOA, case # 05-064) Analytical Laboratory Data Package Subset (sample numbers B06CJ8, B06CK0, B06CK4, B06CK6, B06CL0, B06CL2, B06CL3, B06CL5, B06CL6, B06CL8, B06CM2, B06CM4, B06CM5, B06CM7, B06CM8, B06CN0, B06CN1, B06CN3, B06CS0, B06CS2, B06CT3, B06CV8, B06CW8, B06CX2, B06CX4). C) Organics (Semi-VOA and Pest/PCB, case # 05-064) Analytical Laboratory Data Package Subset (sample numbers B06CJ8, B06CK4, B06CL0, B06CL3, B06CL6, B06CM2, B06CM5, B06CM8, B06CN1 and B06CS0). D) Metals (case # N2-05-119) Analytical Laboratory Data Package Subset (sample numbers B06CJ8, B06CK4, B06CL0, B06CL3, B06CL6, B06CM2, B06CM5, B06CM8, B06CN1, B06CS0, B06CV7, B06CW7, B06CX1, B06CX3, B06CJ9, B06CK5, B06CL1, B06CL4, B06CL7, B06CM3, B06CM6, B06CM9, B06CN2 and B06CS1).	100-HR-3				

COMMENTS: Data is being transmitted without OSM verification or validation. Data will be validated by an offsite contractor.

RECEIVED BY: Monica Ellingworth DATE: 8/11/92

The signature below certifies that the documents submitted by this transmittal have been reviewed and are ready for processing.

SIGNATURE: SKD Janette M. Duncan DATE: 8/11/92

PROCESSED BY: DATE:

9213142.1424

9613442.1425

000002

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL 1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/16/92

Ice Chest No. SML-63

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 250986 8042

Offsite Property No. W92-0-0345-50

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CK4

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CK5~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CK6

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: C Celebrate C CELEBRETTE	Received by: R Reid	Date/Time: 5/16/92 1400
Relinquished by:	Received by: B. WHITTEN	Date/Time: 5-18-92 0900
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-19-92	Received by: Joby Bernard	Date/Time: 5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1426

000003

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-16-92 Time 0812 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ B06CK4	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO_3), unfiltered~~
✓	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
✓	3, 40M, Gs	W	CLP - VOA
✓	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
✓	1, 500 ml, G	W	ANions, pH
✓	1, 500ml, G	W	Cond.
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pu-238/239/240 Am-241); Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
✓ ~~B06CK5~~	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO_3) filtered~~
✓ B06CK6	3, 40 ml, Gs	W	CLP-VOA

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Hermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL #2509868042 OPC #W92-0-0345-50

9613442.1427

000004

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL 1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/17/92

Ice Chest No. SML-120

Field Logbook No. EFL-0057 p. 10

Bill of Lading/Airbill No. 850986804 2

Offsite Property No. W92-0-0345-50

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CN1

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U 234/235/238, Pu 238/239/240, Am 241), Sr 90, Tc 99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

* ~~B06CN2~~

~~3, 1L, P, WATER, CLP ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CN3

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: Kirby Ha K.D. Ha	Received by: relinq to refrigerator	Date/Time: 5/17/92 1325
Relinquished by:	Received by: B. WHITTEN	Date/Time: 5-18-92 0900
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: 5-19-92 Kermit Blum	Received by: Tody Bernard	Date/Time: 5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* ID on this sample (B06CN2) was unreadable. It is assumed that the leftover bottle, marked metals, is B06CN2. These labels are wet & easily damaged. KB 5-19-92

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1428

000005

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO - 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-17-92 Time 1023 hours

Company Contact P H Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ B06CN1	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO3), unfiltered~~
✓	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
✓	3, 40M, Gs	W	CLP - VOA
✓	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
✓	1, 500 ml, G	W	ANions, pH
✓	1, 500ml, G	W	Cond.
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
✓ * ~~B06CN2~~	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO3) filtered~~
✓ B06CN3	3, 40 ml, Gs	W	CLP-VOA

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL #250986804 2 OPC #W92-0-0345-50

9613442.1429

000006

Westinghouse Hanford Company

CHAIN OF CUSTODY

ARL 1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/17/92

Ice Chest No. SMASH

Field Logbook No. EFL-0057 pg 9

Bill of Lading/Airbill No. 250986804 2

Offsite Property No. W92-0-0569-1

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CS0

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CST~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CS2

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody

Chain of Possession (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
K. D. Lee	relinq to refrigerator	5/17/92 1325
	B. WHITTEN	5-18-92 0900
B. WHITTEN	Kermit Blum	5-19-92 1230
Kermit Blum 5-19-92	Toby Bennett	5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1430

000007

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-17-92 Time 0645 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06C50	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO_3), unfiltered~~
	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
	3, 40M, Gs	W	CLP - VOA
	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
	1, 500 ml, G	W	ANions, pH
	1, 500ml, G	W	Cond.
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
~~B06C51~~	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO_3) filtered~~
B06C52	3, 40 ml, Gs	W	CLP-VOA

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL #2509868042 OPC #W92-O-0399-1

9613442.1451

000008

Westinghouse Hanford Company

CHAIN OF CUSTODY

ARL 1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/16/92

Ice Chest No. SML-7

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 2509969042

Offsite Property No. W92-0-0345-45

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CJ8

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CJ9~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CK0

3, 40ml, Gs, WATER, CLP-VOA

B06CT3

3, 40ml, Gs, Water, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: CCelbert CC	Received by: Retrel	Date/Time: 5/16/92 1400
Relinquished by:	Received by: K Trapp / K. Trapp	Date/Time: 5/18/92 0658
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-19-92	Received by: Tody Bennard	Date/Time: 5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1452

000009

Task #: 93-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 5/16/92 Time 0645 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ B06CJ8	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO_3), unfiltered~~
✓	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
✓	3, 40M, Gs	W	CLP - VOA
✓	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
✓	1, 500 ml, G	W	ANions, pH
✓	1, 500ml, G	W	Cond.
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
✓ ~~B06CJ9~~	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO_3) filtered~~
✓ B06CK0	3, 40 ml, Gs	W	CLP-VOA
✓ B06CT3	3, 40mL, Gs	W	CLP-VOA

Field Information** BOL: 2509969042
OPC: W92-0-0345-45

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL # OPC #

9613442.1456

000010

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL 1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/16/92

Ice Chest No. SML-15

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 2509869042

Offsite Property No. W92-0-0345-45

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CC6

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CC7~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CC8

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: K.D. Lee	Received by: relog to refrigerator	Date/Time: 5/16/92 1400
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 5/18/92 0658
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-19-92	Received by: Tody Bennett	Date/Time: 5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1434

Task II 92-16 000011

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 5/16/92 Time 1200 hours

Company Contact P. H. Rutcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ B06CL6	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO3), unfiltered~~
✓ -	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
✓	3, 40M, Gs	W	CLP - VOA
✓	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
✓	1, 500 ml, G	W	ANions, pH
✓	1, 500ml, G	W	Cond.
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/233/238, Pa-230/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
✓ ~~B06CL7~~	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO3) filtered~~
✓ B06CL8	3, 40 ml, Gs	W	CLP-VOA

Field Information** BOL: 2509869042

OPC: W92-0-0345-45

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL # OPC #

*Indicate whether sample is soil, sludge, water, etc.

9613442.1435

000012

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/16/92

Ice Chest No. SML-17

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 250986042

Offsite Property No. W92-0-0345-46

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CC0

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CC1~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CC2

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
C Celiberti C CELIBERTI	Refrid.	5/16/92 1400
Relinquished by:	Received by: K Trapp / K. Trapp	Date/Time: 5/18/92 0658
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-19-92	Received by: Tody Bennett	Date/Time: 5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1436

000013

Task #: 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 5/16/92 Time 0925 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ B06CL0	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO3), unfiltered~~
✓	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
✓	3, 40M, Gs	W	CLP - VOA
✓ ✓	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
✓	1, 500 ml, G	W	ANions, pH
✓	1, 500ml, G	W	Cond.
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
✓ ~~B06CL1~~	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO3) filtered~~
✓ B06CL2	3, 40 ml, Gs	W	CLP-VOA

Field Information** BOL: 2509868042
OPC: W92-0-0345-46

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Hermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL # — OPC #

9613442.1457

000014

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/17/92

Ice Chest No. SML-16

Field Logbook No. EFL-0057 pg 9

Bill of Lading/Airbill No. 250986 8041 2

Offsite Property No. W92-0-0345-48

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CM5

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CM6~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CM7

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: K.D. Lee K.D. Lee	Received by: sealing to refrigerator	Date/Time: 5/17/92 1325
Relinquished by:	Received by: B. WHITTEN	Date/Time: 5-18-92 0900
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-19-92	Received by: Tody Bernard	Date/Time: 5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1438

000015

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-17-92 Time 0700 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ B06CM5	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO_3), unfiltered~~
	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
✓	3, 40M, Gs	W	CLP - VOA
✓	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
✓	1, 500 ml, G	W	ANions, pH
✓	1, 500ml, G	W	Cond.
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pu-238/239/240 Am-241); Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
✓ ~~B06CM6~~	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO_3) filtered~~
✓ B06CM7	3, 40 ml, Gs	W	CLP-VOA

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required _____

BOL # 2509868041 2 OPC # W92-0-0345-98

9613442.1439

000016

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL 1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/17/92

Ice Chest No. Rusty Dusty

Field Logbook No. EC-0057 p.9

Bill of Lading/Airbill No. 2509868042

Offsite Property No. W92-0-0345-48

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CM8

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CM9~~

~~3, 1L, P, WATER, CLP ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CN0

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: Kathy Shea K.D.Lee	Received by: relinq to refrigerator	Date/Time: 5/17/92 1325
Relinquished by:	Received by: Bill Whitten B.WHITTEN	Date/Time: 5-18/92 0900
Relinquished by: Bill Whitten B.WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-19-92	Received by: Tody Bernard	Date/Time: 5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1440

000017

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-17-92 Time 0645 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CM8	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO_3), unfiltered~~
	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
	3, 40M, Gs	W	CLP - VOA
	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
	1, 500 ml, G	W	ANions, pH
	1, 500ml, G	W	Cond.
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CM9	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO_3) filtered~~
B06CN0	3, 40 ml, Gs	W	CLP-VOA

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL # 250986804 2 OPC # W92-0-0345-46

9613442.1441 000018

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL 1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/15/92

Ice Chest No. Silver Bullet

Field Logbook No. EFL 0057

Bill of Lading/Airbill No. 2509968042

Offsite Property No. W92-0-0345-47

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

~~B0G3~~ KT 5/20/92

B06CX1 ~~3, 1L, P, WATER, CLP CYANIDE (NaOH)~~
~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06CX2
3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody

Chain of Possession (Sign and Print Names)		
Relinquished by: GG Hamilton GG HAMILTON	Received by: Relinquished to Refrigerator	Date/Time: 5/15/92 1325
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 5/19/92 0651
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-19-92	Received by: Tody Bernard	Date/Time: 5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1442

000019

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 5/15/92 Time 0934 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ ~~B06CX1~~	~~3, 1L, P~~	~~W~~	~~CLP Cyanide (NaOH)~~
✓	~~2, 1L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U 238/235/238, Pu 238/239/240, Am 241),~~
			~~Sr 90 (HNO_3)~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250ml, G~~	~~W~~	~~Tritium~~
✓ B06CX2	3, 40ml, Gs	W	CLP-VOA

Field Information** BOC #: 2509968042
OPC #: W92-0-0345-47

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1443

000020

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARLI

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/16/92

Ice Chest No. SML-22

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 2509868042

Offsite Property No. W92-0-0345-46

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CL3

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~
~~3, 1L, P, WATER, CLP CYANIDE (NaOH)~~
3, 40ml, Gs, WATER, CLP-VOA
3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST
1, 500ml, G, WATER, ANIONS, pH
1, 500ml, G, WATER, CONDUCTIVITY
~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

~~B06CL4~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CL5

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: C. Celebrate C. CELEBRATE	Received by: Retrid	Date/Time: 5/16/92 1460
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 5/18/92 0658
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-19-92	Received by: Tody Bernard	Date/Time: 5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1444

000021

Task #: 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 5/16/92 Time 1046 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CL3 ✓	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO_3), unfiltered~~
✓	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
✓	3, 40M, Gs	W	CLP - VOA
✓	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
✓	1, 500 ml, G	W	ANions, pH
✓	1, 500ml, G	W	Cond.
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
~~B06CL4~~ ✓	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO_3) filtered~~
B06CL5 ✓	3, 40 ml, Gs	W	CLP-VOA

Field Information** BOL: 2509869042
OPC: W92-0-0345-46

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL # OPC #

9613442.1445

000022

Westinghouse Hanford Company	CHAIN OF CUSTODY ARL1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/17/92

Ice Chest No. Bad Boy

Field Logbook No. EFL-0057 p 10

Bill of Lading/Airbill No. 0509868040

Offsite Property No. W92-0-0345-49

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CM2

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

3, 40ml, Gs, WATER, CLP-VOA

3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST

1, 500ml, G, WATER, ANIONS, pH

1, 500ml, G, WATER, CONDUCTIVITY

~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CM3~~

~~3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED~~

B06CM4

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: Kathy D. Lee K.D. Lee	Received by: relinq to refrigerator	Date/Time: 5/17/92 1325
Relinquished by:	Received by: B. WHITTEN	Date/Time: 5-18-92 0900
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-19-92	Received by: Tody Bernard	Date/Time: 5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1446

000023 ok

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 5-17-92 Time 0915 hours

Company Contact P H Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CM2 ✓	~~3, 1L, P~~	~~W~~	~~CLP - ICP/AA Metals & Hg (HNO_3), unfiltered~~
✓	~~3, 1L, P~~	~~W~~	~~CLP - CN (NaOH)~~
✓	3, 40M, Gs	W	CLP - VOA
✓	3, 2L, G	W	CLP - Semi-VOA/PCB/Pest
✓	1, 500 ml, G	W	ANions, pH
✓	1, 500ml, G	W	Cond.
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CM3 ✓	~~3, 1L, P~~	~~W~~	~~CLP-ICP/AA Metals & Hg (HNO_3) filtered~~
B06CM4 ✓	3, 40 ml, Gs	W	CLP-VOA

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required _____

BOL #250986804 2 OPC #W92-0-034549

9613442.1447

,000024

Westinghouse Hanford Company	CHAIN OF CUSTODY	A:L_1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/15/92

Ice Chest No. SML-75

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 250986804 2

Offsite Property No. W92-0-0345-49

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

~~B06CV7~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U 234/235/238, Pu 238/239/240, Am 241), Sr 90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

B06CV8

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody

Relinquished by:	Received by:	Date/Time:
Kirby D. Lee K.D. Lee	relinq. to refrigerator	5/15/92 1325
Relinquished by:	Received by: B. WHITTEN	Date/Time: 5-18-92 0900
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: 5-19-92 Kermit Blum	Received by: Toby Bernard	Date/Time: 5/20/92 1000

Chain of Possession (Sign and Print Names)

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 5-15-92 Time 0655 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
~~B06CV7~~	~~3, 1L, P~~	~~W~~	~~CLP Cyanide (NaOH)~~
✓	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U-234/235/238, Pu-238/239/240, Am-241),~~
			~~Sr-90 (HNO_3)~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250ml, G~~	~~W~~	~~Tritium~~
B06CV8✓	3, 40ml, Gs	W	CLP-VOA

Field Information** BOL #: 2509868042

OPC #: W920-0345-49

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

Westinghouse Hanford Company

CHAIN OF CUSTODY

ARL 1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/15/92

Ice Chest No. CC-1

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 2509869042

Offsite Property No. W92-0-0345-44

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

~~B0GCW7~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

~~2, 4L, P , WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

B0GCW8

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
Kelly P. Lee K.D. Lee	relinq. to refrigerator	5/15/92 1325
Relinquished by:	Received by: K. Trapp / K. J Trapp	Date/Time: 5/18/92 0658
Relinquished by: K. Trapp / K. J Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-19-92	Received by: Tody Bernard	Date/Time: 5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector K D Lee / L D Walker Date Sampled 5/15/92 Time 1120 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
00GCW7	3, 1L, P	W	~~CLP Cyanide (NaOH)~~
	~~2, 4L, P~~	W	~~Gross Gamma Spec, Alpha Spec (U 238, 235/238, Pu 238/239/240, Am 241), Sr 90 (HNO3)~~
	~~1, 500ml, P~~	W	~~C 14~~
	~~1, 250ml, G~~	W	~~Tritium~~
00GCW8	3, 40ml, Gs	W	CLP-VOA

Field Information** BOC #: 2509968042
OPC #: WA2-0-0345-44

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1451

000028

Westinghouse Hanford Company	CHAIN OF CUSTODY	ARL 1

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/15/92

Ice Chest No. SML-80

Field Logbook No. EFL 0057

Bill of Lading/Airbill No. 2509869042

Offsite Property No. W92-0-0345-44

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

~~B06CX3~~

~~3, 1L, P, WATER, CLP-CYANIDE (NaOH)~~

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

B06CX4

3, 40ml, Gs, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: GG Hamilton GG HAMILTON	Received by: relinq to refrigerator	Date/Time: 5/15/92 1325
Relinquished by:	Received by: K. Trapp/K. Trapp	Date/Time: 5/18/92 0658
Relinquished by: K. Trapp/K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-19-92	Received by: Tody Bernard	Date/Time: 5/20/92 1000

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 5/15/92 Time 0934 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CX3	3, 1L, P	W	CLP Cyanide (NaOH)
	2, 4L, P	W	Gross Gamma Spec, Alpha Spec (U 234 235/238, Pu-238/239/240, Am-241), Sr 90 (HNO_3)
	1, 500ml, P	W	C 14
	1, 250ml, G	W	Tritium
B06CX4	3, 40ml, Gs	W	CLP-VOA

Field Information** DOC #: 2509968042
OPC #: W92-0-0345-44

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

SAMPLE LOG-IN SHEET

LAB NAME : TMA/ARLI

PAGE : 1 OF 1

RECEIVED BY (PRINT NAME): Tody Bernard

LOG-IN-DATE : 5/20/92

RECEIVED BY (SIGNATURE) Tody Bernard

CASE NUMBER:

SAMPLE DELIVERY GROUP NO.:

SAS NUMBER:

REMARKS:

1. Custody Seal(s) Present/Absent* Intact/Broken
2. Custody Seal Nos:
3. Chain of Custody Records Present/Absent*
4. Traffic Reports or Packing List Present/Absent*
5. Airbill Airbill/Sticker Present/Absent*
6. Airbill No.: 2121089 7164
7. Sample Tags Present/Absent*
8. Sample Tags Numbers Listed/Not Listed on Chain of Custody
9. Sample Condition: Intact/Broken*/Leaking
10. Does information on custody records, traffic reports, and sample tags agree Yes/No*
11. Date Recieved at Lab: 5/20/92
12. Temp of ice chest 4.1 °C
13. Time Recieved: 1000 AM

SAMPLE TRANSFER

Fraction:

Area #:

By:

On:

EPA SAMPLE #	CORRESPONDING SAMPLE TAG #	CORRESPONDING ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC.
	BOLCK4	AZ05-063-01	
	BOLCK6	AZ05-063-02	
	BOLCN1	AZ05-063-03	
	BOLCL3	AZ05-063-04	
	BOLCS0	AZ05-063-05	
	BOLCS2	AZ05-063-06	
	BOLCJ8	AZ05-063-07	
	BOLCK0	AZ05-063-08	
	BOLCT3	AZ05-063-09	
	BOLCL6	AZ05-063-10	
	BOLCL8	AZ05-063-11	
	BOLCL0	AZ05-063-12	
	BOLCL2	AZ05-063-13	
	BOLCM5	AZ05-063-14	
	BOLCM7	AZ05-063-15	
	BOLCM8	AZ05-063-16	
	BOLCN0	AZ05-063-17	
	BOLCX2	AZ05-063-18	
	BOLCL3	AZ05-063-19	
	BOLCL5	AZ05-063-20	
	BOLCM2	AZ05-063-21	
	BOLCM4	AZ05-063-22	
	BOLCV8	AZ05-063-23	
	BOLCW3	AZ05-063-24	
	BOLCX4	AZ05-063-25	

* Contact SMO and attach record of resolution

Reviewed By: Logbook No.:

Date: Logbook Page No.:

FORM DC-1

TMA/ARLI
Thermo Analytical Inc.

RADIATION DOSE RATE SURVEY FORM

Date 5/20/92 COMPANY NORCAL (WHC) OTHER ORD # 212689726L

Surveyor's Name Mark S. McGraw

Model No. HP-210 / ESP-1 Model No. AC-3-7 / ESP-1

Serial Nos. 710289 / 02619 Serial Nos. 407726 / 02628

Calibration Date 3/25/92 Calibration Date 11/15/91

Instrument Calibration Factor 0.280 Instrument Calibration Factor 0.177

Sample	Location	HP-210 CPM	HP-210 Factor	HP-210 DPM	AC-3-7 CPM	AC-3-7 Factor	AC-3-7 DPM	Spillage or Breakage?	Activity, nCi/mL or nCi/g
Background		50.0			1.0				
Consistency		7,320	0.2826		5070	0.1863			
Smears: SML 165		45.0			3.0			NONE	
BLUE PLAIN		33.0			0			NONE	
09 RAGS		28.0			0			NONE	
J AUNT		31.0			1.0			NONE	
SML 159		49.0			0			NONE	
FSI N.Y.		32.0			~~10~~ 1.0			NONE	
RED, 243		43.0			2.0			NONE	
	(51 samples) each 50 pCi/gr.								

Comments:

All OK _____ Approved _____

Not OK Date

000032

FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL
PACKAGE TRACKING NUMBER 2126897264

2126897264

Date

RECIPIENT'S COPY

1 From (Your Name Please Print)
Your Phone Number (Very Important)
Company
Department/Floor No
Street Address
City State ZIP Required

2 To (Recipient's Name) Please Print
Recipient's Phone Number (Very Important)
Company
Department/Floor No
Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes)
City State ZIP Required

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice)

H IF HOLD FOR PICK-UP, Print FEDEX Address Here
Street Address
City State ZIP Required

3 PAYMENT
1 Bill Sender 2 Bill Recipient's FedEx Acct No 3 Bill 3rd Party FedEx Acct No 4 Bill Credit Card

4 SERVICES (Check one box)

Priority Overnight
11 ☑ YOUR PACKAGING
14 ☐ FEDEX LETTER*
15 ☐ FEDEX PAK*
13 ☐ FEDEX BOX
14 ☐ FEDEX TUBE

Standard Overnight
YOUR PACKAGING
FEDEX LETTER*
FEDEX PAK*
FEDEX BOX
FEDEX TUBE

Economy Two Day
ECONOMY

Government Overnight
GOVT LETTER
GOVT PACKAGE

Freight Service
OVERNIGHT FREIGHT**
TWO DAY FREIGHT**

5 DELIVERY AND SPECIAL HANDLING (Check services required)
1 ☐ HOLD FOR PICK UP
2 ☒ DELIVER WEEKDAY
3 DELIVER SATURDAY ☐
4 ☐ DANGEROUS GOODS
5 ☐
6 ☐ DRY ICE lbs
7 ☐ OTHER SPECIAL SERVICE
8 ☐
9 ☐ SATURDAY PICK-UP
10 ☐
11 ☐
12 ☐ HOLIDAY DELIVERY

6 PACKAGES WEIGHT in Pounds Only YOUR DECLARED VALUE
Total Total Total
DIM SHIPMENT (Chargeable Weight)
☐ lbs
X X =
Received At
1 ☐ Regular Stop 3 ☐ Drop Box
2 ☐ On Call Stop 4 ☐ BSC 5 ☐ Station

Emp. No Date
☐ Cash Received
☐ Return Shipment
☐ Third Party ☐ Chg. To Dest ☐ Chg. To Hold
Street Address
City State Zip
Received By
X
Date/Time Received FedEx Employee Number

7 Release Signature
FedEx Emp. No Date/Time

Federal Express Use
Base Charges
Declared Value Charge
Other 1
Other 2
Total Charges

REVISION DATE 6/91
PART #137204 FXEM 1/92
FORMAT #099
099
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CJ8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B11

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	B
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	3	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1457

000038

EPA SAMPLE NO.

B06CJ8

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B11

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CK0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B12

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1459

000040
EPA SAMPLE NO.

B06CK0

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B12

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CK4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B03

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	12	B
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CK4

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B03

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Subst. alkane	4.92	5	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CK6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B04

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	3	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CK6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B04

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CL0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-12A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B16

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	3	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CL0

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-12A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B16

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Subst. alkane	4.90	5	J

9615442.1466

000C47
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CL2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-13A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527B13

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CL2

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-13A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20527B13

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/27/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CL3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-19A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B09

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	14	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	3	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CL3

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-19A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B09

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Subst. alkane	3.73	7	J

9613442.1470

000051
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CL5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-20A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B10

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	14	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CL5

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-20A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B10

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CL6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-10A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B14

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	13	B
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	3	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1473

000054
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CL6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-10A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B14

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CL8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-11A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B15

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CL8

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-11A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B15

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CM2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-21A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B11

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	13	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	5	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1477

000058

EPA SAMPLE NO.

B06CM2

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-21A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B11

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Subst. alkane	3.67	5	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CM4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-22A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B12

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1479

000060
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CM4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-22A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B12

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Subst. alkane	3.68	7	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CM5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-14A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B18

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/23/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	6	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	3	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CM5

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-14A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B18

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/23/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9613442.1482

000063

EPA SAMPLE NO.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

B06CM7

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-15A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B03

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613443 1483

1E

000061

EPA SAMPLE NO.

B06CM7

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-15A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B03

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Subst. Alkane	3.68	6	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CM8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-16A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B04

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	9	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613442.1485

000066
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CM8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-16A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B04

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

EPA SAMPLE NO.

B06CN0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-17A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B07

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	14	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CN0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-17A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B07

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CN1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B07

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	4	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CN1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B07

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CN3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B08

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	3	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CN3

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B08

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CS0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B09

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CS0

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B09

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CS2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B10

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	9	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	3	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9613942.1495

000076

EPA SAMPLE NO.

B06CS2

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B10

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CT3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B13

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CT3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20522B13

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/22/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Subst. alkane	4.93	5	J

9613442.1498

000079

EPA SAMPLE NO.

B06CV8

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-23A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B13

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CV8

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-23A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B13

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Subst. alkane	3.70	7	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CW8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-24A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B14

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CW8

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-24A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B14

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Subst. alkane	3.67	7	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CX2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-18A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B08

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

EPA SAMPLE NO.

B06CX2

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-18A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B08

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Subst. alkane	3.68	5	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CX4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-25A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B15

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	BJ
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	BJ
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CX4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-25A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 20526B15

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: not dec. ____ Date Analyzed: 05/26/92

GC Column: WIDE ID: 0.539 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Subst. alkane	3.67	8	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CJ8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N03

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CJ8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N03

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2	BJ
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CJ8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N03

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.25	150	J
2.	Unknown hydrocarbon	4.98	13	J
3.	Unknown hydrocarbon	7.60	10	BJ
4.	Unknown alcohol	8.23	2	BJ
5.	Unknown ketone	9.15	4	BJ
6.	Unknown hydrocarbon	22.68	3	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CK4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20610N03

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/10/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CK4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20610N03

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/10/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	55	B
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613492.1511

000092

EPA SAMPLE NO.

B06CK4

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20610N03

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/10/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.23	41	J
2.	Unknown cyclo hydorcarbon	4.40	120	J
3.	Unknown hydrocarbon	5.07	12	J
4.	Unknown hydrocarbon	7.68	9	BJ
5.	Unknown alcohol	8.30	3	BJ
6.	Unknown ketone	9.23	3	BJ
7.	Unknown hydrocarbon	14.68	2	J
8.	Unknown carboxylic acid	16.58	3	BJ

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CL0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-12B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20619N9

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/19/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CL0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-12B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20619N9

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/19/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2	BJ
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

B06CL0

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-12B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20619N9

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/19/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	26	J
2.	Unknown hydrocarbon	7.48	13	J
3.	Unknown alcohol	8.12	4	BJ
4.	Unknown ketone	9.05	6	BJ
5.	Unknown carboxylic acid	16.42	4	BJ
6.	Unknown hydrocarbon	30.08	14	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CL3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-19B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20610N16

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/11/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CL3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-19B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20610N16

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/11/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CL3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-19B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20610N16

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/11/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	220	J
2.	Unknown hydrocarbon	7.53	7	BJ
3.	Unknown alcohol	8.13	3	BJ
4.	Unknown ketone	9.05	4	BJ
5.	Unknown carboxylic acid	16.38	3	BJ

9613442.1518

000098

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CL6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-10B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N04

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CL6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-10B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N04

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	16	B
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9615442.1520

000101
EPA SAMPLE NO.

B06CL6

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-10B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N04

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.23	160	J
2.	Unknown hydrocarbon	4.93	18	J
3.	Unknown hydrocarbon	7.55	8	BJ
4.	Unknown alcohol	8.18	2	BJ
5.	Unknown ketone	9.10	4	BJ

9613442.1521

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000102
EPA SAMPLE NO.

B06CM2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-21B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20610N17

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/11/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CM2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-21B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20610N17

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/11/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	6	BJ
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

B06CM2

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-21B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20610N17

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/11/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	200	J
2.	Unknown hydrocarbon	4.87	32	J
3.	Unknown hydrocarbon	7.53	7	BJ
4.	Unknown ketone	9.07	4	BJ
5.	Unknown carboxylic acid	16.40	3	BJ
6.	Unknown hydrocarbon	29.95	5	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CM5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-14B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N06

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CM5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-14B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N06

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06CM5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-14B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N06

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.22	190	J
2.	Unknown hydrocarbon	7.48	6	BJ
3.	Unknown ketone	9.02	4	BJ

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CM8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-16B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N07

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

9613442.1528

000109
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06CM8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-16B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N07

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

B06CM8

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-16B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N07

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.32	140	J
2.	Unknown hydrocarbon	5.02	10	J
3.	Unknown hydrocarbon	7.62	5	BJ
4.	Unknown ketone	9.18	4	BJ
5.	Unknown hydrocarbon	21.18	73	J

9613442.1530

000111

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CN1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20610N04

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/10/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

9613442.1531

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000112

EPA SAMPLE NO.

B06CN1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20610N04

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/10/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

B06CN1

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20610N04

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/10/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.37	210	J
2.	Unknown cyclo hydrocarbon	5.03	19	J
3.	Unknown hydrocarbon	7.65	8	BJ
4.	Unknown alcohol	8.27	3	BJ
5.	Unknown ketone	9.20	5	BJ
6.	Unknown carboxylic acid	16.55	5	BJ

EPA SAMPLE NO.

B06CS0

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N02

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	25	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CS0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N02

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613442.1535

000116
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06CS0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 20612N02

Level: (low/med) LOW Date Received: 05/19/92

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 05/21/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/12/92

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown cyclic hydrocarbon	4.32	190	J
2.	Unknown nitrile	5.00	18	J
3.	Unknown hydrocarbon	7.63	7	BJ
4.	Unknown ketone	9.17	5	BJ
5.	Unknown alcohol	14.63	7	J
6.	Unknown hydrocarbon	21.12	65	J

9613442.1536

000117

EPA SAMPLE NO.

B06CJ8

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/19/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/21/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/23/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CK4

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/19/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/21/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/23/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

EPA SAMPLE NO.

B06CL0

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-12B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/19/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/21/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/23/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1539

000120
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CL3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-19B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/19/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/21/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/23/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1540

000121
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CL6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-10B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/19/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/21/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/23/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1591

000122
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CM2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-21B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/19/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/21/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/23/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1542

000123

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CM5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-14B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/19/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/21/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/23/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1543

000124
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06CM8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-16B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/19/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/21/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/23/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1544

000125

EPA SAMPLE NO.

B06CN1

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/19/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/21/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/23/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06CS0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 05063 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A205063-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 05/19/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/21/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/23/92

Injection Volume: 2.50 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9613442.1546

000025

TMA Inc. REPORT

Received: 05/19/92

06/09/92 12:19:51

Work Order # A2-05-064
Work Not Complete

REPORT TO: Westinghouse Hanford Company
2355 Stevens Dr.
Richland,WA.99352
MO-346/200 West/T6-08

ATTEN: Jeanette Duncan

PREPARED BY: Thermo Analytical, Inc.
160 Taylor Street
Monrovia, CA 91016

ATTEN: Ms. Carole Harris

PHONE: 818-357-3247

CERTIFIED BY: Ernesto Vazquez

CONTACT: DDW

CLIENT: WHC SAMPLES: 10

COMPANY: Westinghouse Hanford Company

FACILITY:

This report is for the sole and exclusive use of the client to whom it is addressed and represents only those samples herein described. Samples not destroyed in testing are retained a maximum of 30 days unless otherwise requested.

WORK ID: 100-HR-3

TAKEN: By Westinghouse Staff

TRANS: By Federal Express

TYPE: Liquid

P.O. #: N2-05-119-SU-AR

INVOICE: under separate cover

SAMPLE IDENTIFICATION

01	B06CK4
02	B06CN1
02	B06CN1 MS
02	B06CN1
03	B06CS0
03	B06CS0 Duplicate
03	B06CS0
04	B06CJ8
04	B06CJ8 Duplicate
05	B06CL6
06	B06CL0
07	B06CM5
08	B06CM2
09	B06CM8
10	B06CL3

TEST CODES and NAMES used on this workorder

WCCLPL	Anions & Wet Chem. - WH043
WCL L	Chloride - WH120
WCQCD	Quality Control Summary
WCQCS	Quality Control Summary
WF L	Fluoride in Water
WNO2 L	Nitrite (Liquids)
WNO3 L	Nitrate (water)
WPH L	pH of Liquid - WH121
WPO4 L	Phosphate in Liquids
WSO4 L	Sulfate (in Waters)
W COND	Conductivity-Water WH135

TMA Inc. REPORT Work Order # A2-05-064

Received: 05/19/92

Results by Sample

SAMPLE ID B06CK4 FRACTION 01A TEST CODE VCCLPL NAME Anions & Wet Chem. - VB043

Date & Time Collected 05/16/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.5	mg/L	0.1
Chloride	300	16.3	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	7.9	mg/L	0.2
Sulfate	300	89	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	378	umho/cm	6
pH	150.1	8.2	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-05-064

Received: 05/19/92

Results by Sample

SAMPLE ID B06CN1 FRACTION 02A TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 05/17/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.3	mg/L	0.1
Chloride	300	3.9	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	1.7	mg/L	0.2
Sulfate	300	24	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	189	umho/cm	6
pH	150.1	8.2	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-05-064

Received: 05/19/92

Results by Sample

SAMPLE ID B06CS0 FRACTION 03A TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 05/17/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.3	mg/L	0.1
Chloride	300	5.0	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	0.8	mg/L	0.2
Sulfate	300	68	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	371	umho/cm	6
pH	150.1	8.0	pH	0.1

FORM I

TBA Inc. REPORT Work Order # A2-05-064

Received: 05/19/92 Results by Sample

SAMPLE ID B06CJ8 FRACTION Q4A TEST CODE WCCLPL NAME Anions & Wet Chem. - WB043

Date & Time Collected 05/16/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.3	mg/L	0.1
Chloride	300	22.1	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	8.1	mg/L	0.2
Sulfate	300	89	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	425	umho/cm	6
pH	150.1	8.0	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-05-064

Received: 05/19/92 Results by Sample

SAMPLE ID B06CL6 FRACTION 05A TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 05/16/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.2	mg/L	0.1
Chloride	300	17.3	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	7.1	mg/L	0.2
Sulfate	300	90	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	351	umho/cm	6
pH	150.1	8.2	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-05-064

Received: 05/19/92

Results by Sample

SAMPLE ID B06CL0 FRACTION 06A TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 05/16/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.3	mg/L	0.1
Chloride	300	23.0	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	15.0	mg/L	0.2
Sulfate	300	156	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	531	umho/cm	6
pH	150.1	8.1	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-05-064

Received: 05/19/92

Results by Sample

SAMPLE ID B06CM5 FRACTION 07A TEST CODE WCCLPL NAME Anions & Wet Chem. - WB043

Date & Time Collected 05/17/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	<0.1	mg/L	0.1
Chloride	300	35.2	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	11.8	mg/L	0.2
Sulfate	300	113	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	470	umho/cm	6
pH	150.1	8.1	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-05-064

Received: 05/19/92

Results by Sample

SAMPLE ID B06CM2 FRACTION 08A TEST CODE WCCLPL NAME Anionss & Wet Chem. - WM043

Date & Time Collected 05/17/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	<0.1	mg/L	0.1
Chloride	300	28.0	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	9.8	mg/L	0.2
Sulfate	300	92	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	474	umho/cm	6
pH	150.1	8.1	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-05-064

Received: 05/19/92

Results by Sample

SAMPLE ID B06CM8 FRACTION 09A TEST CODE VCCLPL NAME Anions & Wet Chem. - VM043

Date & Time Collected 05/17/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	0.3	mg/L	0.1
Chloride	300	5.1	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	0.7	mg/L	0.2
Sulfate	300	68	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	362	umho/cm	6
pH	150.1	8.0	pH	0.1

FORM I

TMA Inc. REPORT Work Order # A2-05-064

Received: 05/19/92

Results by Sample

SAMPLE ID B06CL3 FRACTION 10A TEST CODE WCCLPL NAME Anions & Wet Chem. - WB043

Date & Time Collected 05/16/92 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Fluoride	300	<0.1	mg/L	0.1
Chloride	300	23.0	mg/L	0.2
Nitrite	300	<0.1	mg/L	0.1
Nitrate	300	15.4	mg/L	0.2
Sulfate	300	172	mg/L	1
Phosphate	300	<0.4	mg/L	0.4
Elect. Conductivity	120.1	581	umho/cm	6
pH	150.1	8.0	pH	0.1

FORM I

9613442.1957

TMA
Thermo Analytical Inc.

300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200
FAX (617) 890-3883

JUL 1992
RECEIVED
OSM DMO

June 25, 1992

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Quality Control Narrative

Scope
Fourteen (14) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on May 21,1992 from Westinghouse Hanford Company. The samples were analyzed for the USEPA CLP metals and cyanide as indicated on the chain of custody. The analysis was performed under Skinner and Sherman work order S205210.

Methodology
The samples were prepared, analyzed and reported in accordance with the USEPA Contract Laboratory Program Statement of Work 7/88 (CLP SOW788).

Discussion
All quality control requirements were met for the samples with the following exceptions:

The chromium, selenium and thallium digestion spike recovery exceeded the control limit requirements.

The barium ICP serial dilution exceeded the control limit requirements.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

1/18/96 M.H.

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CJ8

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-119SAS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-01S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	311.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	7.90	B		F
7440-39-3	Barium	92.90	B	E	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	57300.00			P
7440-47-3	Chromium	483.00		N	P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	7.40	B		P
7439-89-6	Iron	762.00			P
7439-92-1	Lead	2.80	B		F
7439-95-4	Magnesium	15800.00			P
7439-96-5	Manganese	145.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	34.00	B		P
7440-09-7	Potassium	6090.00			P
7782-49-2	Selenium	4.00	U	MWN	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	18900.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	17.20	B		P
7440-66-6	Zinc	14.20	B		P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613442.1559

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CK4

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-119SAS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-02S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	116.00	B		P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.80	B		F
7440-39-3	Barium	38.60	B	E	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	44400.00			P
7440-47-3	Chromium	748.00		N	P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	278.00			P
7439-92-1	Lead	1.70	B		F
7439-95-4	Magnesium	16200.00			P
7439-96-5	Manganese	54.40			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	14.80	B		P
7440-09-7	Potassium	6740.00			P
7782-49-2	Selenium	4.00	U	WN	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	17100.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	6.60	B		P
7440-66-6	Zinc	11.00	U		P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CL0

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-1199AS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-03S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1580.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.10	B		F
7440-39-3	Barium	126.00	B	E	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	85700.00			P
7440-47-3	Chromium	139.00		N	P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	14.70	B		P
7439-89-6	Iron	5570.00			P
7439-92-1	Lead	2.60	B		F
7439-95-4	Magnesium	26700.00			P
7439-96-5	Manganese	385.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	39.20	B		P
7440-09-7	Potassium	5480.00			P
7782-49-2	Selenium	4.00	U	WN	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	11800.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	11.60	B		P
7440-66-6	Zinc	78.00			P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613442.1561

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CL3

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-119SAS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-04S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1140.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.30	B		F
7440-39-3	Barium	95.20	B	E	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	84700.00			P
7440-47-3	Chromium	176.00		N	P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	10.20	B		P
7439-89-6	Iron	2240.00			P
7439-92-1	Lead	2.90	B		F
7439-95-4	Magnesium	26600.00			P
7439-96-5	Manganese	66.80			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	58.90			P
7440-09-7	Potassium	5580.00			P
7782-49-2	Selenium	20.00	U	WN	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	13900.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	14.80	B		P
7440-66-6	Zinc	32.00			P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CL6

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-119SAS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-05S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1480.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.70	B		F
7440-39-3	Barium	91.70	B	E	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	48400.00			P
7440-47-3	Chromium	264.00		N	P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	7.00	B		P
7439-89-6	Iron	2490.00			P
7439-92-1	Lead	4.30			F
7439-95-4	Magnesium	14400.00			P
7439-96-5	Manganese	61.60			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	32.80	B		P
7440-09-7	Potassium	4610.00	B		P
7782-49-2	Selenium	20.00	U	N	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	14800.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	19.60	B		P
7440-66-6	Zinc	36.10			P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9615442.1563

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CM2

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-119SAS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-06S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1060.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.50	B		F
7440-39-3	Barium	91.70	B	E	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	80600.00			P
7440-47-3	Chromium	443.00		N	P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	6.40	B		P
7439-89-6	Iron	1740.00			P
7439-92-1	Lead	1.90	B		F
7439-95-4	Magnesium	13700.00			P
7439-96-5	Manganese	25.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	35.20	B		P
7440-09-7	Potassium	5080.00			P
7782-49-2	Selenium	4.00	U	WN	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	12500.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	14.20	B		P
7440-66-6	Zinc	54.40			P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CM5

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-1195AS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-075

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	579.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	2.70	B	W	F
7440-39-3	Barium	31.70	B	E	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	72400.00			P
7440-47-3	Chromium	412.00		N	P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	3.20	B		P
7439-89-6	Iron	1440.00			P
7439-92-1	Lead	2.40	B		F
7439-95-4	Magnesium	10200.00			P
7439-96-5	Manganese	33.10			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	57.30			P
7440-09-7	Potassium	4120.00	B		P
7782-49-2	Selenium	4.00	U	WN	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	8530.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	6.90	B		P
7440-66-6	Zinc	26.00			P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CM8

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-1199AS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-08S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2320.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.90	B	W	F
7440-39-3	Barium	136.00	B	E	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	39200.00			P
7440-47-3	Chromium	95.90		N	P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	8.60	B		P
7439-89-6	Iron	3440.00			P
7439-92-1	Lead	3.40			F
7439-95-4	Magnesium	14900.00			P
7439-96-5	Manganese	350.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	49.30			P
7440-09-7	Potassium	9340.00			P
7782-49-2	Selenium	20.00	U	WN	F
7440-22-4	Silver	2.40	B		P
7440-23-5	Sodium	31900.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	34.70	B		P
7440-66-6	Zinc	41.70			P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613442.1566

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CN1

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-119SAS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-09S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	200.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	1.60	B	W	F
7440-39-3	Barium	63.70	B	E	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	30900.00			P
7440-47-3	Chromium	169.00		N	P
7440-48-4	Cobalt	3.00	U		P
7440-50-8	Copper	5.20	B		P
7439-89-6	Iron	966.00			P
7439-92-1	Lead	3.10		M	F
7439-95-4	Magnesium	4940.00	B		P
7439-96-5	Manganese	24.40			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	89.70			P
7440-09-7	Potassium	3410.00	B		P
7782-49-2	Selenium	20.00	U	WN	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	5940.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	6.70	B		P
7440-66-6	Zinc	11.00	U		P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613942.1567

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CS0

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-119SAS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-10S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2710.00			P
7440-36-0	Antimony	16.00	U		P
7440-38-2	Arsenic	3.10	B	W	F
7440-39-3	Barium	140.00	B	E	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	39900.00			P
7440-47-3	Chromium	85.20		N	P
7440-48-4	Cobalt	3.10	B		P
7440-50-8	Copper	6.10	B		P
7439-89-6	Iron	3690.00			P
7439-92-1	Lead	4.90			F
7439-95-4	Magnesium	15100.00			P
7439-96-5	Manganese	370.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	43.60			P
7440-09-7	Potassium	9460.00			P
7782-49-2	Selenium	20.00	U	EN	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	33000.00			P
7440-28-0	Thallium	1.00	U	WN	F
7440-62-2	Vanadium	35.10	B		P
7440-66-6	Zinc	47.40			P
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613442.1568

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CV7

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-119SAS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-11S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613942.1569

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CW7

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-119SAS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-12S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

FORM I - IN

9613442.1570

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CX1

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-119SAS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-13S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CX3

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-119SAS No.: SDG No.: B06CJ8

Matrix (soil/water): WATER Lab Sample ID: 05210-146

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide	10.00	U		CA

Color Before: COLORLESS Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

9613442.1572

TMA/Skinner & Sherman Labs **SAMPLE LOG-IN**

WORKORDER 92-05-210 CLIENT HANFORD.NOR No. SAMPLES:

PROTCL CLP TURNARND 33 days (Soil) 14 (Water) (Specify Other)

COOLER TEMP: 4 oC, or NA

CUSTODIAN Henney, A. SDG/BATCH N/A

CUSTODY SEAL: PRESENT/ABSENT/INTACT/NOT CLIENT CASE N2-05-119

SHIPER & # Fedex # 2126897172 PO/CONTRACT# N/

TAGS: PRESENT/ABSENT/NA/SEE COC CONTACT Dolores Sanchez

CHAIN OF CUSTODY: PRESENT/ABSENT/NA, # N/A COMMENTS: NONE

SAMPLE CONTAINERS INTACT/BROKEN COMMENTS

CLIENT COMMENT? YES/NO

SAMPLE LABELS AGREE WITH CHAIN OF CUSTODY INFO? YES/NO (COMMENT)

CLIENT PAPERWORK AGREES WITH SAMPLES & COC? YES/NO (COMMENT)

SHIPMENT DATES 5.21.92

LIST ANY DATE WITH PAPERWORK/SHIPMENT PROBLEMS & SPECIFY THE PROBLEM:

N/A

unfiltered

	CLIENT ID	MATRIX	RECEIVED	QC	TEST(S)	HOLD TIME UP
1	B06CJ8	WATER	5.21.92	D,S	TM/CN	5/16
2	K4					
3	L0					
4	L3					
5	L6					CN due 5.28
6	M2					5.17
7	M5					
8	M8					
9	N1					
10	S0					HG due 6.10
11	B06CV7				CN only	5/15
12	W7					5.15
13	X1					5.15
14	X3					5.15
15						
16						
17						
18						
19						
20						
21						
22						92
23						
24						
25						
26						KB
27						

Samples are from site known to have Rad-Contamination: YES X NO

Samples have detectable amounts of Radioactive Material: YES X NO

SUBCONTRACT: YES/NO TO: DATE:

REVIEWED Rev. 1.4 PAGE 187

9613442.1573

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/16/92

Ice Chest No. SML-63

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 0509866 8097 2

Offsite Property No. W92-0-0345-50

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CK4

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED
3, 1L, P, WATER, CLP-CYANIDE (NaOH)
~~3, 40ml, Gs, WATER, CLP-VOA~~
~~8, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~
~~1, 500ml, G, WATER, ANIONS, pH~~
~~1, 500ml, G, WATER, CONDUCTIVITY~~
~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06CK5

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CK6~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
C Celiberti C CELIBERTI	R Reid	5/16/92 1400
Relinquished by:	Received by: B. WHITTEN	Date/Time: 5-18-92 0900
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-20-92	Received by:	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

188

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1574

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-16-92 Time 0812 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CK4	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	3, 1L, P	W	CLP - CN (NaOH)
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CK5	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CK6~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

~~189~~

PART II: LABORATORY SECTION

Received by Hermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL #250986804 2 OPC #W92-0-0345-50

9613442.1575

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/17/92

Ice Chest No. SML-120

Field Logbook No. EFL-0057 p. 10

Bill of Lading/Airbill No. 850986804 2

Offsite Property No. W92-0-0345-50

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CN1

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED
3, 1L, P, WATER, CLP-CYANIDE (NaOH)
~~3, 40ml, Gs, WATER, CLP-VOA~~
~~3, 2L, G, WATER, CLP SEMI VOA/PCB/PEST~~
~~1, 500ml, G, WATER, ANIONS, pH~~
~~1, 500ml, G, WATER, CONDUCTIVITY~~
~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am 241), Sr 90, Tc 99~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

* B06CN2

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CN3~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: K.D. Lee	Received by: relinquished to refrigerator	Date/Time: 5/17/92 1325
Relinquished by:	Received by: B. WHITTEN	Date/Time: 5-18-92 0900
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: 5-20-92 Kermit Blum	Received by:	Date/Time: 5/21/92 7:3"

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* ID on this sample (B06CN2) was unreadable. It is assumed that the leftover bottle, marked metals, is B06CN2. These labels are wet & easily damaged. KB 5-19-92

190

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1576

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION TASK NO - 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-17-92 Time 1023 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CN1	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	3, 1L, P	W	CLP - CN (NaOH)
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CN2	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CN3~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION 191

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL #250986 804 2 OPC #W92-0-0345-50

9613442.1577

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/17/92

Ice Chest No. SMASH

Field Logbook No. EFL-0057 pg. 9

Bill of Lading/Airbill No. 250986804 2

Offsite Property No. W92-0-0369-1

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CS0

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED
3, 1L, P, WATER, CLP-CYANIDE (NaOH)
~~3, 40ml, Gs, WATER, CLP-VOA~~
~~3, 2L, G, WATER, CLP-SEMI VOA/PCB/PEST~~
~~1, 500ml, G, WATER, ANIONS, pH~~
~~1, 500ml, G, WATER, CONDUCTIVITY~~
~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06CS1

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CS2~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody

Chain of Possession (Sign and Print Names)		
Relinquished by: Kirby R. Lee K.D. Lee	Received by: relinq. to refrigerator	Date/Time: 5/17/92 1325
Relinquished by:	Received by: Bill Whitten B. WHITTEN	Date/Time: 5-18-92 0900
Relinquished by: Bill Whitten B. WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-20-92	Received by: [illegible]	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

192

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1578

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-17-92 Time 0645 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06C50	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	3, 1L, P	W	CLP - CN (NaOH)
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06C51	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06C52~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

193

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL #2509868092 OPC #W92-O-0399-1

9613442.1579

Westinghouse Hanford Company	CHAIN OF CUSTODY	S & S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/16/92

Ice Chest No. SML-7

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 2509969042

Offsite Property No. W92-0-0345-45

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CJ8

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED
3, 1L, P, WATER, CLP-CYANIDE (NaOH)
~~3, 40ml, Gs, WATER, CLP VOA~~
~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~
~~1, 500ml, G, WATER, ANIONS, pH~~
~~1, 500ml, G, WATER, CONDUCTIVITY~~
~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06CJ9

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CK0~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

~~B06CT3~~

~~3, 40ml, Gs, Water, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: C Colbert CC	Received by: Retail	Date/Time: 5/16/92 1400
Relinquished by:	Received by: K Trapp / K. Trapp	Date/Time: 5/18/92 0658
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-20-92	Received by: [signature]	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1580

Task #: 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 5/16/92 Time 0645 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ B06CJ8	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
✓	3, 1L, P	W	CLP - CN (NaOH)
✓	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
✓	~~3, 2L, G~~	~~W~~	~~CLP - Semi VOA/PCB/Pest~~
✓	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
✓	~~1, 500ml, G~~	~~W~~	~~Cond.~~
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
✓ B06CJ9	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
✓ ~~B06CK0~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~
✓ ~~B06CT3~~	~~3, 40mL, Gs~~	~~W~~	~~CLP-VOA~~

Field Information** BOL: 2509969042
OPC: W92-0-0345-45

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL # OPC #

195

9613442.1581

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/16/92

Ice Chest No. SML-15

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 2509869042

Offsite Property No. W92-0-0345-45

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06C66

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED
3, 1L, P, WATER, CLP-CYANIDE (NaOH)
~~3, 40ml, Gs, WATER, CLP-VOA~~
~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~
~~1, 500ml, G, WATER, ANIONS, pH~~
~~1, 500ml, G, WATER, CONDUCTIVITY~~
~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06C67

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06C68~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: Kathy D. Lee K.D. Lee	Received by: relog to refrigerator	Date/Time: 5/16/92 1400
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 5/18/92 0658
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-20-92	Received by: [signature]	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

196

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1582

Task II: 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 5/16/92 Time 1200 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CL6	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	3, 1L, P	W	CLP - CN (NaOH)
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CL7	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CL8~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

BOL: 2509869042

OPC: W92-0-0345-45

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL # OPC #

*Indicate whether sample is soil, sludge, water, etc.

197

9613442.1583

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/16/92

Ice Chest No. SML-17

Field Logbook No. EPL-0057

Bill of Lading/Airbill No. 2509968042

Offsite Property No. W92-0-0345-46

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CC0

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED
3, 1L, P, WATER, CLP-CYANIDE (NaOH)
~~3, 40ml, Gs, WATER, CLP-VOA~~
~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~
~~1, 500ml, G, WATER, ANIONS, pH~~
~~1, 500ml, G, WATER, CONDUCTIVITY~~
~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06CC1

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CC2~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
C Celiberti C CELIBERTI	Refrid.	5/16/92 1400
Relinquished by:	Received by: K Trapp / K. Trapp	Date/Time: 5/18/92 0658
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: 5-20-92 Kermit Blum	Received by: [illegible]	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

198

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1584

Task #: 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 5/16/92 Time 0925 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ B0GCL0	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
✓	3, 1L, P	W	CLP - CN (NaOH)
✓	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
✓	✓ ~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
✓	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
✓	~~1, 500ml, G~~	~~W~~	~~Cond.~~
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
✓ B0GCL1	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
✓ ~~B0GCL2~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information** BOL: 2509868042
OPC: W92-0-0345-46

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

199

Received by Hermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL # OPC #

9613442.1585

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/17/92

Ice Chest No. 5ML-16

Field Logbook No. EFL-0057 pg. 9

Bill of Lading/Airbill No. 250986 8094 2

Offsite Property No. W92-0-0345-46

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CM5

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED
3, 1L, P, WATER, CLP-CYANIDE (NaOH)
~~3, 40ml, Gs, WATER, CLP-VOA~~
~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~
~~1, 500ml, G, WATER, ANIONS, pH~~
~~1, 500ml, G, WATER, CONDUCTIVITY~~
~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06CM6

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CM7~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: K.D. Lee K.D. Lee	Received by: relinq to refrigerator	Date/Time: 5/17/92 1325
Relinquished by:	Received by: B. WHITTEN	Date/Time: 5-18-92 0900
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-20-92	Received by:	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

200

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1586

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-17-92 Time 0700 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ B06CM5	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	3, 1L, P	W	CLP - CN (NaOH)
✓	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
✓	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
✓	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
✓	~~1, 500ml, G~~	~~W~~	~~Cond.~~
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
✓ B06CM6	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
✓ ~~B06CM7~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

201

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL # 250986804 2 OPC # W92-0-0345-98

9613442.1587

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/17/92

Ice Chest No. Rusty Dusty

Field Logbook No. EFL-0057 p.9

Bill of Lading/Airbill No. 2509868042

Offsite Property No. W92-0-0345-48

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CM8

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED
3, 1L, P, WATER, CLP-CYANIDE (NaOH)
~~3, 40ml, Gs, WATER, CLP-VOA~~
~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~
~~1, 500ml, G, WATER, ANIONS, pH~~
~~1, 500ml, G, WATER, CONDUCTIVITY~~
~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06CM9

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CN0~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: Kirby A Lee K.O. Lee	Received by: relinq to refrigerator	Date/Time: 5/17/92 1325
Relinquished by:	Received by: Bill Whitten B. WHITTEN	Date/Time: 5-18/92 0900
Relinquished by: Bill Whitten B. WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-20-92	Received by: [illegible]	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

202

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1588

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

TASK NO 92-165

Collector L. D. Walker/K. D. Lee Date Sampled 5-17-92 Time 0645 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CM8	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
	3, 1L, P	W	CLP - CN (NaOH)
	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
	~~1, 500ml, G~~	~~W~~	~~Cond.~~
	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CM9	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CN0~~	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

203

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL # 250986804 2 OPC # W92-0-0345-48

9613442.1589

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/16/92

Ice Chest No. SML-22

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 2509868042

Offsite Property No. W92-0-0345-46

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CL3

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED
3, 1L, P, WATER, CLP-CYANIDE (NaOH)
~~3, 40ml, Gs, WATER, CLP-VOA~~
~~3, 2L, G, WATER, CLP-SEMI-VOA/PCB/PEST~~
~~1, 500ml, G, WATER, ANIONS, pH~~
~~1, 500ml, G, WATER, CONDUCTIVITY~~
~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06CL4

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CL5~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: C. Celebrate C. CELEBRATE	Received by: Refrid	Date/Time: 5/16/92 1460
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 5/18/92 0650
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-20-92	Received by: [illegible]	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

204

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1590

Task#: 92-165

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 5/16/92 Time 1046 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CL3 ✓	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
✓	3, 1L, P	W	CLP - CN (NaOH)
✓	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
✓	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
✓	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
✓	~~1, 500ml, G~~	~~W~~	~~Cond.~~
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CL4 ✓	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CL5~~ ✓	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information** BOL: 2509869042
OPC: W92-0-0345-46

Special Handling and/or Storage

Possible Sample Hazards

205

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL # OPC #

9613442.1591

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Project Designation/Sampling Locations 100-HR-3

Ice Chest No. Bad Boy

Bill of Lading/Airbill No. 0509868094 0

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045

Collection Date 5/17/92

Field Logbook No. EFL-0057 p.10

Offsite Property No. W92-0-0345-49

Sample Identification

B06CM2

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) UNFILTERED
3, 1L, P, WATER, CLP-CYANIDE (NaOH)
~~3, 40ml, Gs, WATER, CLP VOA~~
~~3, 2L, G, WATER, CLP SEMI VOA/PCB/PEST~~
~~1, 500ml, G, WATER, ANIONS, pH~~
~~1, 500ml, G, WATER, CONDUCTIVITY~~
~~2, 4L, P, WATER, GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90, Tc-99~~
~~1, 500ml, P, WATER, C-14~~
~~1, 250ml, G, WATER, TRITIUM~~

B06CM3

3, 1L, P, WATER, CLP-ICP/AA METALS & MERCURY (HNO3) FILTERED

~~B06CM4~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: Kirby D. Lee K.D. Lee	Received by: relinq to refrigerator	Date/Time: 5/17/92 1325
Relinquished by:	Received by: B. WHITTEN	Date/Time: 5-18-92 0900
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-20-92	Received by:	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

206

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1592

ok

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector L. D. Walker/K. D. Lee Date Sampled 5-17-92 Time 0915 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CM2 ✓	3, 1L, P	W	CLP - ICP/AA Metals & Hg (HNO_3), unfiltered
✓	3, 1L, P	W	CLP - CN (NaOH)
✓	~~3, 40M, Gs~~	~~W~~	~~CLP - VOA~~
✓	~~3, 2L, G~~	~~W~~	~~CLP - Semi-VOA/PCB/Pest~~
✓	~~1, 500 ml, G~~	~~W~~	~~ANions, pH~~
✓	~~1, 500ml, G~~	~~W~~	~~Cond.~~
✓	~~2, 4L, P~~	~~W~~	~~Gross Alpha/Beta, Gamma Spec, Alpha Spec (U-234/235/238, Pa-238/239/240 Am-241), Sr-90, Tc-99~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250 ml, G~~	~~W~~	~~Tritium~~
B06CM3 ✓	3, 1L, P	W	CLP-ICP/AA Metals & Hg (HNO_3) filtered
~~B06CM4~~ ✓	~~3, 40 ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

207

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

BOL #250986804 2 OPC #W92-0-034549

9615442.1593

ck

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Project Designation/Sampling Locations 100-HR-3

Ice Chest No. SML-75

Bill of Lading/Airbill No. 2509868042

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045

Collection Date 5/15/92

Field Logbook No. EFL-0057

Offsite Property No. W92-0-0345-49

Sample Identification

B06CV7

- 3, 1L, P, WATER, CLP-CYANIDE (NaOH)
- ~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~
- ~~1, 500ml, P, WATER, C-14~~
- ~~1, 250ml, G, WATER, TRITIUM~~

~~B06CV8~~

- ~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: Kirby D. Lee K.D. Lee	Received by: relinq. to refrigerator	Date/Time: 5/15/92 1325
Relinquished by:	Received by: B. WHITTEN	Date/Time: 5-18-92 0900
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: 5-20-92 Kermit Blum	Received by:	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

208

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613942.1594

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KD Lee / LD Walker Date Sampled 5-15-92 Time 0655 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CV7	3, 1L, P	W	CLP- Cyanide (NaOH)
✓	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U-234, 235/238, Pu 238/239/240, Am-241), Sr 90 (HNO3)~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250ml, G~~	~~W~~	~~Tritium~~
~~B06CV8~~	~~3, 40ml, Gs~~	~~W~~	~~CLP- VOA~~

Field Information** BOL #: 2509868042
OPC #: W92-0-0345-49

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5/18/92

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1595

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/15/92

Ice Chest No. CC-1

Field Logbook No. EFL-0057

Bill of Lading/Airbill No. 2509869042

Offsite Property No. W92-0-0345-44

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B0GCW7

3, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B0GCW8~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: K.D. Lee	Received by: relinq. to refrigerator	Date/Time: 5/15/92 1325
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 5/18/92 0658
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-20-92	Received by: [illegible]	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

210

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1596

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

Task #92-165

PART I: FIELD SECTION

Collector KD Lee / LD Walker Date Sampled 5/15/92 Time 1120 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CW7	3, 1L, P	W	CLP Cyanide (NaOH)
	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U 234, 235/238, Pu 238/239/240, Am 241),~~
			~~Sr 90 (HNO_3)~~
	~~1, 500ml, P~~	~~W~~	~~C-14~~
	~~1, 250ml, G~~	~~W~~	~~Tritium~~
B06CW8	~~3, 40ml, GS~~	~~W~~	~~CLP-VOA~~

Field Information** BOC #: 2509968042
OPC #: W92-0-0345-44

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5/19/92

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1597

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/15/92

Ice Chest No. SML-80

Field Logbook No. EFL 0057

Bill of Lading/Airbill No. 2509869042

Offsite Property No. W92-0-0345-44

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B06CX3

3, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CX4~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
G G Hamilton GG HAMILTON	relinq. to refrigerator	5/15/92 1325
Relinquished by:	Received by: K. Trapp/K. Trapp	Date/Time: 5/18/92 0658
Relinquished by: K. Trapp/K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-20-92	Received by: [illegible]	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

212

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1598

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 5/15/92 Time 0834 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
B06CX3 ✓	3, 1L, P	W	CLP Cyanide (NaOH)
✓	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U-234, 235/238, Pu-238/239/240, Am-241),~~
			~~Sr-90 (HNO_3)~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250ml, G~~	~~W~~	~~Tritium~~
✓ ~~B06CX4~~	~~3, 40ml, GS~~	~~W~~	~~CLP-VOA~~

Field Information** BOL #: 2509969042
OPC #: W92-0-0345-44

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

213

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1599

Westinghouse Hanford Company	CHAIN OF CUSTODY	S&S

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-HR-3

Collection Date 5/15/92

Ice Chest No. Silver Bullet

Field Logbook No. EFL 0057

Bill of Lading/Airbill No. 2509968042

Offsite Property No. W92-0-0345-47

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

~~B06J~~ KT 5/7/92

B06CX1 3, 1L, P, WATER, CLP-CYANIDE (NaOH)

~~2, 4L, P, WATER, GAMMA SPEC, ALPHA SPEC(U-234/235/238, Pu-238/239/240, Am-241), Sr-90 (HNO3)~~

~~1, 500ml, P, WATER, C-14~~

~~1, 250ml, G, WATER, TRITIUM~~

~~B06CX2~~

~~3, 40ml, Gs, WATER, CLP-VOA~~

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: GG Hamilton	Received by: Relinquished to Refrigerator	Date/Time: 5/15/92 1325
Relinquished by:	Received by: K. Trapp / K. Trapp	Date/Time: 5/18/92 0658
Relinquished by: K. Trapp / K. Trapp	Received by: Kermit Blum	Date/Time: 5-19-92 1230
Relinquished by: Kermit Blum 5-20-92	Received by: [signature]	Date/Time: 5/21/92 9:30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

9613442.1600

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-165

PART I: FIELD SECTION

Collector KDLee / LD Walker Date Sampled 5/15/92 Time 0834 hours

Company Contact PH Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
✓ 00GCX1	3, 1L, P	W	CLP Cyanide (NaOH)
✓	~~2, 4L, P~~	~~W~~	~~Gross Gamma Spec, Alpha Spec (U-234/235/238, Pu-238/239/240, Am-241),~~
			~~Sr-90 (HNO_3)~~
✓	~~1, 500ml, P~~	~~W~~	~~C-14~~
✓	~~1, 250ml, G~~	~~W~~	~~Tritium~~
✓ ~~00GCX2~~	~~3, 40ml, Gs~~	~~W~~	~~CLP-VOA~~

Field Information** BOL #: 2509968042
OPC #: W92-0-0345-47

Special Handling and/or Storage

Possible Sample Hazards

PART II: LABORATORY SECTION

Received by Kermit Blum Title Sample Control Supervisor Date 5-19-92

Analysis Required

215

*Indicate whether sample is soil, sludge, water, etc.
**Use back of page for additional information relative to sample location.

A-6000-406 (05/90)

9613442.1601

TMA
Thermo Analytical Inc.

300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200
FAX (617) 890-3883

JUL 1992
RECEIVED
OSM DMO

June 25, 1992

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Quality Control Narrative

Scope
Ten (10) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on May 21, 1992 from Westinghouse/Hanford Company. The samples were analyzed for the USEPA CLP Target Analyte List metals. The analysis was performed under Skinner and Sherman work order S205211.

Methodology
The samples were prepared, analyzed and reported in accordance with the USEPA Contract Laboratory Program Statement of Work 7/88 (CLP SOW788).

Discussion
All quality control requirements were met for the samples with the following exceptions:

The chromium and thallium digestion spike recovery exceeded the control limit requirements.

The chromium ICP serial dilution exceeded the control limit requirements.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

1/18/96 M.H.

9613442.1602

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CJ9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-120SAS No.: SDG No.: B06CJ9

Matrix (soil/water): WATER Lab Sample ID: 05211-01S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	71.40	B		P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	6.40	B		F
7440-39-3	Barium	36.40	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	57900.00			P
7440-47-3	Chromium	410.00		EN	P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	6.00	B		P
7439-89-6	Iron	32.40	B		P
7439-92-1	Lead	2.80	B		F
7439-95-4	Magnesium	15800.00			P
7439-96-5	Manganese	110.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.40	B		P
7440-09-7	Potassium	6320.00			P
7782-49-2	Selenium	20.00	U	W	F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	19200.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	18.10	B		P
7440-66-6	Zinc	8.20	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613442.1603

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CK5

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-120SAS No.: SDG No.: B06CJ9

Matrix (soil/water): WATER Lab Sample ID: 05211-02S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	370.00			P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	3.50	B		F
7440-39-3	Barium	83.90	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	42200.00			P
7440-47-3	Chromium	712.00		NE	P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	29.30	B		P
7439-92-1	Lead	4.40		W	F
7439-95-4	Magnesium	15500.00			P
7439-96-5	Manganese	61.80			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.00	U		P
7440-09-7	Potassium	6340.00			P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	15700.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	7.40	B		P
7440-66-6	Zinc	8.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9615442.1604

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CL1

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-120SAS No.: SDG No.: B06CJ9

Matrix (soil/water): WATER Lab Sample ID: 05211-03S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	497.00			P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	2.20	B		F
7440-39-3	Barium	92.30	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	81800.00			P
7440-47-3	Chromium	65.70		NE	P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	28.10	B		P
7439-92-1	Lead	1.30	B		F
7439-95-4	Magnesium	24900.00			P
7439-96-5	Manganese	256.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.00	U		P
7440-09-7	Potassium	5020.00			P
7782-49-2	Selenium	6.10			F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	11100.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	6.20	B		P
7440-66-6	Zinc	21.70			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CL4

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-120SAS No.: SDG No.: B06CJ9

Matrix (soil/water): WATER Lab Sample ID: 05211-04S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2140.00			P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	2.40	B		F
7440-39-3	Barium	90.30	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	82900.00			P
7440-47-3	Chromium	38.10		NE	P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	132.00			P
7439-92-1	Lead	1.50	B	W	F
7439-95-4	Magnesium	25600.00			P
7439-96-5	Manganese	134.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.60	B		P
7440-09-7	Potassium	5540.00			P
7782-49-2	Selenium	21.20		+	F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	13600.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	13.70	B		P
7440-66-6	Zinc	28.40			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CL7

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-120SAS No.: SDG No.: B06CJ9

Matrix (soil/water): WATER Lab Sample ID: 05211-05S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1040.00			P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	3.70	B		F
7440-39-3	Barium	71.20	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	45500.00			P
7440-47-3	Chromium	201.00		NE	P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	58.10	B		P
7439-92-1	Lead	1.70	B		F
7439-95-4	Magnesium	13300.00			P
7439-96-5	Manganese	52.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.00	U		P
7440-09-7	Potassium	4250.00	B		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	14000.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	14.40	B		P
7440-66-6	Zinc	15.80	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CM3

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-120SAS No.: SDG No.: B06CJ9

Matrix (soil/water): WATER Lab Sample ID: 05211-06S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	24.20	B		P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	3.00	B		F
7440-39-3	Barium	59.90	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	70000.00			P
7440-47-3	Chromium	301.00		NE	P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	75.90	B		P
7439-92-1	Lead	1.10	B		F
7439-95-4	Magnesium	9730.00			P
7439-96-5	Manganese	4.00	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	10.20	B		P
7440-09-7	Potassium	3850.00	B		P
7782-49-2	Selenium	4.00	U		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	7990.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	9.00	B		P
7440-66-6	Zinc	8.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613442.1608

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CM6

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-120SAS No.: SDG No.: B06CJ9

Matrix (soil/water): WATER Lab Sample ID: 05211-07S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23.60	B		P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	3.20	B		F
7440-39-3	Barium	75.00	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	77500.00			P
7440-47-3	Chromium	378.00		NE	P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	25.00	U		P
7439-92-1	Lead	1.80	B		F
7439-95-4	Magnesium	13000.00			P
7439-96-5	Manganese	1.60	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.00	U		P
7440-09-7	Potassium	4770.00	B		P
7782-49-2	Selenium	20.00	U		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	11800.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	13.20	B		P
7440-66-6	Zinc	8.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613442.1609

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CM9

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-120SAS No.: SDG No.: B06CJ9

Matrix (soil/water): WATER Lab Sample ID: 05211-08S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	40.80	B		P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	3.50	B		F
7440-39-3	Barium	116.00	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	37600.00			P
7440-47-3	Chromium	5.00	U	NE	P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	61.60	B		P
7439-92-1	Lead	1.70	B		F
7439-95-4	Magnesium	14100.00			P
7439-96-5	Manganese	300.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.00	U		P
7440-09-7	Potassium	8930.00			P
7782-49-2	Selenium	4.00	U	W	F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	32000.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	31.00	B		P
7440-66-6	Zinc	8.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CN2

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-120SAS No.: SDG No.: B06CJ9

Matrix (soil/water): WATER Lab Sample ID: 05211-09S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21.00	U		P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	2.00	B		F
7440-39-3	Barium	50.30	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	28600.00			P
7440-47-3	Chromium	9.40	B	NE	P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	25.00	U		P
7439-92-1	Lead	1.50	B	W	F
7439-95-4	Magnesium	4560.00	B		P
7439-96-5	Manganese	2.30	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.00	U		P
7440-09-7	Potassium	3310.00	B		P
7782-49-2	Selenium	4.00	U	W	F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	5590.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	5.40	B		P
7440-66-6	Zinc	8.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06CS1

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N2-05-120SAS No.: SDG No.: B06CJ9

Matrix (soil/water): WATER Lab Sample ID: 05211-10S

Level (low/med): LOW Date Received: 05/21/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1140.00			P
7440-36-0	Antimony	11.00	U		P
7440-38-2	Arsenic	3.90	B		F
7440-39-3	Barium	123.00	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	37900.00			P
7440-47-3	Chromium	5.00	U	NE	P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	U		P
7439-89-6	Iron	96.40	B		P
7439-92-1	Lead	2.00	B		F
7439-95-4	Magnesium	14000.00			P
7439-96-5	Manganese	356.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.00	U		P
7440-09-7	Potassium	3840.00			P
7782-49-2	Selenium	22.10	B		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	31700.00			P
7440-28-0	Thallium	2.00	U	WN	F
7440-62-2	Vanadium	29.90	B		P
7440-66-6	Zinc	15.30	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9015992.1612

TMA/Skinner & Sherman Labs **SAMPLE LOG-IN**

WORKORDER 92-05-211 CLIENT HANFORD-NCR No. SAMPLES:

PROTCL CLP TURNARND 33 days 10

COOLER TEMP: 4 oC, or NA (Soil) (Water) (Specify Other)

CUSTODIAN Benney, A. SDG/BATCH N/A

CUSTODY SEAL PRESENT/ABSENT INTACT/NOT CLIENT CASE N2-05-120

SHIPER & # Fedex # 2126897172 PO/CONTRACT# N/A

TAGS: PRESENT/ABSENT/NA/SEE COC CONTACT Dolores Sanchez

CHAIN OF CUSTODY: PRESENT/ABSENT/NA, # N/A COMMENTS: NONE

SAMPLE CONTAINERS INTACT/BROKEN COMMENTS

CLIENT COMMENT? YES/NO

SAMPLE LABELS AGREE WITH CHAIN OF CUSTODY INFO? YES/NO (COMMENT)

CLIENT PAPERWORK AGREES WITH SAMPLES & COC? YES/NO (COMMENT)

SHIPMENT DATES 5.21.92

LIST ANY DATE WITH PAPERWORK/SHIPMENT PROBLEMS & SPECIFY THE PROBLEM:

Fwld Filtered

	CLIENT ID	MATRIX	RECEIVED	QC	TEST(S)	HOLD TIME UP
1	B06CJ9	WATER	5.21.92	D,S	TM	5.16
2	K5					HG DUE 6.10
3	L1					
4	L4					
5	L7					
6	M3					5.17
7	M6					
8	M9					
9	N2					
10	S1					
11						
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22						
23						
24						
25						
26						
27						

complete 5.22.92 AB

Samples are from site known to have Rad-Contamination: YES X NO

Samples have detectable amounts of Radioactive Material: YES X NO

SUBCONTRACT: YES/NO TO: DATE:

REVIEWED Rev. 1.4 PAGE 168