W0279

0048136

Quanterra
Environmental Services

JAN 1995
RECEIVED
Data Log In

January 6, 1995

Joan Kessner
Buyer's Technical Representative
Bechtel Hanford Incorporated
P.O. Box 1970
2355 Stevens Drive
Richland, WA 99352

Dear Joan,

Due to misunderstanding the SAF, no graphite furnace metals were analyzed for SDG W0279. The laboratory's interpretation of the SAF was that the only required furnace metal was mercury since it was indented under that header.

Sincerely,

for Wade H. Price
Project Manager
Quanterra Environmental Services, St. Louis Laboratory

public/wadepric/hanford/w0279.wpl

Quanterra Environmental Services

Quanterra Incorporated
13715 Rider Trail North
Earth City, Missouri 63045

314 298-8566 Telephone
314 298-8757 Fax

CERTIFICATE OF ANALYSIS

Bechtel Hanford Incorporated
P.O. Box 1970
Richland, Washington 99352

December 10, 1994

Attention: Joan Kessner

DEC 1994
RECEIVED
Data
Log In

Project number	:	550.27
Date Received by Lab	:	October 27, 1994
Number of Samples	:	Nine (9)
Sample Type	:	Water
SDG Number	:	W0279
Data Deliverable	:	Summary

RECORD COPY

I. Introduction

On October 27, 1994, nine (9) water samples were received by Quanterra, Richland and transferred to Quanterra, St. Louis for chemical analyses. Upon receipt, the samples were given the following laboratory ID numbers to correspond with the specific client ID's:

St Louis ID	WHC ID	Richland ID	Matrix	Date of Receipt
6671-001	B0CY69	41056901	Water	10/27/94
6671-002	B0CY71	41056903	Water	10/27/94
6671-003	B0CY73	41056905	Water	10/27/94
6671-004	B0CY75	41056907	Water	10/27/94
6671-005	B0CY79	41056909	Water	10/27/94
6671-006	B0CY70	41056902	Water	10/27/94
6671-007	B0CY72	41056904	Water	10/27/94
6671-008	B0CY74	41056906	Water	10/27/94
6671-009	B0CY76	41056908	Water	10/27/94

II. Analytical Results/ Methodology

The analytical results for this report are presented by analytical test. Each set of data includes sample identification information, analytical results and the appropriate detection limits.

Analyses requested: BNA by EPA method CLP90. VOA by EPA method CLP90. ICAP Metals by EPA method CLP90. Mercury by EPA method CLP90. pH by EPA method 9040. Nitrate by EPA method 300.0. Nitrate/Nitrite by EPA method 353.1. Total Dissolved Solids by EPA method 160.1. Total Organic Carbon by EPA method 415.1.

III. Quality Control

A Laboratory Control Sample and Method Blank were analyzed with each preparation batch. Matrix Spike and Matrix Spike Duplicate or Sample Duplicate analyses were performed per the protocol for all analytes in this SDG.

IV. Definitions

The following codes are used to denote laboratory quality control samples and can be found in the data summary section of this report:

QCBLK- Quality Control Blank, Method Blank
QCLCS- Quality Control Laboratory Control Sample, Blank Spike

V. Comments

Sample 6671-002MSD gave low recoveries of 1,4-dichlorobenzene, N-Nitroso-di-n-propylamine, 1,2,4-Trichlorobenzene and Acenaphthene at 26%, 38%, 31% and 41%, respectively. The MS gave normal recoveries. Consequently, high RPDs were obtained for many of the spike compounds as well. It appears that the MSD gave lower recoveries for the spike compounds based on volatility, i.e. the more volatile surrogates gave lower recovery while the lesser volatile surrogates gave the same recoveries as in the MS. This indicates that the MSD probably suffers from improper concentration.

Quanterra
Environmental Services

The Matrix Spike for mercury had recoveries outside of suggested limits, however, the sample contamination was greater than four times the spike concentration which would render the recovery limits invalid. The Matrix Spike for Iron also had recoveries out of the suggested limits of 75-125%. A post digestion spike was performed in accordance with CLP protocol.

Silver had recovery outside of suggested limits of 75-125% in the LCS.

Due to insufficient sample volume, the matrix spike for Mercury for sample 6671-001was digested with initial and final volumes of 50 ml instead of 100 ml as required by CLP protocol. See nonconformance memo included in the package.

Nitrate, Nitrite and Phosphate hold times were expired upon receipt of samples at laboratory.

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Reviewed and approved:

Wade H. Price
Project Manager
z:\abbydave\hanw0279.nar

ITAS-St. Louis
LABORATORY NONCONFORMANCE MEMO (NCM)

PROJECT ID (Name/Number): 550.27
NCM INITIATED BY (Name/Date): Timothy J. Weber
PARAMETER(S): Hg
SAMPLE NUMBER(S) AFFECTED: 6671-001 MS

AREA:

☐ SHIP/REC	☐ GC	☐ GEN CHEM	☐ BIOASSAY	☐ IH
☐ ORG EXT	☐ HPLC	☑ METALS	☐ RADIOCHEM	☐ DATA VERIFICATION
☐ INORG PREP	☐ GCMS	☐ GEO	☐ COUNTING	☐ REPORTING
☐ OTHER:	☐ _____	☐ _____	☐ _____	☐ _____

NONCONFORMANCE [check appropriate item(s)]:

1. ☑ Not enough sample received for proper analysis.
2. ☐ Holding time exceeded by _____ days due to:
   - 2.1 ☐ **CATEGORY I: Out of Laboratory Control**
     - ☐ Holding time expired at receipt.
   - 2.2 ☐ **CATEGORY II: Laboratory Dependent**
     - ☐ work backlog ☐ instrument failure
     - ☐ communication ☐ other (see #10)
   - 2.3 ☐ **CATEGORY III: Laboratory Reruns**
     - 2.3.1. ☐ ***QA/QC:***
       - ☐ surrogates ☐ internal standards
       - ☐ spike recoveries ☐ blank contamination
     - 2.3.2. ☐ ***CONFIRMATION:***
       - ☐ second column ☐ contamination check
       - ☐ other (see #10)
     - 2.3.3. ☐ ***DILUTION:***
       - ☐ over calibration ☐ under calibration
       - ☐ other (see #10)
     - 2.3.4. ☐ ***OTHER: (see #10)***
3. ☐ Sample lost during extraction/analysis; no re-prep or re-analysis possible.
4. ☐ QC data reported to client outside of:
   - ☐ method limits ☐ internal limits
   - ☐ QAPP limits ☐ contract limits
   - ☐ regulatory limits ☐ blank criteria
5. ☐ Incorrect procedure(s) used. (See #10)
6. ☐ Invalid instrument calibration. (See #10)
7. ☐ Incorrect/incomplete data reported to client. (See #10)
8. ☐ Reported detection limit(s) higher than:
   - ☐ method limits ☐ QAPP limits
   - ☐ contract limits ☐ other (see #10)

   Due to:
   - ☐ sample matrix ☐ insufficient sample
   - ☐ instrumentation ☐ other (see #10)
9. ☐ Other (specify):
10. ☑ Comments/Explanation: 6671-001MS digested with initial and final volumes of 50 ml instead of 100. as required by CLP protocol

NOTIFICATION [check appropriate item(s)]:

1. ☐ Client notified by (name and date): _____
   - ☐ in writing ☐ by FAX
   - ☐ by phone ☐ Other (explain)
2. ☐ Client's name _____ and response
   - ☐ process "as is" ☐ resample
   - ☐ on hold til ____ ☐ Other (explain)

PROJECT MANAGER (signature & date): _____

FURTHER ACTION REQUIRED, SEE PAGE 2 OF 2

CORRECTIVE ACTION

☐ ROOT CAUSE: INITIALS/DATE [illegible] 12-10-94

insufficient sample volume

☐ CORRECTIVE ACTION: INITIALS/DATE [illegible] 12-10-94

Digestion performed with 50ml initial and final volumes.

☐ RESPONSIBILITY FOR PERFORMING CORRECTIVE ACTION ASSIGNED TO:

☐ ACTIONS TO PREVENT RECURRENCE: INITIALS/DATE [illegible] 12-10-94

N/A

FIRST LEVEL SUPERVISOR: [illegible] DATE: 12-10-94

RESPONSIBLE MANAGER: _____ DATE: _____

QC REVIEW

☐ NONCONFORMANCE ☐ DEFICIENCY ☐ RERUN

☐ FURTHER ACTION REQUIRED: _____

ASSIGNED TO: _____

QC COO[illegible] _____ DATE: _____

CORRECTIVE ACTION VERIFICATION

☐ VERIFIED ☐ CANNOT VERIFY (specify reason)

REASON: _____

NCM CLOSURE

QC COORDINATOR: _____ DATE: _____

SIGNED ORIGINAL MUST BE RETAINED IN FILE: ☐ QUALITY/OPERATIONS FILE ☐ PROJECT FILE

00004B

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: VOA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/12/94

Client ID: BOCY69

Quanterra ID : 6671-001

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Chloromethane	74-87-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromomethane	74-83-9	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Vinyl Chloride	75-01-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chloroethane	75-00-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Methylene Chloride	75-09-2	QCBLK50421-1	11/03/94	11/03/94	8	UG/L	BJ	10	1
Acetone	67-64-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Carbon Disulfide	75-15-0	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1-Dichloroethene	75-35-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1-Dichloroethane	75-34-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,2-Dichloroethene (total)	540-59-0	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chloroform	67-66-3	QCBLK50421-1	11/03/94	11/03/94	19	UG/L		10	1
1,2-Dichloroethane	107-06-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
2-Butanone	78-93-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,1-Trichloroethane	71-55-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Carbon Tetrachloride	56-23-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromodichloromethane	75-27-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,2-Dichloropropane	78-87-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
cis-1,3-Dichloropropene	10061-01-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Trichloroethene	79-01-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Dibromochloromethane	124-48-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,2-Trichloroethane	79-00-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Benzene	71-43-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
trans-1,3-Dichloropropene	10061-02-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromoform	75-25-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
4-Methyl-2-Pentanone	108-10-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
2-Hexanone	591-78-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Tetrachloroethene	127-18-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,2,2-Tetrachloroethane	79-34-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Toluene	108-88-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chlorobenzene	108-90-7	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Ethyl Benzene	100-41-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Styrene	100-42-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Xylenes (total)	1330-20-7	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Toluene-d8 (SURR)	2037-26-5	QCBLK50421-1	11/03/94	11/03/94	101	%REC			1
Bromofluorobenzene (SURR)	460-00-4	QCBLK50421-1	11/03/94	11/03/94	92	%REC			1
1,2-Dichloroethane-d4 (SURR)	17070-07-0	QCBLK50421-1	11/03/94	11/03/94	95	%REC			1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: VOA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/12/94

Client ID: BOCY71

Quanterra ID : 6671-002

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Chloromethane	74-87-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromomethane	74-83-9	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Vinyl Chloride	75-01-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chloroethane	75-00-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Methylene Chloride	75-09-2	QCBLK50421-1	11/03/94	11/03/94	8	UG/L	BJ	10	1
Acetone	67-64-1	QCBLK50421-1	11/03/94	11/03/94	6	UG/L	BJ	10	1
Carbon Disulfide	75-15-0	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1-Dichloroethene	75-35-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1-Dichloroethane	75-34-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,2-Dichloroethene (total)	540-59-0	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chloroform	67-66-3	QCBLK50421-1	11/03/94	11/03/94	15	UG/L		10	1
1,2-Dichloroethane	107-06-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
2-Butanone	78-93-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,1-Trichloroethane	71-55-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Carbon Tetrachloride	56-23-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromodichloromethane	75-27-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,2-Dichloropropane	78-87-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
cis-1,3-Dichloropropene	10061-01-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Trichloroethene	79-01-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Dibromochloromethane	124-48-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,2-Trichloroethane	79-00-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Benzene	71-43-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
trans-1,3-Dichloropropene	10061-02-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromoform	75-25-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
4-Methyl-2-Pentanone	108-10-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
2-Hexanone	591-78-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Tetrachloroethene	127-18-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,2,2-Tetrachloroethane	79-34-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Toluene	108-88-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chlorobenzene	108-90-7	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Ethyl Benzene	100-41-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Styrene	100-42-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Xylenes (total)	1330-20-7	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Toluene-d8 (SURR)	2037-26-5	QCBLK50421-1	11/03/94	11/03/94	105	%REC			1
Bromofluorobenzene (SURR)	460-00-4	QCBLK50421-1	11/03/94	11/03/94	94	%REC			1
1,2-Dichloroethane-d4 (SURR)	17070-07-0	QCBLK50421-1	11/03/94	11/03/94	94	%REC			1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: VOA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/12/94

Client ID: BOCY73

Quanterra ID : 6671-003

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Chloromethane	74-87-3	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Bromomethane	74-83-9	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Vinyl Chloride	75-01-4	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Chloroethane	75-00-3	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Methylene Chloride	75-09-2	QCBLK50578-1	11/04/94	11/04/94	2	UG/L	BJ	10	1
Acetone	67-64-1	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Carbon Disulfide	75-15-0	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,1-Dichloroethene	75-35-4	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,1-Dichloroethane	75-34-3	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,2-Dichloroethene (total)	540-59-0	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Chloroform	67-66-3	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,2-Dichloroethane	107-06-2	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
2-Butanone	78-93-3	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,1,1-Trichloroethane	71-55-6	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Carbon Tetrachloride	56-23-5	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Bromodichloromethane	75-27-4	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,2-Dichloropropane	78-87-5	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
cis-1,3-Dichloropropene	10061-01-5	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Trichloroethene	79-01-6	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Dibromochloromethane	124-48-1	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,1,2-Trichloroethane	79-00-5	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Benzene	71-43-2	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
trans-1,3-Dichloropropene	10061-02-6	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Bromoform	75-25-2	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
4-Methyl-2-Pentanone	108-10-1	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
2-Hexanone	591-78-6	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Tetrachloroethene	127-18-4	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,1,2,2-Tetrachloroethane	79-34-5	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Toluene	108-88-3	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Chlorobenzene	108-90-7	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Ethyl Benzene	100-41-4	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Styrene	100-42-5	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Xylenes (total)	1330-20-7	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Toluene-d8 (SURR)	2037-26-5	QCBLK50578-1	11/04/94	11/04/94	100	%REC			1
Bromofluorobenzene (SURR)	460-00-4	QCBLK50578-1	11/04/94	11/04/94	96	%REC			1
1,2-Dichloroethane-d4 (SURR)	17070-07-0	QCBLK50578-1	11/04/94	11/04/94	95	%REC			1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: VOA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/12/94

Client ID: BOCY75

Quanterra ID : 6671-004

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Chloromethane	74-87-3	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Bromomethane	74-83-9	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Vinyl Chloride	75-01-4	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Chloroethane	75-00-3	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Methylene Chloride	75-09-2	QCBLK50578-1	11/04/94	11/04/94	3	UG/L	BJ	10	1
Acetone	67-64-1	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Carbon Disulfide	75-15-0	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,1-Dichloroethene	75-35-4	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,1-Dichloroethane	75-34-3	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,2-Dichloroethene (total)	540-59-0	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Chloroform	67-66-3	QCBLK50578-1	11/04/94	11/04/94	2	UG/L	J	10	1
1,2-Dichloroethane	107-06-2	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
2-Butanone	78-93-3	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,1,1-Trichloroethane	71-55-6	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Carbon Tetrachloride	56-23-5	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Bromodichloromethane	75-27-4	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,2-Dichloropropane	78-87-5	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
cis-1,3-Dichloropropene	10061-01-5	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Trichloroethene	79-01-6	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Dibromochloromethane	124-48-1	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,1,2-Trichloroethane	79-00-5	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Benzene	71-43-2	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
trans-1,3-Dichloropropene	10061-02-6	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Bromoform	75-25-2	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
4-Methyl-2-Pentanone	108-10-1	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
2-Hexanone	591-78-6	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Tetrachloroethene	127-18-4	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
1,1,2,2-Tetrachloroethane	79-34-5	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Toluene	108-88-3	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Chlorobenzene	108-90-7	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Ethyl Benzene	100-41-4	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Styrene	100-42-5	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Xylenes (total)	1330-20-7	QCBLK50578-1	11/04/94	11/04/94	10	UG/L	U	10	1
Toluene-d8 (SURR)	2037-26-5	QCBLK50578-1	11/04/94	11/04/94	104	%REC			1
Bromofluorobenzene (SURR)	460-00-4	QCBLK50578-1	11/04/94	11/04/94	100	%REC			1
1,2-Dichloroethane-d4 (SURR)	17070-07-0	QCBLK50578-1	11/04/94	11/04/94	91	%REC			1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: VOA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/14/94

Client ID: BOCY70

Quanterra ID : 6671-006

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Chloromethane	74-87-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromomethane	74-83-9	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Vinyl Chloride	75-01-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chloroethane	75-00-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Methylene Chloride	75-09-2	QCBLK50421-1	11/03/94	11/03/94	8	UG/L	BJ	10	1
Acetone	67-64-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Carbon Disulfide	75-15-0	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1-Dichloroethene	75-35-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1-Dichloroethane	75-34-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,2-Dichloroethene (total)	540-59-0	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chloroform	67-66-3	QCBLK50421-1	11/03/94	11/03/94	1	UG/L	J	10	1
1,2-Dichloroethane	107-06-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
2-Butanone	78-93-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,1-Trichloroethane	71-55-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Carbon Tetrachloride	56-23-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromodichloromethane	75-27-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,2-Dichloropropane	78-87-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
cis-1,3-Dichloropropene	10061-01-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Trichloroethene	79-01-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Dibromochloromethane	124-48-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,2-Trichloroethane	79-00-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Benzene	71-43-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
trans-1,3-Dichloropropene	10061-02-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromoform	75-25-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
4-Methyl-2-Pentanone	108-10-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
2-Hexanone	591-78-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Tetrachloroethene	127-18-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,2,2-Tetrachloroethane	79-34-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Toluene	108-88-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chlorobenzene	108-90-7	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Ethyl Benzene	100-41-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Styrene	100-42-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Xylenes (total)	1330-20-7	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Toluene-d8 (SURR)	2037-26-5	QCBLK50421-1	11/03/94	11/03/94	103	%REC			1
Bromofluorobenzene (SURR)	460-00-4	QCBLK50421-1	11/03/94	11/03/94	100	%REC			1
1,2-Dichloroethane-d4 (SURR)	17070-07-0	QCBLK50421-1	11/03/94	11/03/94	98	%REC			1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: VOA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/12/94

Client ID: BOCY72

Quanterra ID : 6671-007

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Chloromethane	74-87-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromomethane	74-83-9	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Vinyl Chloride	75-01-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chloroethane	75-00-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Methylene Chloride	75-09-2	QCBLK50421-1	11/03/94	11/03/94	6	UG/L	BJ	10	1
Acetone	67-64-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Carbon Disulfide	75-15-0	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1-Dichloroethene	75-35-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1-Dichloroethane	75-34-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,2-Dichloroethene (total)	540-59-0	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chloroform	67-66-3	QCBLK50421-1	11/03/94	11/03/94	1	UG/L	J	10	1
1,2-Dichloroethane	107-06-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
2-Butanone	78-93-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,1-Trichloroethane	71-55-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Carbon Tetrachloride	56-23-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromodichloromethane	75-27-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,2-Dichloropropane	78-87-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
cis-1,3-Dichloropropene	10061-01-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Trichloroethene	79-01-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Dibromochloromethane	124-48-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,2-Trichloroethane	79-00-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Benzene	71-43-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
trans-1,3-Dichloropropene	10061-02-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromoform	75-25-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
4-Methyl-2-Pentanone	108-10-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
2-Hexanone	591-78-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Tetrachloroethene	127-18-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,2,2-Tetrachloroethane	79-34-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Toluene	108-88-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chlorobenzene	108-90-7	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Ethyl Benzene	100-41-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Styrene	100-42-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Xylenes (total)	1330-20-7	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Toluene-d8 (SURR)	2037-26-5	QCBLK50421-1	11/03/94	11/03/94	100	%REC			1
Bromofluorobenzene (SURR)	460-00-4	QCBLK50421-1	11/03/94	11/03/94	93	%REC			1
1,2-Dichloroethane-d4 (SURR)	17070-07-0	QCBLK50421-1	11/03/94	11/03/94	97	%REC			1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: VOA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/12/94

Client ID: BOCY74

Quanterra ID : 6671-008

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Chloromethane	74-87-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromomethane	74-83-9	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Vinyl Chloride	75-01-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chloroethane	75-00-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Methylene Chloride	75-09-2	QCBLK50421-1	11/03/94	11/03/94	8	UG/L	BJ	10	1
Acetone	67-64-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Carbon Disulfide	75-15-0	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1-Dichloroethene	75-35-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1-Dichloroethane	75-34-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,2-Dichloroethene (total)	540-59-0	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chloroform	67-66-3	QCBLK50421-1	11/03/94	11/03/94	2	UG/L	J	10	1
1,2-Dichloroethane	107-06-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
2-Butanone	78-93-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,1-Trichloroethane	71-55-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Carbon Tetrachloride	56-23-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromodichloromethane	75-27-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,2-Dichloropropane	78-87-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
cis-1,3-Dichloropropene	10061-01-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Trichloroethene	79-01-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Dibromochloromethane	124-48-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,2-Trichloroethane	79-00-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Benzene	71-43-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
trans-1,3-Dichloropropene	10061-02-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromoform	75-25-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
4-Methyl-2-Pentanone	108-10-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
2-Hexanone	591-78-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Tetrachloroethene	127-18-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,2,2-Tetrachloroethane	79-34-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Toluene	108-88-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chlorobenzene	108-90-7	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Ethyl Benzene	100-41-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Styrene	100-42-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Xylenes (total)	1330-20-7	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Toluene-d8 (SURR)	2037-26-5	QCBLK50421-1	11/03/94	11/03/94	103	%REC			1
Bromofluorobenzene (SURR)	460-00-4	QCBLK50421-1	11/03/94	11/03/94	96	%REC			1
1,2-Dichloroethane-d4 (SURR)	17070-07-0	QCBLK50421-1	11/03/94	11/03/94	98	%REC			1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: VOA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/14/94

Client ID: BOCY76

Quanterra ID : 6671-009

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Chloromethane	74-87-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromomethane	74-83-9	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Vinyl Chloride	75-01-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chloroethane	75-00-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Methylene Chloride	75-09-2	QCBLK50421-1	11/03/94	11/03/94	6	UG/L	BJ	10	1
Acetone	67-64-1	QCBLK50421-1	11/03/94	11/03/94	8	UG/L	BJ	10	1
Carbon Disulfide	75-15-0	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1-Dichloroethene	75-35-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1-Dichloroethane	75-34-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,2-Dichloroethene (total)	540-59-0	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chloroform	67-66-3	QCBLK50421-1	11/03/94	11/03/94	2	UG/L	J	10	1
1,2-Dichloroethane	107-06-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
2-Butanone	78-93-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,1-Trichloroethane	71-55-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Carbon Tetrachloride	56-23-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromodichloromethane	75-27-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,2-Dichloropropane	78-87-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
cis-1,3-Dichloropropene	10061-01-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Trichloroethene	79-01-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Dibromochloromethane	124-48-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,2-Trichloroethane	79-00-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Benzene	71-43-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
trans-1,3-Dichloropropene	10061-02-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Bromoform	75-25-2	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
4-Methyl-2-Pentanone	108-10-1	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
2-Hexanone	591-78-6	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Tetrachloroethene	127-18-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
1,1,2,2-Tetrachloroethane	79-34-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Toluene	108-88-3	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Chlorobenzene	108-90-7	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Ethyl Benzene	100-41-4	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Styrene	100-42-5	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Xylenes (total)	1330-20-7	QCBLK50421-1	11/03/94	11/03/94	10	UG/L	U	10	1
Toluene-d8 (SURR)	2037-26-5	QCBLK50421-1	11/03/94	11/03/94	100	%REC			1
Bromofluorobenzene (SURR)	460-00-4	QCBLK50421-1	11/03/94	11/03/94	93	%REC			1
1,2-Dichloroethane-d4 (SURR)	17070-07-0	QCBLK50421-1	11/03/94	11/03/94	97	%REC			1

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY69

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-001

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1527

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/03/94

GC Column: DB-624 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	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	19	
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.

B0CY69

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-001

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1527

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/03/94

GC Column: DB-624 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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY70

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-006

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1523

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/03/94

GC Column: DB-624 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	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	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.

B0CY70

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-006

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1523

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/03/94

GC Column: DB-624 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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY71

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-002

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1528

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/03/94

GC Column: DB-624 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	BJ
67-64-1	Acetone	6	BJ
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	15	
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.

B0CY71

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-002

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1528

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/03/94

GC Column: DB-624 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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY72

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-007

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1524

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/03/94

GC Column: DB-624 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	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	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.

B0CY72

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-007

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1524

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/03/94

GC Column: DB-624 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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY73

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-003

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1547

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/04/94

GC Column: DB-624 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	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.

B0CY73

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-003

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1547

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/04/94

GC Column: DB-624 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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY74

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-008

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1525

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/03/94

GC Column: DB-624 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	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	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.

B0CY74

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-008

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1525

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/03/94

GC Column: DB-624 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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY75

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-004

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1548

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/04/94

GC Column: DB-624 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	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	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.

B0CY75

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-004

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1548

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/04/94

GC Column: DB-624 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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY76

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-009

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1526

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/03/94

GC Column: DB-624 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	BJ
67-64-1	Acetone	8	BJ
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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B0CY76

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: V67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-009

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E1526

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: not dec. Date Analyzed: 11/03/94

GC Column: DB-624 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

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: BNA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/11/94

Client ID: BOCY69

Quanterra ID : 6671-001

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Phenol	108-95-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Chloroethyl) Ether	111-44-4	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Chlorophenol	95-57-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,3-Dichlorobenzene	541-73-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,4-Dichlorobenzene	106-46-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,2-Dichlorobenzene	95-50-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Methylphenol	95-48-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Chloroisopropyl)Ether	108-60-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Methylphenol	106-44-5	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
N-nitrosodi-n-propylamine	621-64-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachloroethane	67-72-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Nitrobenzene	98-95-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Isophorone	78-59-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Nitrophenol	88-75-5	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dimethylphenol	105-67-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Chloroethoxy)Methane	111-91-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dichlorophenol	120-83-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,2,4-Trichlorobenzene	120-82-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Naphthalene	91-20-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Chloroaniline	106-47-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachlorobutadiene	87-68-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Chloro-3-Methylphenol	59-50-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Methylnaphthalene	91-57-6	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachlorocyclopentadiene	77-47-4	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4,6-Trichlorophenol	88-06-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4,5-Trichlorophenol	95-95-4	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
2-Chloronaphthalene	91-58-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Nitroaniline	88-74-4	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Dimethyl Phthalate	131-11-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Acenaphthylene	208-96-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,6-Dinitrotoluene	606-20-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
3-Nitroaniline	99-09-2	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Acenaphthene	83-32-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dinitrophenol	51-28-5	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
4-Nitrophenol	100-02-7	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Dibenzofuran	132-64-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dinitrotoluene	121-14-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Diethylphthalate	84-66-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Chlorophenyl Phenyl Ether	7005-72-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Fluorene	86-73-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Nitroaniline	100-01-6	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
4,6-Dinitro-2-Methylphenol	534-52-1	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
n-Nitrosodiphenylamine	86-30-6	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Bromophenyl Phenyl Ether	101-55-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachlorobenzene	118-74-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Pentachlorophenol	87-86-5	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Phenanthrene	85-01-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Anthracene	120-12-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Carbazole	86-74-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Di-N-Butylphthalate	84-74-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Fluoranthene	206-44-0	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Pyrene	129-00-0	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Butyl Benzyl Phthalate	85-68-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
3,3'-Dichlorobenzidine	91-94-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(a)Anthracene	56-55-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Chrysene	218-01-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Ethylhexyl)Phthalate	117-81-7	QCBLK49961-1	10/31/94	11/09/94	4	UG/L	J	10	1
di-N-Octyl Phthalate	117-84-0	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(b)Fluoranthene	205-99-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(k)Fluoranthene	207-08-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(a)Pyrene	50-32-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: BNA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/11/94

Client ID: BOCY69

Quanterra ID : 6671-001

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Indeno(1,2,3-CD)Pyrene	193-39-5	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Dibenzo(a,h)Anthracene	53-70-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(g,h,i)Perylene	191-24-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Unknown-1	TIC-32	QCBLK49961-1	10/31/94	11/09/94	2	UG/L	J		1
Unknown-2	TIC-33	QCBLK49961-1	10/31/94	11/09/94	3	UG/L	J		1
Unknown-3	TIC-34	QCBLK49961-1	10/31/94	11/09/94	92	UG/L	J		1
Nitrobenzene-d5	4165-60-0	QCBLK49961-1	10/31/94	11/09/94	72	%REC			1
2-Fluorobiphenyl	321-60-8	QCBLK49961-1	10/31/94	11/09/94	68	%REC			1
Terphenyl-d14	1718-51-0	QCBLK49961-1	10/31/94	11/09/94	62	%REC			1
Phenol-d5	13127-88-3	QCBLK49961-1	10/31/94	11/09/94	73	%REC			1
2-Fluorophenol	367-12-4	QCBLK49961-1	10/31/94	11/09/94	60	%REC			1
2,4,6-Tribromophenol	118-79-6	QCBLK49961-1	10/31/94	11/09/94	77	%REC			1
2-Chlorophenol-d4	25167-80-0	QCBLK49961-1	10/31/94	11/09/94	66	%REC			1
1,2-Dichlorobenzene-d4	95-50-01	QCBLK49961-1	10/31/94	11/09/94	60	%REC			1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: BNA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/11/94

Client ID: BOCY71

Quanterra ID : 6671-002

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Phenol	108-95-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Chloroethyl) Ether	111-44-4	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Chlorophenol	95-57-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,3-Dichlorobenzene	541-73-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,4-Dichlorobenzene	106-46-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,2-Dichlorobenzene	95-50-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Methylphenol	95-48-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Chloroisopropyl)Ether	108-60-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Methylphenol	106-44-5	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
N-nitrosodi-n-propylamine	621-64-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachloroethane	67-72-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Nitrobenzene	98-95-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Isophorone	78-59-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Nitrophenol	88-75-5	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dimethylphenol	105-67-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Chloroethoxy)Methane	111-91-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dichlorophenol	120-83-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,2,4-Trichlorobenzene	120-82-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Naphthalene	91-20-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Chloroaniline	106-47-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachlorobutadiene	87-68-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Chloro-3-Methylphenol	59-50-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Methylnaphthalene	91-57-6	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachlorocyclopentadiene	77-47-4	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4,6-Trichlorophenol	88-06-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4,5-Trichlorophenol	95-95-4	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
2-Chloronaphthalene	91-58-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Nitroaniline	88-74-4	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Dimethyl Phthalate	131-11-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Acenaphthylene	208-96-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,6-Dinitrotoluene	606-20-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
3-Nitroaniline	99-09-2	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Acenaphthene	83-32-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dinitrophenol	51-28-5	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
4-Nitrophenol	100-02-7	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Dibenzofuran	132-64-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dinitrotoluene	121-14-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Diethylphthalate	84-66-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Chlorophenyl Phenyl Ether	7005-72-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Fluorene	86-73-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Nitroaniline	100-01-6	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
4,6-Dinitro-2-Methylphenol	534-52-1	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
n-Nitrosodiphenylamine	86-30-6	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Bromophenyl Phenyl Ether	101-55-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachlorobenzene	118-74-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Pentachlorophenol	87-86-5	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Phenanthrene	85-01-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Anthracene	120-12-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Carbazole	86-74-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Di-N-Butylphthalate	84-74-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Fluoranthene	206-44-0	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Pyrene	129-00-0	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Butyl Benzyl Phthalate	85-68-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
3,3'-Dichlorobenzidine	91-94-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(a)Anthracene	56-55-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Chrysene	218-01-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Ethylhexyl)Phthalate	117-81-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
di-N-Octyl Phthalate	117-84-0	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(b)Fluoranthene	205-99-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(k)Fluoranthene	207-08-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(a)Pyrene	50-32-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: BNA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/11/94

Client ID: BOCY71

Quanterra ID : 6671-002

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Indeno(1,2,3-CD)Pyrene	193-39-5	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Dibenzo(a,h)Anthracene	53-70-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(g,h,i)Perylene	191-24-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Unknown-1	TIC-32	QCBLK49961-1	10/31/94	11/09/94	31	UG/L	J		1
Acetophenone	98-86-2	QCBLK49961-1	10/31/94	11/09/94	2	UG/L	JN		1
Unknown-2	TIC-33	QCBLK49961-1	10/31/94	11/09/94	7	UG/L	J		1
Unknown-3	TIC-34	QCBLK49961-1	10/31/94	11/09/94	8	UG/L	J		1
Unknown-4	TIC-35	QCBLK49961-1	10/31/94	11/09/94	59	UG/L	J		1
Nitrobenzene-d5	4165-60-0	QCBLK49961-1	10/31/94	11/09/94	70	%REC			1
2-Fluorobiphenyl	321-60-8	QCBLK49961-1	10/31/94	11/09/94	67	%REC			1
Terphenyl-d14	1718-51-0	QCBLK49961-1	10/31/94	11/09/94	62	%REC			1
Phenol-d5	13127-88-3	QCBLK49961-1	10/31/94	11/09/94	72	%REC			1
2-Fluorophenol	367-12-4	QCBLK49961-1	10/31/94	11/09/94	61	%REC			1
2,4,6-Tribromophenol	118-79-6	QCBLK49961-1	10/31/94	11/09/94	81	%REC			1
2-Chlorophenol-d4	25167-80-0	QCBLK49961-1	10/31/94	11/09/94	66	%REC			1
1,2-Dichlorobenzene-d4	95-50-01	QCBLK49961-1	10/31/94	11/09/94	60	%REC			1

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Project: 550.27

Category: BNA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/14/94

Client ID: B0CY73

Quanterra ID : 6671-003

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Phenol	108-95-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Chloroethyl) Ether	111-44-4	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Chlorophenol	95-57-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,3-Dichlorobenzene	541-73-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,4-Dichlorobenzene	106-46-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,2-Dichlorobenzene	95-50-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Methylphenol	95-48-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Chloroisopropyl)Ether	108-60-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Methylphenol	106-44-5	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
N-nitrosodi-n-propylamine	621-64-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachloroethane	67-72-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Nitrobenzene	98-95-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Isophorone	78-59-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Nitrophenol	88-75-5	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dimethylphenol	105-67-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Chloroethoxy)Methane	111-91-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dichlorophenol	120-83-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,2,4-Trichlorobenzene	120-82-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Naphthalene	91-20-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Chloroaniline	106-47-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachlorobutadiene	87-68-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Chloro-3-Methylphenol	59-50-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Methylnaphthalene	91-57-6	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachlorocyclopentadiene	77-47-4	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4,6-Trichlorophenol	88-06-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4,5-Trichlorophenol	95-95-4	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
2-Chloronaphthalene	91-58-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Nitroaniline	88-74-4	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Dimethyl Phthalate	131-11-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Acenaphthylene	208-96-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,6-Dinitrotoluene	606-20-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
3-Nitroaniline	99-09-2	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Acenaphthene	83-32-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dinitrophenol	51-28-5	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
4-Nitrophenol	100-02-7	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Dibenzofuran	132-64-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dinitrotoluene	121-14-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Diethylphthalate	84-66-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Chlorophenyl Phenyl Ether	7005-72-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Fluorene	86-73-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Nitroaniline	100-01-6	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
4,6-Dinitro-2-Methylphenol	534-52-1	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
n-Nitrosodiphenylamine	86-30-6	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Bromophenyl Phenyl Ether	101-55-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachlorobenzene	118-74-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Pentachlorophenol	87-86-5	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Phenanthrene	85-01-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Anthracene	120-12-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Carbazole	86-74-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Di-N-Butylphthalate	84-74-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Fluoranthene	206-44-0	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Pyrene	129-00-0	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Butyl Benzyl Phthalate	85-68-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
3,3'-Dichlorobenzidine	91-94-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(a)Anthracene	56-55-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Chrysene	218-01-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Ethylhexyl)Phthalate	117-81-7	QCBLK49961-1	10/31/94	11/09/94	11	UG/L		10	1
di-N-Octyl Phthalate	117-84-0	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(b)Fluoranthene	205-99-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(k)Fluoranthene	207-08-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(a)Pyrene	50-32-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1

Quanterra-Richland
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Project: 550.27

Category: BNA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/14/94

Client ID: BOCY73

Quanterra ID : 6671-003

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Indeno(1,2,3-CD)Pyrene	193-39-5	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Dibenzo(a,h)Anthracene	53-70-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(g,h,i)Perylene	191-24-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Unknown-1	TIC-32	QCBLK49961-1	10/31/94	11/09/94	2	UG/L	J		1
Unknown-2	TIC-33	QCBLK49961-1	10/31/94	11/09/94	8	UG/L	J		1
Unknown-3	TIC-34	QCBLK49961-1	10/31/94	11/09/94	5	UG/L	J		1
Benzothiazole	95-16-9	QCBLK49961-1	10/31/94	11/09/94	4	UG/L	JN		1
Unknown-4	TIC-35	QCBLK49961-1	10/31/94	11/09/94	110	UG/L	J		1
Unknown C7H9N	TIC-575	QCBLK49961-1	10/31/94	11/09/94	4	UG/L	J		1
Unknown C7H5NOS	TIC-576	QCBLK49961-1	10/31/94	11/09/94	27	UG/L	J		1
Unknown-5	TIC-36	QCBLK49961-1	10/31/94	11/09/94	94	UG/L	J		1
Unknown-6	TIC-37	QCBLK49961-1	10/31/94	11/09/94	6	UG/L	J		1
Unknown-7	TIC-7	QCBLK49961-1	10/31/94	11/09/94	4	UG/L	J		1
Unknown-8	TIC-8	QCBLK49961-1	10/31/94	11/09/94	4	UG/L	J		1
Unknown-9	TIC-9	QCBLK49961-1	10/31/94	11/09/94	9	UG/L	J		1
Unknown-10	TIC-10	QCBLK49961-1	10/31/94	11/09/94	3	UG/L	J		1
Unknown-11	TIC-11	QCBLK49961-1	10/31/94	11/09/94	7	UG/L	J		1
Unknown-12	TIC-12	QCBLK49961-1	10/31/94	11/09/94	2	UG/L	J		1
Unknown-13	TIC-13	QCBLK49961-1	10/31/94	11/09/94	7	UG/L	J		1
Unknown-14	TIC-14	QCBLK49961-1	10/31/94	11/09/94	3	UG/L	J		1
Unknown-15	TIC-15	QCBLK49961-1	10/31/94	11/09/94	3	UG/L	J		1
Unknown-16	TIC-16	QCBLK49961-1	10/31/94	11/09/94	3	UG/L	J		1
Unknown-17	TIC-17	QCBLK49961-1	10/31/94	11/09/94	3	UG/L	J		1
Nitrobenzene-d5	4165-60-0	QCBLK49961-1	10/31/94	11/09/94	70	%REC			1
2-Fluorobiphenyl	321-60-8	QCBLK49961-1	10/31/94	11/09/94	70	%REC			1
Terphenyl-d14	1718-51-0	QCBLK49961-1	10/31/94	11/09/94	61	%REC			1
Phenol-d5	13127-88-3	QCBLK49961-1	10/31/94	11/09/94	74	%REC			1
2-Fluorophenol	367-12-4	QCBLK49961-1	10/31/94	11/09/94	63	%REC			1
2,4,6-Tribromophenol	118-79-6	QCBLK49961-1	10/31/94	11/09/94	90	%REC			1
2-Chlorophenol-d4	25167-80-0	QCBLK49961-1	10/31/94	11/09/94	66	%REC			1
1,2-Dichlorobenzene-d4	95-50-01	QCBLK49961-1	10/31/94	11/09/94	62	%REC			1

Quanterra-Richland
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Project: 550.27

Category: BNA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/11/94

Client ID: BOCY75

Quanterra ID : 6671-004

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Phenol	108-95-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Chloroethyl) Ether	111-44-4	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Chlorophenol	95-57-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,3-Dichlorobenzene	541-73-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,4-Dichlorobenzene	106-46-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,2-Dichlorobenzene	95-50-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Methylphenol	95-48-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Chloroisopropyl)Ether	108-60-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Methylphenol	106-44-5	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
N-nitrosodi-n-propylamine	621-64-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachloroethane	67-72-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Nitrobenzene	98-95-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Isophorone	78-59-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Nitrophenol	88-75-5	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dimethylphenol	105-67-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Chloroethoxy)Methane	111-91-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dichlorophenol	120-83-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
1,2,4-Trichlorobenzene	120-82-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Naphthalene	91-20-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Chloroaniline	106-47-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachlorobutadiene	87-68-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Chloro-3-Methylphenol	59-50-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Methylnaphthalene	91-57-6	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachlorocyclopentadiene	77-47-4	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4,6-Trichlorophenol	88-06-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4,5-Trichlorophenol	95-95-4	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
2-Chloronaphthalene	91-58-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2-Nitroaniline	88-74-4	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Dimethyl Phthalate	131-11-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Acenaphthylene	208-96-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,6-Dinitrotoluene	606-20-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
3-Nitroaniline	99-09-2	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Acenaphthene	83-32-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dinitrophenol	51-28-5	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
4-Nitrophenol	100-02-7	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Dibenzofuran	132-64-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
2,4-Dinitrotoluene	121-14-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Diethylphthalate	84-66-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Chlorophenyl Phenyl Ether	7005-72-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Fluorene	86-73-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Nitroaniline	100-01-6	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
4,6-Dinitro-2-Methylphenol	534-52-1	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
n-Nitrosodiphenylamine	86-30-6	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
4-Bromophenyl Phenyl Ether	101-55-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Hexachlorobenzene	118-74-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Pentachlorophenol	87-86-5	QCBLK49961-1	10/31/94	11/09/94	25	UG/L	U	25	1
Phenanthrene	85-01-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Anthracene	120-12-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Carbazole	86-74-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Di-N-Butylphthalate	84-74-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Fluoranthene	206-44-0	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Pyrene	129-00-0	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Butyl Benzyl Phthalate	85-68-7	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
3,3'-Dichlorobenzidine	91-94-1	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(a)Anthracene	56-55-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Chrysene	218-01-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
bis(2-Ethylhexyl)Phthalate	117-81-7	QCBLK49961-1	10/31/94	11/09/94	4	UG/L	J	10	1
di-N-Octyl Phthalate	117-84-0	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(b)Fluoranthene	205-99-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(k)Fluoranthene	207-08-9	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(a)Pyrene	50-32-8	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: BNA CLP
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/11/94

Client ID: BOCY75

Quanterra ID : 6671-004

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Indeno(1,2,3-CD)Pyrene	193-39-5	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Dibenzo(a,h)Anthracene	53-70-3	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Benzo(g,h,i)Perylene	191-24-2	QCBLK49961-1	10/31/94	11/09/94	10	UG/L	U	10	1
Unknown-1	TIC-32	QCBLK49961-1	10/31/94	11/09/94	3	UG/L	J		1
Unknown-2	TIC-33	QCBLK49961-1	10/31/94	11/09/94	9	UG/L	J		1
Benzothiazole	95-16-9	QCBLK49961-1	10/31/94	11/09/94	4	UG/L	JN		1
Unknown-3	TIC-34	QCBLK49961-1	10/31/94	11/09/94	2	UG/L	J		1
Unknown-4	TIC-35	QCBLK49961-1	10/31/94	11/09/94	22	UG/L	J		1
Unknown-5	TIC-36	QCBLK49961-1	10/31/94	11/09/94	110	UG/L	J		1
Unknown-6	TIC-37	QCBLK49961-1	10/31/94	11/09/94	5	UG/L	J		1
Unknown-7	TIC-7	QCBLK49961-1	10/31/94	11/09/94	2	UG/L	J		1
Unknown-8	TIC-8	QCBLK49961-1	10/31/94	11/09/94	5	UG/L	J		1
Unknown-9	TIC-9	QCBLK49961-1	10/31/94	11/09/94	5	UG/L	J		1
Unknown-10	TIC-10	QCBLK49961-1	10/31/94	11/09/94	4	UG/L	J		1
Unknown-11	TIC-11	QCBLK49961-1	10/31/94	11/09/94	3	UG/L	J		1
Unknown-12	TIC-12	QCBLK49961-1	10/31/94	11/09/94	2	UG/L	J		1
Nitrobenzene-d5	4165-60-0	QCBLK49961-1	10/31/94	11/09/94	70	%REC			1
2-Fluorobiphenyl	321-60-8	QCBLK49961-1	10/31/94	11/09/94	68	%REC			1
Terphenyl-d14	1718-51-0	QCBLK49961-1	10/31/94	11/09/94	58	%REC			1
Phenol-d5	13127-88-3	QCBLK49961-1	10/31/94	11/09/94	70	%REC			1
2-Fluorophenol	367-12-4	QCBLK49961-1	10/31/94	11/09/94	62	%REC			1
2,4,6-Tribromophenol	118-79-6	QCBLK49961-1	10/31/94	11/09/94	82	%REC			1
2-Chlorophenol-d4	25167-80-0	QCBLK49961-1	10/31/94	11/09/94	65	%REC			1
1,2-Dichlorobenzene-d4	95-50-01	QCBLK49961-1	10/31/94	11/09/94	60	%REC			1

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY69

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: S67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H1379

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: decanted: (Y/N) Date Extracted: 10/31/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/94

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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY69

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: S67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H1379

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: decanted: (Y/N) Date Extracted: 10/31/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/94

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-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
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
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.

B0CY69

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: S67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H1379

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: decanted: (Y/N) Date Extracted: 10/31/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/94

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	21.63	2	J
2.	UNKNOWN	23.82	3	J
3.	UNKNOWN	27.26	92	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY71

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: S67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-002

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H1380

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: decanted: (Y/N) Date Extracted: 10/31/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/94

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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY71

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: S67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-002

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H1380

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: decanted: (Y/N) Date Extracted: 10/31/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/94

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-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
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	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.

B0CY71

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: S67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-002

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H1380

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: decanted: (Y/N) Date Extracted: 10/31/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/94

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	6.36	31	J
2. 98862	Ethanone, 1-phenyl-	7.75	2	JN
3.	UNKNOWN	21.61	7	J
4.	UNKNOWN	23.80	8	J
5.	UNKNOWN	27.23	59	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY73

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: S67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-003

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H1383

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: decanted: (Y/N) Date Extracted: 10/31/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/94

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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY73

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: S67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-003

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H1383

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: decanted: (Y/N) Date Extracted: 10/31/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/94

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-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
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	11	
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.

B0CY73

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: S67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-003

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H1383

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: decanted: (Y/N) Date Extracted: 10/31/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/94

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.82	2	J
2.	UNKNOWN	6.93	8	J
3.	UNKNOWN	9.82	5	J
4. 95169	Benzothiazole	10.45	4	JN
5.	UNKNOWN	12.80	110	J
6.	Unknown C7H9N	15.86	4	J
7.	Unknown C7H5NOS	16.73	27	J
8.	UNKNOWN	21.62	94	J
9.	UNKNOWN	23.32	6	J
10.	UNKNOWN	23.43	4	J
11.	UNKNOWN	23.79	4	J
12.	UNKNOWN	26.42	9	J
13.	UNKNOWN	27.22	3	J
14.	UNKNOWN	27.76	7	J
15.	UNKNOWN	28.56	2	J
16.	UNKNOWN	29.03	7	J
17.	UNKNOWN	29.23	3	J
18.	UNKNOWN	29.46	3	J
19.	UNKNOWN	29.85	3	J
20.	UNKNOWN	30.35	3	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY75

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: S67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-004

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H1384

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: decanted: (Y/N) Date Extracted: 10/31/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/94

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	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B0CY75

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: S67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-004

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H1384

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: decanted: (Y/N) Date Extracted: 10/31/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/94

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-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
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
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.

B0CY75

Lab Name: ITAS-ST.LOUIS Contract: 550-27

Lab Code: ITSL Case No.: S67101 SAS No.: SDG No.: W0279

Matrix: (soil/water) WATER Lab Sample ID: 6671-004

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H1384

Level: (low/med) LOW Date Received: 10/27/94

% Moisture: decanted: (Y/N) Date Extracted: 10/31/94

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/94

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	5.82	3	J
2.	UNKNOWN	6.93	9	J
3. 95169	Benzothiazole	10.45	4	JN
4.	UNKNOWN	15.84	2	J
5.	UNKNOWN	16.73	22	J
6.	UNKNOWN	21.64	110	J
7.	UNKNOWN	23.32	5	J
8.	UNKNOWN	23.43	2	J
9.	UNKNOWN	23.80	5	J
10.	UNKNOWN	26.42	5	J
11.	UNKNOWN	27.23	4	J
12.	UNKNOWN	27.77	3	J
13.	UNKNOWN	29.03	2	J

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Project: 550.27

Category: CLP ICAP Metals
Method: EPA CLP ICAP Metals
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/14/94

Client ID: BOCY69

Quanterra ID : 6671-001

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Aluminum	7429-90-5	QCBLK50596-1	11/07/94	11/08/94	171	UG/L	B	200	1
Antimony	7440-36-0	QCBLK50596-1	11/07/94	11/08/94	28.1	UG/L	U	60.0	1
Barium	7440-39-3	QCBLK50596-1	11/07/94	11/08/94	23.7	UG/L	B	200	1
Beryllium	7440-41-7	QCBLK50596-1	11/07/94	11/08/94	0.85	UG/L	B	5.0	1
Cadmium	7440-43-9	QCBLK50596-1	11/07/94	11/08/94	1.5	UG/L	U	5.0	1
Calcium	7440-70-2	QCBLK50596-1	11/07/94	11/08/94	19590	UG/L		5000	1
Chromium	7440-47-3	QCBLK50596-1	11/07/94	11/08/94	5.3	UG/L	U	10.0	1
Cobalt	7440-48-4	QCBLK50596-1	11/07/94	11/08/94	3.4	UG/L	U	50.0	1
Copper	7440-50-8	QCBLK50596-1	11/07/94	11/08/94	9.7	UG/L	B	25.0	1
Iron	7439-89-6	QCBLK50596-1	11/07/94	11/08/94	1160	UG/L		100	1
Magnesium	7439-95-4	QCBLK50596-1	11/07/94	11/08/94	4390	UG/L	B	5000	1
Manganese	7439-96-5	QCBLK50596-1	11/07/94	11/08/94	15.2	UG/L		15.0	1
Nickel	7440-02-0	QCBLK50596-1	11/07/94	11/08/94	5.2	UG/L	U	40.0	1
Potassium	7440-09-7	QCBLK50596-1	11/07/94	11/08/94	1360	UG/L	B	5000	1
Silver	7440-22-4	QCBLK50596-1	11/07/94	11/08/94	3.8	UG/L	U	10.0	1
Sodium	7440-23-5	QCBLK50596-1	11/07/94	11/08/94	2450	UG/L	B	5000	1
Vanadium	7440-62-2	QCBLK50596-1	11/07/94	11/08/94	9.6	UG/L	U	50.0	1
Zinc	7440-66-6	QCBLK50596-1	11/07/94	11/08/94	34.3	UG/L		20.0	1

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Project: 550.27

Category: CLP ICAP Metals
Method: EPA CLP ICAP Metals
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/14/94

Client ID: BOCY71

Quanterra ID : 6671-002

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Aluminum	7429-90-5	QCBLK50596-1	11/07/94	11/08/94	6820	MG/L		200	1
Antimony	7440-36-0	QCBLK50596-1	11/07/94	11/08/94	28.1	MG/L	U	60.0	1
Barium	7440-39-3	QCBLK50596-1	11/07/94	11/08/94	67.8	MG/L	B	200	1
Beryllium	7440-41-7	QCBLK50596-1	11/07/94	11/08/94	0.85	MG/L	B	5.0	1
Cadmium	7440-43-9	QCBLK50596-1	11/07/94	11/08/94	3.5	MG/L	B	5.0	1
Calcium	7440-70-2	QCBLK50596-1	11/07/94	11/08/94	46000	MG/L		5000	1
Chromium	7440-47-3	QCBLK50596-1	11/07/94	11/08/94	10.5	MG/L		10.0	1
Cobalt	7440-48-4	QCBLK50596-1	11/07/94	11/08/94	6.0	MG/L	B	50.0	1
Copper	7440-50-8	QCBLK50596-1	11/07/94	11/08/94	38.3	MG/L		25.0	1
Iron	7439-89-6	QCBLK50596-1	11/07/94	11/08/94	1740	MG/L		100	1
Magnesium	7439-95-4	QCBLK50596-1	11/07/94	11/08/94	10900	MG/L		5000	1
Manganese	7439-96-5	QCBLK50596-1	11/07/94	11/08/94	44.4	MG/L		15.0	1
Nickel	7440-02-0	QCBLK50596-1	11/07/94	11/08/94	107	MG/L		40.0	1
Potassium	7440-09-7	QCBLK50596-1	11/07/94	11/08/94	3600	MG/L	B	5000	1
Silver	7440-22-4	QCBLK50596-1	11/07/94	11/08/94	3.8	MG/L	U	10.0	1
Sodium	7440-23-5	QCBLK50596-1	11/07/94	11/08/94	16100	MG/L		5000	1
Vanadium	7440-62-2	QCBLK50596-1	11/07/94	11/08/94	9.6	MG/L	U	50.0	1
Zinc	7440-66-6	QCBLK50596-1	11/07/94	11/08/94	195	MG/L		20.0	1

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Project: 550.27

Category: CLP ICAP Metals
Method: EPA CLP ICAP Metals
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/14/94

Client ID: B0CY73

Quanterra ID : 6671-003

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Aluminum	7429-90-5	QCBLK50596-1	11/07/94	11/08/94	208	MG/L		200	1
Antimony	7440-36-0	QCBLK50596-1	11/07/94	11/08/94	28.1	MG/L	U	60.0	1
Barium	7440-39-3	QCBLK50596-1	11/07/94	11/08/94	25.8	MG/L	B	200	1
Beryllium	7440-41-7	QCBLK50596-1	11/07/94	11/08/94	0.85	MG/L	B	5.0	1
Cadmium	7440-43-9	QCBLK50596-1	11/07/94	11/08/94	1.5	MG/L	U	5.0	1
Calcium	7440-70-2	QCBLK50596-1	11/07/94	11/08/94	20600	MG/L		5000	1
Chromium	7440-47-3	QCBLK50596-1	11/07/94	11/08/94	5.3	MG/L	U	10.0	1
Cobalt	7440-48-4	QCBLK50596-1	11/07/94	11/08/94	3.4	MG/L	U	50.0	1
Copper	7440-50-8	QCBLK50596-1	11/07/94	11/08/94	11.7	MG/L	B	25.0	1
Iron	7439-89-6	QCBLK50596-1	11/07/94	11/08/94	172	MG/L		100	1
Magnesium	7439-95-4	QCBLK50596-1	11/07/94	11/08/94	4600	MG/L	B	5000	1
Manganese	7439-96-5	QCBLK50596-1	11/07/94	11/08/94	15.7	MG/L		15.0	1
Nickel	7440-02-0	QCBLK50596-1	11/07/94	11/08/94	5.2	MG/L	U	40.0	1
Potassium	7440-09-7	QCBLK50596-1	11/07/94	11/08/94	1430	MG/L	B	5000	1
Silver	7440-22-4	QCBLK50596-1	11/07/94	11/08/94	3.8	MG/L	U	10.0	1
Sodium	7440-23-5	QCBLK50596-1	11/07/94	11/08/94	2540	MG/L	B	5000	1
Vanadium	7440-62-2	QCBLK50596-1	11/07/94	11/08/94	9.6	MG/L	U	50.0	1
Zinc	7440-66-6	QCBLK50596-1	11/07/94	11/08/94	81.4	MG/L		20	1

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Project: 550.27

Category: CLP ICAP Metals
Method: EPA CLP ICAP Metals
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/14/94

Client ID: BOCY75

Quanterra ID : 6671-004

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Aluminum	7429-90-5	QCBLK50596-1	11/07/94	11/08/94	3350	MG/L		200	1
Antimony	7440-36-0	QCBLK50596-1	11/07/94	11/08/94	41.3	MG/L	B	60.0	1
Barium	7440-39-3	QCBLK50596-1	11/07/94	11/08/94	34.4	MG/L	B	200	1
Beryllium	7440-41-7	QCBLK50596-1	11/07/94	11/08/94	0.85	MG/L	B	5.0	1
Cadmium	7440-43-9	QCBLK50596-1	11/07/94	11/08/94	1.5	MG/L	U	5.0	1
Calcium	7440-70-2	QCBLK50596-1	11/07/94	11/08/94	66400	MG/L		5000	1
Chromium	7440-47-3	QCBLK50596-1	11/07/94	11/08/94	5.3	MG/L	U	10.0	1
Cobalt	7440-48-4	QCBLK50596-1	11/07/94	11/08/94	3.5	MG/L	B	50.0	1
Copper	7440-50-8	QCBLK50596-1	11/07/94	11/08/94	24.6	MG/L	B	25.0	1
Iron	7439-89-6	QCBLK50596-1	11/07/94	11/08/94	933	MG/L		100	1
Magnesium	7439-95-4	QCBLK50596-1	11/07/94	11/08/94	16900	MG/L		5000	1
Manganese	7439-96-5	QCBLK50596-1	11/07/94	11/08/94	30.1	MG/L		15.0	1
Nickel	7440-02-0	QCBLK50596-1	11/07/94	11/08/94	12.0	MG/L	B	40.0	1
Potassium	7440-09-7	QCBLK50596-1	11/07/94	11/08/94	5280	MG/L		5000	1
Silver	7440-22-4	QCBLK50596-1	11/07/94	11/08/94	3.8	MG/L	U	10.0	1
Sodium	7440-23-5	QCBLK50596-1	11/07/94	11/08/94	24500	MG/L		5000	1
Vanadium	7440-62-2	QCBLK50596-1	11/07/94	11/08/94	19.0	MG/L	B	50.0	1
Zinc	7440-66-6	QCBLK50596-1	11/07/94	11/08/94	543	MG/L		20.0	1

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Project: 550.27

Category: CLP Mercury
Method: EPA CLP
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/12/94

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
BOCY69	6671-001	Mercury	7439-97-6	QCBLK50484-1	11/04/94	11/05/94	6.0	UG/L		0.20	1
BOCY69	6671-001DUP	Mercury	7439-97-6	QCBLK50484-1	11/04/94	11/05/94	5.9	UG/L		0.20	1
BOCY69	6671-001MS	Mercury	7439-97-6	QCBLK50484-1	11/04/94	11/05/94	55	%REC			1
BOCY71	6671-002	Mercury	7439-97-6	QCBLK50484-1	11/04/94	11/05/94	4.5	UG/L		0.20	1
BOCY73	6671-003	Mercury	7439-97-6	QCBLK50484-1	11/04/94	11/05/94	0.10	UG/L	U	0.20	1
BOCY75	6671-004	Mercury	7439-97-6	QCBLK50484-1	11/04/94	11/05/94	0.22	UG/L		0.20	1
NA	QCBLK50484-1	Mercury	7439-97-6	QCBLK50484-1	11/04/94	11/05/94	0.10	UG/L	B	0.20	1
NA	QCLCS50484-1	Mercury	7439-97-6	QCBLK50484-1	11/04/94	11/05/94	94	%REC			1

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

B0CY69

Lab Name: ITAS_ST._LOUIS_____ Contract: 550.27____

Lab Code: ITMO__ Case No.: _____ SAS No.: _____ SDG No.: W0279_

Matrix (soil/water): WATER Lab Sample ID: 6671-001

Level (low/med): LOW__ Date Received: 10/27/94

% 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_	171	B		P
7440-36-0	Antimony_	28.1	U		P
7440-39-3	Barium___	23.7	B		P
7440-41-7	Beryllium	0.85	B		P
7440-43-9	Cadmium__	1.5	U		P
7440-70-2	Calcium__	19600			P
7440-47-3	Chromium_	5.3	U		P
7440-48-4	Cobalt___	3.4	U		P
7440-50-8	Copper___	9.7	B		P
7439-89-6	Iron____	1170		N	P
7439-95-4	Magnesium	4390	B		P
7439-96-5	Manganese	15.2			P
7439-97-6	Mercury__	6.0			CV
7440-02-0	Nickel___	5.2	U		P
7440-09-7	Potassium	1360	B		P
7440-22-4	Silver___	3.8	U		P
7440-23-5	Sodium___	2450	B	E	P
7440-62-2	Vanadium_	9.6	U		P
7440-66-6	Zinc_____	34.3			P

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

B0CY71

Lab Name: ITAS_ST._LOUIS_____ Contract: 550.27____

Lab Code: ITMO__ Case No.: _____ SAS No.: _____ SDG No.: W0279_

Matrix (soil/water): WATER Lab Sample ID: 6671-002

Level (low/med): LOW__ Date Received: 10/27/94

% 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_	6820			P
7440-36-0	Antimony_	28.1	U		P
7440-39-3	Barium___	67.8	B		P
7440-41-7	Beryllium	0.85	B		P
7440-43-9	Cadmium__	3.5	B		P
7440-70-2	Calcium__	46000			P
7440-47-3	Chromium_	10.5			P
7440-48-4	Cobalt___	6.0	B		P
7440-50-8	Copper___	38.3			P
7439-89-6	Iron____	1740		N	P
7439-95-4	Magnesium	10900			P
7439-96-5	Manganese	44.4			P
7439-97-6	Mercury__	4.5			CV
7440-02-0	Nickel___	107			P
7440-09-7	Potassium	3600	B		P
7440-22-4	Silver___	3.8	U		P
7440-23-5	Sodium___	16100		E	P
7440-62-2	Vanadium_	9.6	U		P
7440-66-6	Zinc_____	195			P

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

B0CY73

Lab Name: ITAS_ST._LOUIS_____ Contract: 550.27____

Lab Code: ITMO__ Case No.: _____ SAS No.: _____ SDG No.: W0279_

Matrix (soil/water): WATER Lab Sample ID: 6671-003

Level (low/med): LOW__ Date Received: 10/27/94

% 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_	208			P
7440-36-0	Antimony_	28.1	U		P
7440-39-3	Barium___	25.8	B		P
7440-41-7	Beryllium	0.85	B		P
7440-43-9	Cadmium__	1.5	U		P
7440-70-2	Calcium__	20600			P
7440-47-3	Chromium_	5.3	U		P
7440-48-4	Cobalt___	3.4	U		P
7440-50-8	Copper___	11.7	B		P
7439-89-6	Iron____	172		N	P
7439-95-4	Magnesium	4600	B		P
7439-96-5	Manganese	15.7			P
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	5.2	U		P
7440-09-7	Potassium	1430	B		P
7440-22-4	Silver___	3.8	U		P
7440-23-5	Sodium___	2540	B	E	P
7440-62-2	Vanadium_	9.6	U		P
7440-66-6	Zinc_____	81.4			P

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

B0CY75

Lab Name: ITAS_ST._LOUIS_____ Contract: 550.27____

Lab Code: ITMO__ Case No.: _____ SAS No.: _____ SDG No.: W0279_

Matrix (soil/water): WATER Lab Sample ID: 6671-004

Level (low/med): LOW__ Date Received: 10/27/94

% 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_	3350	_		P_
7440-36-0	Antimony_	41.3	_		P_
7440-39-3	Barium___	34.4	B		P_
7440-41-7	Beryllium	0.85	B		P_
7440-43-9	Cadmium__	1.5	U		P_
7440-70-2	Calcium__	66400			P_
7440-47-3	Chromium_	5.3	U		P_
7440-48-4	Cobalt___	3.5	B		P_
7440-50-8	Copper___	24.6	B		P_
7439-89-6	Iron____	933	_	N	P_
7439-95-4	Magnesium	16900	_		P_
7439-96-5	Manganese	30.1	_		P_
7439-97-6	Mercury__	0.22	_		CV
7440-02-0	Nickel___	12.0	B		P_
7440-09-7	Potassium	5290	_		P_
7440-22-4	Silver___	3.8	U		P_
7440-23-5	Sodium___	24500		E	P_
7440-62-2	Vanadium_	19.0	B		P_
7440-66-6	Zinc____	543	_		P_
			_		
			_		
			_		
			_		
			_		

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: NITRATE
Method: EPA 300.0
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/10/94

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
BOCY69	6671-001	Nitrate	14797-55-8	QCBLK50552-1	11/04/94	11/04/94	0.075	MG/L		0.020	1
BOCY69	6671-001DUP	Nitrate	14797-55-8	QCBLK50552-1	11/04/94	11/04/94	0.074	MG/L		0.020	1
BOCY69	6671-001MS	Nitrate	14797-55-8	QCBLK50552-1	11/04/94	11/04/94	105	%REC			1
BOCY71	6671-002	Nitrate	14797-55-8	QCBLK50552-1	11/04/94	11/04/94	0.020	MG/L	U	0.020	1
BOCY73	6671-003	Nitrate	14797-55-8	QCBLK50552-1	11/04/94	11/04/94	4.49	MG/L		0.20	10
BOCY75	6671-004	Nitrate	14797-55-8	QCBLK50552-1	11/04/94	11/04/94	4.55	MG/L		0.20	10
NA	QCBLK50552-1	Nitrate	14797-55-8	QCBLK50552-1	11/04/94	11/04/94	0.020	MG/L	U	0.020	1
NA	QCLCS50552-1	Nitrate	14797-55-8	QCBLK50552-1	11/04/94	11/04/94	100	%REC			1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: Nitrate/Nitrite
Method: EPA 353.1
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/10/94

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
BOCY69	6671-001	Nitrate/Nitrite	C-005	QCBLK50503-1	11/04/94	11/04/94	83.4	UG/L		50.0	1
BOCY69	6671-001DUP	Nitrate/Nitrite	C-005	QCBLK50503-1	11/04/94	11/04/94	79.6	UG/L		50.0	1
BOCY69	6671-001MS	Nitrate/Nitrite	C-005	QCBLK50503-1	11/04/94	11/04/94	100	%REC			1
BOCY71	6671-002	Nitrate/Nitrite	C-005	QCBLK50503-1	11/04/94	11/04/94	50.0	UG/L	U	50.0	1
BOCY73	6671-003	Nitrate/Nitrite	C-005	QCBLK50503-2	11/04/94	11/04/94	4240	UG/L		500	10
BOCY75	6671-004	Nitrate/Nitrite	C-005	QCBLK50503-2	11/04/94	11/04/94	4200	UG/L		500	10
BOCY79	6671-005	Nitrate/Nitrite	C-005	QCBLK50503-2	11/04/94	11/04/94	4260	UG/L		500	10
NA	QCBLK50503-1	Nitrate/Nitrite	C-005	QCBLK50503-2	11/04/94	11/04/94	50.0	UG/L	U	50.0	1
NA	QCBLK50503-2	Nitrate/Nitrite	C-005	QCBLK50503-2	11/04/94	11/04/94	50.0	UG/L	U	50.0	1
NA	QCLCS50503-1	Nitrate/Nitrite	C-005	QCBLK50503-1	11/04/94	11/04/94	102	%REC			1
NA	QCLCS50503-2	Nitrate/Nitrite	C-005	QCBLK50503-2	11/04/94	11/04/94	103	%REC			1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: pH
Method: EPA 9040
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/10/94

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
BOCY69	6671-001	pH	10-29-7	QCBLK50481-1	11/04/94	11/04/94	5.45	PH			1
BOCY69	6671-001DUP	pH	10-29-7	QCBLK50481-1	11/04/94	11/04/94	5.47	PH			1
BOCY71	6671-002	pH	10-29-7	QCBLK50481-1	11/04/94	11/04/94	4.66	PH			1
BOCY73	6671-003	pH	10-29-7	QCBLK50481-1	11/04/94	11/04/94	3.09	PH			1
BOCY75	6671-004	pH	10-29-7	QCBLK50481-1	11/04/94	11/04/94	3.71	PH			1
NA	QCBLK50481-1	pH	10-29-7	QCBLK50481-1	11/04/94	11/04/94	5.49	PH			1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: Total Dissolved Solids
Method: EPA 160.1
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/10/94

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
BOCY69	6671-001	Total Dissolved	10-33-3	QCBLK49925-1	10/31/94	10/31/94	119	MG/L		5.00	1
BOCY69	6671-001DUP	Total Dissolved	10-33-3	QCBLK49925-1	10/31/94	10/31/94	113	MG/L		5.00	1
BOCY71	6671-002	Total Dissolved	10-33-3	QCBLK49925-1	10/31/94	10/31/94	183	MG/L		5.00	1
BOCY73	6671-003	Total Dissolved	10-33-3	QCBLK49925-1	10/31/94	10/31/94	449	MG/L		5.00	1
BOCY75	6671-004	Total Dissolved	10-33-3	QCBLK49925-1	10/31/94	10/31/94	581	MG/L		5.00	1
NA	QCBLK49925-1	Total Dissolved	10-33-3	QCBLK49925-1	10/31/94	10/31/94	5.00	MG/L	U	5.00	1
NA	QCLCS49925-1	Total Dissolved	10-33-3	QCBLK49925-1	10/31/94	10/31/94	98	%REC			1

Quanterra-Richland
P.O. Box 1970
Richland, WA 99352

Project: 550.27

Category: Total Organic Carbons
Method: EPA 415.1
Matrix: LIQUID

Sample Date : 10/24/94
Receipt Date : 10/27/94
Report Date : 11/10/94

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
B0CY69	6671-001	TOC	10-35-5	QCBLK50702-1	11/07/94	11/07/94	1.05	MG/L		1.00	1
B0CY69	6671-001DUP	TOC	10-35-5	QCBLK50702-1	11/07/94	11/07/94	1.00	MG/L		1.00	1
B0CY69	6671-001MS	TOC	10-35-5	QCBLK50702-1	11/07/94	11/07/94	101	%REC			1
B0CY71	6671-002	TOC	10-35-5	QCBLK50702-1	11/07/94	11/07/94	1.00	MG/L	U	1.00	1
B0CY73	6671-003	TOC	10-35-5	QCBLK50702-1	11/07/94	11/07/94	11.4	MG/L		1.00	1
B0CY75	6671-004	TOC	10-35-5	QCBLK50702-1	11/07/94	11/07/94	10.6	MG/L		1.00	1
B0CY79	6671-005	TOC	10-35-5	QCBLK50702-1	11/07/94	11/07/94	10.7	MG/L		1.00	1
NA	QCBLK50702-1	TOC	10-35-5	QCBLK50702-1	11/07/94	11/07/94	1.00	MG/L	U	1.00	1
NA	QCLCS50702-1	TOC	10-35-5	QCBLK50702-1	11/07/94	11/07/94	100	%REC			1

Quanterra November 02, 1994 03:44 pm
Account: 10722 Project: 550.27 Quanterra-Richland QAS No. 774 Rev. 0
Master Sample Login: 6671

Project Manager: W. Price

Draft: Final: Entered and Reviewed by: Sue Wilson PM Review: Abby Wolden

Sample Header Template:

Sample No. / Comments	Client ID	C-Matrix	Date: Collected	Received	Due	Shipper	Rad Category	Rad Sample No.
6671-001	BOCY69	Water	24-OCT-94 15:48	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056901								

#	Container Type	Analysis	Class	Preservative	Anal. Due Date	Hold Date	Site	(Container Numbers:% Filled)
3	VI - Vial-40ml	VOA/CLP90/Q4	S	HCL	08-NOV-94	07-NOV-94	109Q	(112454:100 112455:99 112456:98)
2	AN - Amber Glass-1L	BNA/CLP90/Q4	S	COLD	08-NOV-94	31-OCT-94	R5C	(112452:100 112453:99)
1	AN - Amber Glass-500ml	MG/CLP90/Q4	S	HNO3	08-NOV-94	22-NOV-94	R5C	(112447:100)
1		ICAP/CLP90/Q4	S	HNO3	08-NOV-94	25-APR-95	R5C	(112447:100)
1		NO3/300.0/Q4	S	COLD	08-NOV-94	26-OCT-94	R5C	(112448:99)
1		NO3/353.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112449:98)
1		PH/9040/Q4	S	COLD	08-NOV-94	25-OCT-94	R5C	(112448:99)
1		TDS/160.1/Q4	S	COLD	08-NOV-94	31-OCT-94	R5C	(112451:96)
1		TOC/415.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112450:97)

6671-001DUP	BOCY69	Water	24-OCT-94 15:48	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056901								

#	Container Type	Analysis	Class	Preservative	Anal. Due Date	Hold Date	Site	(Container Numbers:% Filled)
1	AN - Amber Glass-500ml	MG/CLP90/Q4	S	HNO3	08-NOV-94	22-NOV-94	R5C	(112447:100)
1		ICAP/CLP90/Q4	S	HNO3	08-NOV-94	25-APR-95	R5C	(112447:100)
1		NO3/300.0/Q4	S	COLD	08-NOV-94	26-OCT-94	R5C	(112448:99)
1		NO3/353.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112449:98)
1		PH/9040/Q4	S	COLD	08-NOV-94	25-OCT-94	R5C	(112448:99)
1		TDS/160.1/Q4	S	COLD	08-NOV-94	31-OCT-94	R5C	(112451:96)
1		TOC/415.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112450:97)

6671-001MS	BOCY69	Water	24-OCT-94 15:48	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056901								

#	Container Type	Analysis	Class	Preservative	Anal. Due Date	Hold Date	Site	(Container Numbers:% Filled)
3	VI - Vial-40ml	VOA/CLP90/Q4	S	HCL	08-NOV-94	03-NOV-94	109Q	(112454:100 112455:99 112456:98)
1	AN - Amber Glass-500ml	MG/CLP90/Q4	S	HNO3	08-NOV-94	22-NOV-94	R5C	(112447:100)
1		ICAP/CLP90/Q4	S	HNO3	08-NOV-94	25-APR-95	R5C	(112447:100)
1		NO3/300.0/Q4	S	COLD	08-NOV-94	26-OCT-94	R5C	(112448:99)
1		NO3/353.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112449:98)
1		TOC/415.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112450:97)

6671-001MSD	BOCY69	Water	24-OCT-94 15:48	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056901								

#	Container Type	Analysis	Class	Preservative	Anal. Due Date	Hold Date	Site	(Container Numbers:% Filled)
3	VI - Vial-40ml	VOA/CLP90/Q4	S	HCL	08-NOV-94	03-NOV-94	109Q	(112454:100 112455:99 112456:98)

6671-002	BOCY71	Water	24-OCT-94 16:10	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056903								

#	Container Type	Analysis	Class	Preservative	Anal. Due Date	Hold Date	Site	(Container Numbers:% Filled)
3	VI - Vial-40ml	VOA/CLP90/Q4	S	HCL	08-NOV-94	07-NOV-94	109Q	(112466:100 112467:99 112468:98)

3*=Sample has not been rad screened.

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Quanterra November 02, 1994 03:44 pm
Account: 10722 Project: 550.27 Quanterra-Richland QAS No. 774 Rev. 0
Master Sample Login: 6671

Project Manager: W. Price

Draft: Final: Entered and Reviewed by: _____ PM Review: _____

Sample Header Template: _____

Sample No. / Comments	Client ID	C-Matrix	Date: Collected	Received	Due	Shipper	Rad Category	Rad Sample No.
6671-002MS	BOCY71	Water	24-OCT-94 16:10	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056903								
6671-002MSD	BOCY71	Water	24-OCT-94 16:10	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056903								
6671-003	BOCY73	Water	24-OCT-94 17:05	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056905								
6671-004	BOCY75	Water	24-OCT-94 17:25	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056907								

#	Container Type	Analysis	Class	Preservative	Anal. Due Date	Hold Date	Site	(Container Numbers:% Filled)
Data:								
1	AN - Amber Glass-1L	BNA/CLP90/Q4	S	COLD	08-NOV-94	31-OCT-94	R5C	(112471:100)
2	AN - Amber Glass-500ml	BNA/CLP90/Q4	S	COLD	08-NOV-94	31-OCT-94	R5C	(112469:95 112470:94)
1		MG/CLP90/Q4	S	HNO3	08-NOV-94	22-NOV-94	R5C	(112459:100)
1		ICAP/CLP90/Q4	S	HNO3	08-NOV-94	25-APR-95	R5C	(112459:100)
1		NO3/300.0/Q4	S	COLD	08-NOV-94	26-OCT-94	R5C	(112460:99)
1		NO3/353.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112461:98)
1		PH/9040/Q4	S	COLD	08-NOV-94	25-OCT-94	R5C	(112460:99)
1		TDS/160.1/Q4	S	COLD	08-NOV-94	31-OCT-94	R5C	(112463:96)
1		TOC/415.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112462:97)
1	AN - Amber Glass-1L	BNA/CLP90/Q4	S	COLD	08-NOV-94	29-OCT-94	R5C	(112471:100)
2	AN - Amber Glass-500ml	BNA/CLP90/Q4	S	COLD	08-NOV-94	29-OCT-94	R5C	(112469:95 112470:94)
1	AN - Amber Glass-1L	BNA/CLP90/Q4	S	COLD	08-NOV-94	29-OCT-94	R5C	(112471:100)
2	AN - Amber Glass-500ml	BNA/CLP90/Q4	S	COLD	08-NOV-94	29-OCT-94	R5C	(112469:95 112470:94)
2	VI - Vial-40ml	VOA/CLP90/Q4	S	HCL	08-NOV-94	07-NOV-94	109Q	(112477:100 112478:99)
2	AN - Amber Glass-1L	BNA/CLP90/Q4	S	COLD	08-NOV-94	31-OCT-94	R5C	(112482:100 112483:99)
1	AN - Amber Glass-500ml	MG/CLP90/Q4	S	HNO3	08-NOV-94	22-NOV-94	R5C	(112472:100)
1		ICAP/CLP90/Q4	S	HNO3	08-NOV-94	25-APR-95	R5C	(112472:100)
1		NO3/300.0/Q4	S	COLD	08-NOV-94	26-OCT-94	R5C	(112473:99)
1		NO3/353.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112474:98)
1		PH/9040/Q4	S	COLD	08-NOV-94	25-OCT-94	R5C	(112473:99)
1		TDS/160.1/Q4	S	COLD	08-NOV-94	31-OCT-94	R5C	(112476:96)
1		TOC/415.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112475:97)
3	VI - Vial-40ml	VOA/CLP90/Q4	S	HCL	08-NOV-94	07-NOV-94	109Q	(112491:100 112492:99 112493:98)
2	AN - Amber Glass-1L	BNA/CLP90/Q4	S	COLD	08-NOV-94	31-OCT-94	R5C	(112494:100 112495:99)
1	AN - Amber Glass-500ml	MG/CLP90/Q4	S	HNO3	08-NOV-94	22-NOV-94	R5C	(112486:100)
1		ICAP/CLP90/Q4	S	HNO3	08-NOV-94	25-APR-95	R5C	(112486:100)
1		NO3/300.0/Q4	S	COLD	08-NOV-94	26-OCT-94	R5C	(112487:99)
1		NO3/353.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112488:98)

3*=Sample has not been rad screened.

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Quanterra November 02, 1994 03:44 pm
Account: 10722 Project: 550.27 Quanterra-Richland QAS No. 774 Rev. 0
Master Sample Login: 6671

Project Manager: W. Price

Draft: Final: Entered and Reviewed by: _____ PM Review: _____

Sample Header Template: _____

Sample No. / Comments	Client ID	C-Matrix	Date: Collected	Received	Due	Shipper	Rad Category	Rad Sample No.
6671-005	BOCY79	Water	24-OCT-94 17:22	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056909								
6671-006	BOCY70	Water	24-OCT-94 12:13	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056902								
6671-007	BOCY72	Water	24-OCT-94 12:15	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056904								
6671-008	BOCY74	Water	24-OCT-94 12:17	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056906								
6671-009	BOCY76	Water	24-OCT-94 14:20	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required
QUANTERRA RICHLAND I.D. 41056908								
6671-010	TRIP BLANK	Water	24-OCT-94 00:00	27-OCT-94 11:30	10-NOV-94	FED-EX	1	Screening not Required

#	Container Type	Analysis	Class	Preservative	Anal. Due Date	Hold Date	Site	(Container Numbers:% Filled)
1		PH/9040/Q4	S	COLD	08-NOV-94	25-OCT-94	R5C	(112487:99)
1		TDS/160.1/Q4	S	COLD	08-NOV-94	31-OCT-94	R5C	(112490:96)
1		TOC/415.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112489:97)
1	AN - Amber Glass-500ml	NO3/353.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112498:98)
1		TOC/415.1/Q4	S	H2SO4	08-NOV-94	21-NOV-94	R5C	(112499:97)
3	VI - Vial-40ml	VOA/CLP90/Q4	S	HCL	08-NOV-94	06-NOV-94	109Q	(112508:100 112509:99 112510:98)
3	VI - Vial-40ml	VOA/CLP90/Q4	S	HCL	08-NOV-94	06-NOV-94	109Q	(112511:100 112512:99 112513:98)
3	VI - Vial-40ml	VOA/CLP90/Q4	S	HCL	08-NOV-94	06-NOV-94	109Q	(112514:100 112515:99 112516:98)
3	VI - Vial-40ml	VOA/CLP90/Q4	S	HCL	08-NOV-94	06-NOV-94	109Q	(112517:100 112518:99 112519:98)
2	VI - Vial-40ml	HOLD//Q4	S	HCL	11-&&&-**	11-&&&-**	109Q	(112520:100 112521:99)

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3*=Sample has not been rad screened.

CVR 2339

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document No. 453920
Page 1 of 4

Project Name/No. 1 B94-068
Sample Team Members 2
Profit Center No. 3 4632
Project Manager 4 V Pelley
Purchase Order No. 6
Required Report Date 11 11/10/94

Samples Shipment Date 7 10/27/94
Lab Destination 8 St Louis
Lab Contact 9
Project Contact/Phone 12
Carrier/Waybill No. 13

Bill to: 5 Pantex Richland
Report to: 10

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Preservative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
41056901A	BOCY69 /H2O	102494 1548 See WHC	Amber VOC/SAR	500 ml	4°C HNO3	metals unfiltered See WHC VOC/SAR	temp 6 A	100
B		"	"	500	—	Arsenic	6-A	
C		"	"	"	H2SO4	NO2/NO3	6-A	
D		"	Amber	40 ml	HCL	VOA	6-A	
E		"	"	"	"	"	6-A	
F		"	"	"	"	"	6-A	
G		102494 1548	Amber	1L	—	Phos	5	
H		102494 1548	Amber	1L	—	BNA	5	

FOR LAB USE ONLY

FOR LAB USE ONLY

Special Instructions: 23

Possible Hazard Identification: 24
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☑

Sample Disposal: 25
Return to Client ☑ Disposal by Lab ☐ Archive ☐ (mos.)

Turnaround Time Required: 26
Normal ☐ Rush ☑

QC Level: 27
I. ☐ II. ☐ III. ☐ Project Specific (specify): SDG W0279

1. Relinquished by 28 (Signature/Affiliation) [signature]	Date: 10/27/94 Time: 1600	1. Received by 28 (Signature/Affiliation) [signature]	Date: 10-28-94 Time: 0700
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: 29

80008

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.)*

Reference Document No.[30] 453920
Page 2 of 4

Project Name W0279 Project No. B94-068 Samples Shipment Date 10/27/94

ONE CONTAINER PER LINE

	Sample[14] Number	Sample[15] Description/Type	Date/Time[16] Collected	Container[17] Type	Sample[18] Volume	Pre-[19] servative	Requested Testing[20] Program	Condition on[21] Receipt	Disposal[22] Record No.
	41056901 I	BOCY69 H_2O	10 24 94 1548 See WHC	Amber COC/SAR	500	4°C H_2SO_4	See WHC TOC COC/SAR	Temp 64 DH 1	10970
	J		10 24 94 1548	Amber	500	—	TDS	6-A	
0	2A	BOCY70	10/24/94 1213	Amber	40mL	HCL	VOA	6-A	
	B		"	"	"	"	"	6-A	
	C		"	"	"	"	"	6-A	
2	3A	BOCY71	10/24/94 1610	Amber	500	HNO_3	metals unfiltered	6 A 1	
	B		"	"	"	—	Anions	6-A	
	C		"	"	"	H_2SO_4	NO2/NO3	6-A 1	
	D		"	"	40mL	HCL	VOA	6-A	
	E			"	"	"	"	6-A	
	F			"	"	"	"	6-A	
	G		"	"	500	—	Bna	6-A	
	H		"	"	"	H_2SO_4	TOC	6-A 1	
	I		"	"	"	—	TDS	6-A	
	J		10/24/94 1610	Amber	1L	—	Bna	5 —	
	K		"	"	500	—	Bna	6-A	
1	4A	BOCY72	10/24/94 1724	Amber	40	— HCL	VOA	6-A	
	B			"	"	"	VOA	6-A	
	C			"	"	"	VOA	6-A	
3	5A	BOCY73	10/24/94 1705	"	500	HNO_3	metals unfiltered	4 1	

60000

White: To accompany samples
Yellow: Field copy
*See back of form for special instructions.

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.)*

Reference Document No.[30] 453920
Page 3 of 4

Project Name W0279 Project No. B94-068 Samples Shipment Date 10/27/94

ONE CONTAINER PER LINE

Sample[14] Number	Sample[15] Description/Type	Date/Time[16] Collected	Container[17] Type	Sample[18] Volume	Pre-[19] servative	Requested Testing[20] Program	Condition on[21] Receipt	Disposal[22] Record No.
41056905 B	BOCY73 H_2O	102494 1705 See WHC	Amber COC/SAR	500	4°C	Anions See WHC COC/SAR	4	100020
C		"	"	"	H_2SO_4	NO_2 NO_3	4	
D		"	"	40mL	HCL	VOA	6-A	
E		"	"	"	"	"	6-A	
F		"	"	1L	—	Bna	4	
G		"	"	1L	—	Bna	4	
H		"	"	500	H_2SO_4	TOC	4	
I		"	"	"	—	TDS	4	
6A	BOCY74	102494 1717	Amber	40mL	HCL	VOA	6-A	
B			"	"	"	"	6-A	
C			"	"	"	"	6-A	
7A	BOCY75	102494 1725	Amber	500	HNO_3	metals unfiltered	4	
B		"	"	"	—	Anions	6-A	
C		"	"	"	H_2SO_4	NO_2/NO_3	6-A	
D		"	"	40	HCL	VOA	6-A	
E		"	"	"	"	"	6-A	no time on Cont
F		"	"	"	"	"	6-A	no time on Cont
G		"	"	1L	—	Bna	4	
H		"	"	1L	"	Bna	4	
I		"	"	500	H_2SO_4	TOC	4	

White: To accompany samples
Yellow: Field copy
*See back of form for special instructions.

00010

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.)*

Reference Document No.[30] 453920
Page 4 of 4

Project Name W0279 Project No. B94-068 Samples Shipment Date 10/27/94

ONE CONTAINER PER LINE

Sample[14] Number	Sample[15] Description/Type	Date/Time[16] Collected	Container[17] Type	Sample[18] Volume	Pre-[19] servative	Requested Testing[20] Program	Condition on[21] Receipt	Disposal[22] Record No.
4105G907J	BOCY75 /H2O	10/27/94 1725 See WHC	Amber COC/SAR	500	4°C	TPS See WHC COC/SAR	Temp 4 PH	1608
9 8 A	BOCY76	10/27/94 1721	Amber	40mL	HCL	VOC	6-A	
B			"	"	"	"	6-A	
C			"	"	"	"	6-A	
5 9 A	BOCY79	10/27/94 1722	Amber	500	H2SO4	NO2 NO3	5 PH 1	No Signif amount
B		"	"	"	"	TOC	4 1	
10/27/94								

Rec'd 2-40mL vials not on COC or labeled

White: To accompany samples Yellow: Field copy

*See back of form for special instructions

00011

Westinghouse Hanford Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page 1 of 1

Data Turnaround: [ ] Priority [X] Normal

Collector	
Company Contact	RC SMITH/MA FRANK
Telephone No.	509-372-2537
Project Designation	200-BP-5 TANK CHARACTERIZATION-UNIT 2
Sampling Location	200 AREAS
SAF No.	B94-068
Ice Chest No.	ER-1B
Field Logbook No.	
Method of Shipment	HAND DELIVER
Shipped To	QUANTERRA
Offsite Property No.	W95-0-000-41
Bill of Lading/Air Bill No.	N/A NA
Possible Sample Hazards/Remarks	
Special Handling and/or Storage	COOL TO 4 DEGREES CENTIGRADE

Preservative	HNO3 <2	COOL 4	H2SO4<2	HCl <2	COOL 4	see SI	COOL 4	HNO3 <2	HCl <2	COOL 4		HCl <2			
Type of Container	G	G	P/G	Gs	gG	P/G	P/G	P/G	P/G	G/P		Gs			
No. of Container(s)	1	1	1	3	2	1	1	7	3	1		3			
Volume	500ml	500ml	500ml	40ml	1000ml	500ml	500ml	1000ml	1000ml	20ml		40ml			
SAMPLE ANALYSIS 410569	CLP ICP METALS-TAL, AA METALS, Hg	ANIONS-IC(NITRATE), pH	NO2-NO3	CLP VOA-TCL	CLP SEMI-VOA-TCL	TOC	TDS	TOTAL ALPHA/BETA, Sr-90, GAMMA SPEC(Co-60)	Tc-99	ACTIVITY SCAN 4/057002		CLP VOA			
	A	B	C	DEF	GH	I	J					ABC			

Sample No.	Matrix*	Date Sampled	Time Sampled															
B0CY69 01	W	10-24-94	1548	X	X	X	X	X	X	X	X	X	X					
B0CY70 2	W	10-24-94	1215												X			

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By	Date/Time	Received By	Date/Time
Doug Bonner	10-24-94 1837	[signature]	10-24-94 1807
[signature]	10-26-94 0930	[signature]	0930 10-26-94
[signature] C. Whitten	10-27-94 1130	[signature]	10/27/94 1130
Relinquished By	Date/Time	Received By	Date/Time

SPECIAL INSTRUCTIONS

THE PRESERVATIVE FOR TOC IS HCl or H2SO4 pH<2

DATA DELIVERABLE - SUMMARY

SDG W0279

Matrix*

- S = Soil
- SE = Sediment
- SO = Solid
- SL = Sludge
- W = Water
- O = Oil
- A = Air
- DS = Drum Solids
- DL = Drum Liquids
- T = Tissue
- WI = Wipe
- L = Liquid
- V = Vegetation
- X = Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

DISTRIBUTION: Original- Sample Yellow - Sampler

BC-6000-828 (12/92)

00012

Westinghouse Hanford Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page 1 of 1

Data Turnaround: [ ] Priority [X] Normal

Collector	Company Contact: RC SMITH/MA FRANK	Telephone No.: 509-372-2537
Project Designation: 200-BP-5 TANK CHARACTERIZATION-UNIT 2	Sampling Location: 200 AREAS	SAF No.: 894-068
Ice Chest No.: ER-8	Field Logbook No.	Method of Shipment: HAND DELIVER
Shipped To: QUANTERRA	Offsite Property No.: 1W95-0-0001-39	Bill of Lading/Air Bill No.: N/A N/A
Possible Sample Hazards/Remarks		

Preservative	HNO3 <2	COOL 4	H2SO4<2	HCl <2	COOL 4	see SI	COOL 4	HNO3 <2	HCl <2	COOL 4	cool 4	HCl <2			
Type of Container	G	G	P/G	Ga	aG	P/G	P/G	P/G	P/G	G/P	a G	Ga			
No. of Container(s)	1	1	1	3	12	1	1	7	3	1	2	3			
Volume	500ml	500ml	500ml	40ml	1000ml	500ml	500ml	1000ml	1000ml	20ml	500ml	40ml			
SAMPLE ANALYSIS 410569	CLP ICP METALS-TAL, AA METALS, Hg	ANIONS-IC(NITRATE), pH	NO2-NO3	CLP VOA-TCL	CLP SEMI-VOA-TCL	TOC	TDS	TOTAL ALPHA/BETA, Sr-90, GAMMA SPEC(Co-60)	Tc-99	ACTIVITY SCAN	CLP Semi-VOA-TCL	CLP VOA			
	A	B	C	DEF		4 10/27/94	I	410570 01			10/27/94	ABC			

Sample No.	Matrix*	Date Sampled	Time Sampled															
BOCY71 03	W	10-24-94	1610	X	X	X	X	X	X	X	X	X	X	X				
BOCY72 4	W	10-24-94	1215												X			

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By	Date/Time	Received By	Date/Time
Doug Bowers	1807 10-24-94	Joan E. Rogers	10-24-94 1807
Joan E. Rogers	10-26-94 0930	B. Whitten	0930 10 26 94
B. Whitten	1130 10-27-94	[illegible]	1130 10/27/94

SPECIAL INSTRUCTIONS

THE PRESERVATIVE FOR TOC IS HCl or H2SO4 pH<2

DATA DELIVERABLE - SUMMARY

SDG W0279

Matrix*

S	=	Soil
SE	=	Sediment
SO	=	Solid
SL	=	Sludge
W	=	Water
O	=	Oil
A	=	Air
DS	=	Drum Solids
DL	=	Drum Liquids
T	=	Tissue
WI	=	Wipe
L	=	Liquid
V	=	Vegetation
X	=	Other

LABORATORY SECTION — Received By: ____ Title: ____ Date/Time: ____

FINAL SAMPLE DISPOSITION — Disposal Method: ____ Disposed By: ____ Date/Time: ____

DISTRIBUTION: Original- Sample Yellow - Sampler

BC-6000-828 (12/92)

00013

Westinghouse Hanford Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page 1 of 1

Data Turnaround: [ ] Priorty [X] Normal

Collector	Company Contact: RC SMITH/MA FRANK	Telephone No.: 509-372-2537
Project Designation: 200-BP-5 TANK CHARACTERIZATION-UNIT 2	Sampling Location: 200 AREAS	SAF No.: B94-068
Ice Chest No.: GWS-141	Field Logbook No.	Method of Shipment: HAND DELIVER
Shipped To: QUANTERRA	Offsite Property No.	Bill of Lading/Air Bill No.: N/A
Possible Sample Hazards/Remarks		
Special Handling and/or Storage: COOL TO 4 DEGREES CENTIGRADE		

Preservative	HNO3 <2	COOL 4	H2SO4<2	HCl <2	COOL 4	see SI	COOL 4	HNO3 <2	HCl <2	COOL 4		HCl <2			
Type of Container	G	G	P/G	Gs	aG	P/G	P/G	P/G	P/G	G/P		Gs			
No. of Container(s)	1	1	1	2	2	1	1	7	3	1		3			
Volume	500ml	500ml	500ml	40ml	1000ml	500ml	500ml	1000ml	1000ml	20ml		40ml			
SAMPLE ANALYSIS 410569	CLP ICP METALS-TAL, AA METALS, Hg	ANIONS-IC(NI-TRATE), pH	NO2-NO3	CLP VOA-TCL	CLP SEMI-VOA-TCL	TOC	TDS	TOTAL ALPHA/BETA, Sr-90, GAMMA SPEC(Co-60)	Tc-99	ACTIVI-TY SCAN		CLP VOA			
	A	B	C	DE	FG	H	I	4105700	3			ABC			

Sample No.	Matrix*	Date Sampled	Time Sampled														
BOCY73 05	W	10-24-94	1705	Y	X	X	X	X	X	X	X	X	X				
BOCY74 6	W	10-24-94	1217											X			

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By	Date/Time	Received By	Date/Time
D. Ray Bowers	1801 10-24-94	Lauren E. Rogers	10-24-94 1807
Lauren E. Rogers	10-26-94 0930	[illegible]	0930 10-26-94
[illegible]	1130 10-27-94	[illegible]	1130 10/27/94

SPECIAL INSTRUCTIONS

THE PRESERVATIVE FOR TOC IS HCl or H2SO4 pH<2

DATA DELIVERABLE - SUMMARY

SDGW0279

Matrix*

S	=	Soil
SE	=	Sediment
SO	=	Solid
SL	=	Sludge
W	=	Water
O	=	Oil
A	=	Air
DS	=	Drum Solids
DL	=	Drum Liquids
T	=	Tissue
WI	=	Wipe
L	=	Liquid
V	=	Vegetation
X	=	Other

LABORATORY SECTION: Received By | Title | Date/Time

FINAL SAMPLE DISPOSITION: Disposal Method | Disposed By | Date/Time

DISTRIBUTION: Original- Sample Yellow - Sampler

BC-6000-828 (12/92)

00014

Westinghouse Hanford Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page 1 of 1

Data Turnaround: [ ] Priorty [X] Normal

Collector	
Company Contact	RC SMITH/MA FRANK
Telephone No.	509-372-2537
Project Designation	200-BP-5 TANK CHARACTERIZATION-UNIT 2
Sampling Location	200 AREAS
SAF No.	B94-068
Ice Chest No.	ER-26
Field Logbook No.	
Method of Shipment	HAND DELIVER
Shipped To	QUANTERRA
Offsite Property No.	
Bill of Lading/Air Bill No.	N/A
Possible Sample Hazards/Remarks	
Special Handling and/or Storage	COOL TO 4 DEGREES CENTIGRADE

Preservative	HNO3 <2	COOL 4	H2SO4<2	HCl <2	COOL 4	see SI	COOL 4	HNO3 <2	HCl <2	COOL 4		HCl <2			
Type of Container	G	G	P/G	Gs	gG	P/G	P/G	P/G	P/G	G/P		Gs			
No. of Container(s)	1	1	1	3	2	1	1	7	3	1		3			
Volume	500ml	500ml	500ml	40ml	1000ml	500ml	500ml	1000ml	1000ml	20ml		40ml			
SAMPLE ANALYSIS 410569	CLP ICP METALS-TAL, AA METALS, Hg	ANIONS-IC(NITRATE), pH	NO2-NO3	CLP VOA-TCL	CLP SEMI-VOA-TCL	TOC	TDS	TOTAL ALPHA/BETA, Sr-90, GAMMA SPEC(Co-60)	Tc-99	ACTIVITY SCAN 410570		CLP VOA			
	A	B	C	DEF	GH	I	J					ABC			

Sample No.	Matrix*	Date Sampled	Time Sampled															
BOCY75 07	W	10-24-94 ~~10-25-94~~	1735	X	X	X	X	X	X	X	X	X	X					
BOCY76 8	W	10-24-94	1221												X			

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By	Date/Time	Received By	Date/Time
Doug Downs	1807 10-24-94	Joyce E. Rogers	10-24-94 1807
Joyce E. Rogers	10-26-94 0930	B. Whitten	0930 10-26-94
B. Whitten	1130 10-27-94	Tom Quinlan	1100 pm 10/27/94 1130

SPECIAL INSTRUCTIONS

THE PRESERVATIVE FOR TOC IS HCl or H2SO4 pH<2

DATA DELIVERABLE - SUMMARY

SDG-W0279

Matrix*

S	=	Soil
SE	=	Sediment
SO	=	Solid
SL	=	Sludge
W	=	Water
O	=	Oil
A	=	Air
DS	=	Drum Solids
DL	=	Drum Liquids
T	=	Tissue
WI	=	Wipe
L	=	Liquid
V	=	Vegetation
X	=	Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

DISTRIBUTION: Original- Sample Yellow - Sampler

BC-6000-828 (12/92)

00015

Westinghouse Hanford Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page 1 of 1

Data Turnaround: [ ] Priority [X] Normal

Collector	Company Contact: RC SMITH/MA FRANK	Telephone No.: 509-372-2537
Project Designation: 200-BP-5 TANK CHARACTERIZATION-UNIT 2	Sampling Location: 200 AREAS	SAF No.: B96-068
Ice Chest No.: ER-26	Field Logbook No.	Method of Shipment: HAND DELIVER
Shipped To: QUANTERRA	Offsite Property No.	Bill of Lading/Air Bill No.: N/A
Possible Sample Hazards/Remarks		
Special Handling and/or Storage: COOL TO 4 DEGREES CENTIGRADE		

Preservative	H2SO4<2	see SI															
Type of Container	P/G	P/G															
No. of Container(s)	1	1															
Volume	500ml	500ml															
SAMPLE ANALYSIS	NO2-NO3	TOC															
410569	A	B															

Sample No.	Matrix*	Date Sampled	Time Sampled															
BOCY79 9	W	10-24-94	1722	X	X													

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By: Doug Downs	Date/Time: 1907 10-24-94	Received By: Robert E. Nagel LD	Date/Time: 10-24-94 1907
Relinquished By: Robert E. Nagel	Date/Time: 10-26-94 0930	Received By: [illegible] 0 Whitten 10 26 94	Date/Time: 0930
Relinquished By: [illegible] 0 Whitten 10-27-94	Date/Time: 1130	Received By: Tom [illegible]	Date/Time: 10/27/94 1130
Relinquished By	Date/Time	Received By	Date/Time

SPECIAL INSTRUCTIONS

THE PRESERVATIVE FOR TOC IS HCl or H2SO4 pH<2

DATA DELIVERABLE - SUMMARY

SDG W0279

Matrix*

- S = Soil
- SE = Sediment
- SO = Solid
- SL = Sludge
- W = Water
- O = Oil
- A = Air
- DS = Drum Solids
- DL = Drum Liquids
- T = Tissue
- WI = Wipe
- L = Liquid
- V = Vegetation
- X = Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

00016

102694A WQ2

TENNELEC #2

SCREENING CALCULATION SPREADSHEET

"No" = Cat. II, "Yes" = Cat. I.
JRM 27 Oct 94

Customer Code	Recieved Date		Screening Prep Date		Count Date	Mnts. Cntd	BACKGROUND Alpha	Beta	Mnts
WHC	10-27-94		10-27		10-2	10	20	202	240

Customer ID WHC	Sample Matrix Solid/Liquid	Residue Wght mg	Vol. Anal. mg ml	Sample Size Gm L	SMPLE CNT DATA Hldr Num.	Total Alpha	Counts Beta	Net Sample Counts/Minute Alpha	Beta	DPM / Aliquot Alpha	Beta	uCi per Sample Alpha	Beta	pCi / Gm or L Alpha	Beta	1-sigma error pCi/ Gm or L Alpha	Beta	Category 1 Yes/No	Aliquot to Cat 1 Gm or L Alpha	Beta
B0CY75	LIQUID	8.2	10.0	1.0	60	0	11	-0.08	0.20	-3.4E-01	8.04E-01	0.0E+00	2.7E-06	-1.5E+01	2.7E+01	39.10	33.34	Yes	-6.6E+02	3.7E+03
B0CY79	LIQUID	2.4	10.0	0.5	63	9	24	0.82	1.56	3.12E+00	2.78E+00	7.0E-05	6.3E-05	1.4E+02	1.3E+02	60.12	45.11	Yes	7.1E+01	8.0E+02
B0CY73	LIQUID	5.7	10.0	1.0	59	0	14	-0.08	0.56	-3.5E-01	1.24E+00	0.0E+00	5.6E-06	-1.6E+01	5.6E+01	38.99	37.18	Yes	-6.3E+02	1.8E+03
B0CY69	LIQUID	1.2	10.0	1.0	58	2	9	0.12	0.06	4.53E-01	4.78E-02	2.0E-05	2.2E-08	2.0E+01	2.2E+00	44.80	29.59	Yes	4.9E+02	4.6E+04
B0CY71	LIQUID	2.4	10.0	1.0	61	1	13	0.02	0.46	4.26E-02	9.84E-01	1.9E-08	4.3E-06	1.9E+00	4.3E+01	41.94	35.56	Yes	5.2E+03	2.3E+03
B0D552	SOLID	66.6	66.6	630.0	52	3	31	0.22	2.26	1.20E+00	5.07E+00	5.1E-03	2.2E-02	8.1E+00	3.4E+01	11.13	8.71	Yes	1.2E+03	2.9E+03
B0D546	SOLID	43.4	43.4	785.0	46	4	24	0.32	1.56	1.58E+00	3.26E+00	1.3E-02	2.7E-02	1.6E+01	3.4E+01	15.31	11.31	No	6.1E+02	3.0E+03
B0D553	SOLID	65.3	65.3	725.0	47	3	31	0.22	2.26	1.19E+00	5.06E+00	5.9E-03	2.5E-02	8.2E+00	3.5E+01	11.25	8.86	Yes	1.2E+03	2.9E+03
B0D548	SOLID	81.5	81.5	875.0	53	5	50	0.42	4.16	2.55E+00	9.51E+00	1.2E-02	4.6E-02	1.4E+01	5.3E+01	10.91	9.15	No	7.1E+02	1.9E+03
B0D4Q0	LIQUID	1.5	10.0	1.0	62	9	24	0.82	1.56	3.12E+00	2.78E+00	1.4E-04	1.3E-04	1.4E+02	1.3E+02	60.12	45.11	Yes	7.1E+01	8.0E+02

00017

TENNELEC #1

SCREENING CALCULATION SPREADSHEET

"No" = Cat. II, "Yes" = Cat. I.
JRM 27 Oct. 94

Customer Code	Recieved Date		Screening Prep Date		Count Date	Mnts. Cntd	BACKGROUND Alpha	Beta	Mnts
WHC	10-27-94		10-27		10-2	10	15	223	240

Customer ID WHC	Sample Matrix Solid/Liquid	Residue Wght mg	Vol. Anal. mg ml	Sample Size Gm L	SMPLE CNT DATA Hldr Num.	Total Counts Alpha	Beta	Net Sample Counts/Minute Alpha	Beta	DPM / Aliquot Alpha	Beta	uCi per Sample Alpha	Beta	pCi / Gm or L Alpha	Beta	1-sigma error pCi/ Gm or L Alpha	Beta	Category 1 Yes/No	Aliquot to Cat 1 Gm or L Alpha	Beta
B0D518	LIQUID	68.7	10.0	1.0	54	5	43	0.44	3.37	2.67E+00	7.83E+00	1.2E-04	3.5E-04	1.2E+02	3.5E+02	86.94	70.87	Yes	8.3E+01	2.8E+02
B0D516	LIQUID	82.9	10.0	1.0	55	6	43	0.54	3.37	3.82E+00	7.94E+00	1.6E-04	3.6E-04	1.6E+02	3.6E+02	101.10	72.15	Yes	6.1E+01	2.8E+02
B0D517	LIQUID	2.8	10.0	1.0	57	1	17	0.04	0.77	1.13E-01	1.63E+00	5.1E-06	7.3E-05	5.1E+00	7.3E+01	41.92	40.47	Yes	2.0E+03	1.4E+03
B0D554	SOLID	62.5	62.5	725.0	49	5	37	0.44	2.77	2.58E+00	6.32E+00	1.3E-02	3.3E-02	1.9E+01	4.6E+01	13.67	10.37	No	5.4E+02	2.2E+03
B0D555	SOLID	87.8	87.8	715.0	51	7	38	0.64	2.87	4.47E+00	6.70E+00	1.6E-02	2.5E-02	2.3E+01	3.4E+01	12.30	7.75	No	4.4E+02	2.9E+03
B0D556	SOLID	100.0	100.0	640.0	48	4	30	0.34	2.07	2.51E+00	5.01E+00	7.2E-03	1.4E-02	1.1E+01	2.3E+01	10.30	6.24	Yes	8.8E+02	4.4E+03
TOTAL	uCi											0.04	0.07							

00018

SAMPLE STATUS REPORT FOR N 3597. RAD SCREEN BOCY69 TIME: 10/27/94 10:13
DISPATCHED: 10/27/94 10: 9 SAMPLE HAS NOT BEEN SLURPED
RECEIVED: 10/27/94 10:10

EXT.	DETER.	RESULTS OR STATUS	OUT OF RANGE?	GOOD ANS?	CHARGE CODE
****	********	**********	***	***	******
4271	TOT-ACT	< 5.00000E 01 pCi/G	N	Y	P51HC

END OF REPORT

BOC469
BOC470
BW
10-27-94

SAMPLE STATUS REPORT FOR E 8473. E-BLANK BOCY71 TIME: 10/27/94 9:45
DISPATCHED: 9/ 1/94 13:23 SAMPLE HAS NOT BEEN SLURPED
RECEIVED: 10/26/94 18:45

EXT.	DETER.	RESULTS OR STATUS	OUT OF RANGE?	GOOD ANS?	CHARGE CODE
****	********	**********	***	***	******
2162	GEA-LIQ	INCOMPLETE			VOGEL
3421	Pu-LIQ	INCOMPLETE			VOGEL
3862	Sr-LIQ	INCOMPLETE			VOGEL
4271	TOT-ACT	< 5.00000E 01 pCi/G	N	Y	VOGEL

END OF REPORT

BOCY71
BOCY72

BW
10-27-94

SAMPLE STATUS REPORT FOR E 8475. E-BLANK BOCY73 TIME: 10/27/94 9:45
DISPATCHED: 9/ 1/94 13:24 SAMPLE HAS NOT BEEN SLURPED
RECEIVED: 10/26/94 18:45

EXT.	DETER.	RESULTS OR STATUS	OUT OF RANGE?	GOOD ANS?	CHARGE CODE
****	********	**********	***	***	******
2162	GEA-LIQ	INCOMPLETE			VOGEL
3421	Pu-LIQ	INCOMPLETE			VOGEL
3862	Sr-LIQ	INCOMPLETE			VOGEL
4271	TOT-ACT	< 5.00000E 01 pCi/G	N	Y	VOGEL

END OF REPORT

BOCY73
BOCY74
BW
10-27-94

SAMPLE STATUS REPORT FOR E 8477. E-BLANK BOCY75 TIME: 10/27/94 9:45
DISPATCHED: 9/ 1/94 13:25 SAMPLE HAS NOT BEEN SLURPED
RECEIVED: 10/26/94 18:46

EXT.	DETER.	RESULTS OR STATUS	OUT OF RANGE?	GOOD ANS?	CHARGE CODE
****	********	**********	***	***	******
2162	GEA-LIQ	INCOMPLETE			VOGEL
3421	Pu-LIQ	INCOMPLETE			VOGEL
3862	Sr-LIQ	INCOMPLETE			VOGEL
4271	TOT-ACT	< 5.00000E 01 pCi/G	N	Y	VOGEL

END OF REPORT

BOCY75
BOCY76
BW
10-27-94

SAMPLE STATUS REPORT FOR E 8477. E-BLANK BOCY75 TIME: 10/27/94 9:45
DISPATCHED: 9/ 1/94 13:25 SAMPLE HAS NOT BEEN SLURPED
RECEIVED: 10/26/94 18:46

EXT.	DETER.	RESULTS OR STATUS	OUT OF RANGE?	GOOD ANS?	CHARGE CODE
****	********	**********	***	***	******
2162	GEA-LIQ	INCOMPLETE			VOGEL
3421	Pu-LIQ	INCOMPLETE			VOGEL
3862	Sr-LIQ	INCOMPLETE			VOGEL
4271	TOT-ACT	< 5.00000E 01 pCi/G	N	Y	VOGEL

END OF REPORT

BOCY79
BW
10-27-94

Contractor	OFF-SITE PROPERTY CONTROL	CONTROL NO. (To be obtained from PROPERTY MANAGEMENT)
BHI		1195-0-0001-0

PART I - TO BE COMPLETED BY ORIGINATOR

Department	Section	Unit
ER Eng Support	Field & Analytical Supp	ER Field Sampling

The following items are to be shipped from ☒ Contractor ☐ Vendor

Routing ☐ Prepaid ☐ Collect

Shipped to Company Quanterra (IT) Address 2800 George Washington Way City Richland, WA 99352 State Zip Code Country	Off-site Custodian BEST COPY AVAILABLE On-site Custodian Payroll No.

Qty.	Property No.	Description (Include Manufacture Name, Model, Serial No.)	Acquisition Cost
1 lbs		Sample #: BOCY79 BOCY75 BOCY76 Cooler ID: ER-26 Polycooler with groundwater samples packed in wet ice and vermiculite	N/A
1 lbs		Sample #: BOCY73 BOCY74 Cooler ID: GWS-141 Polycooler with groundwater samples packed in wet ice and vermiculite	

☐ Classified ☒ Unclassified ☐ Shipped Under DOE Contract ☐ Shipped Under [illegible]

Necessity for the off-site use of this property

☐ Required for Project Work. List Project No. 200-BP-5 TANK CHARACTE[illegible]

☐ Business Trip

Bill of lading # N/A

☐ Off-site Assignment

☐ Shipment to Subcontractor. List Subcontract No. N/A

☐ Other (Please specify) Sampling supports RI/FS work in the 200 AREA

CERTIFICATION OF THE RADIATION MONITORING RELEASE MUST BE SECURED THE SAME DAY THAT MATERIAL IS DELIVERED TO SHIPPING.

RM Clearance for Public Release	RM Survey No.	Date
[illegible]	[illegible]-OFF-0170	10-27-94

Location of and Contact for Property (Name/Phone No./Bldg./Area)
P. H. Butcher/ (509) 376-4388

Date Ready for Shipment	Cost Code to be Charged	Approximate Shipping Date
10-27-94	ITE 2072 PSIHA	Priority will [illegible]

Originated By	Date	Authorized By	Date
B.T WHITTEN	10-27-94	[signature]	10-27-94
Property Representative Signature	**Date**	**Property Management Approval**	**Date**
		[signature]	10/27/94

PART II - TO BE COMPLETED BY SHIPPING

Authorized Shipping Signature	Date

DISTRIBUTION (AFTER FINAL SIGNATURES)

White - Property Management Yellow - Shipping Green - Accounts Payable Pink - Originator Goldenrod - Property Management

*U.S. GPO: 1994-582-170/00029

Received [signature] 10/27/94 1130

00024

54-3000-479 (01/94)

Contractor	OFF-SITE PROPERTY CONTROL	CONTROL NO. (To be obtained from PROPERTY MANAGEMENT)
BHI		W95-0-0001-39

PART I - TO BE COMPLETED BY ORIGINATOR

Department	Section	Unit
ER Eng Support	Field & Analytical Supp	ER Field Sampling

The following items are to be shipped from ☒ Contractor ☐ Vendor

Routing ☐ Prepaid ☐ Collect

Shipped to
Company Quanterra (IT)
Address 2800 George Washington Way
City Richland, WA 99352 State Zip Code
Country

Off-site Custodian

On-site Custodian Payroll No.

Qty.	Property No.	Description (Include Manufacture Name, Model, Serial No.)	Acquisition Cost
1 lbs		Sample #: B0D516 B0D517 Cooler ID: GWS-013 Polycooler with groundwater samples packed in wet ice and vermiculite	N/A
1 lbs.		Sample #: B0CY71 B0CY72 Cooler ID: ER-8 Polycooler with groundwater samples packed in wet ice and vermiculite	[illegible]

☐ Classified ☒ Unclassified ☐ Shipped Under DOE Contract ☐ Shipped Under Contractor's [illegible]

Necessity for the off-site use of this property

☒ Required for Project Work. List Project No. 200-BP-5

☐ Business Trip

☐ Off-site Assignment

Bill of lading # N/A

☐ Shipment to Subcontractor. List Subcontract No. N/A

☐ Other (Please specify) Sampling supports RI/FS work in the 200-UR-1

BEST COPY AVAILABLE

CERTIFICATION OF THE RADIATION MONITORING RELEASE MUST BE SECURED THE SAME DAY THAT MATERIAL IS DELIVERED TO SHIPPING.

RM Clearance for Public Release	RM Survey No.	Date
[illegible]	[illegible]	10-27-94

Location of and Contact for Property (Name/Phone No./Bldg./Area)
P. H. Butcher/(509)376-4388

Date Ready for Shipment	Cost Code to be Charged	Approximate Date This Property will be Returned
10-27-94	ITE2072/ PL531	

Originated By	Date	Authorized By	Date
B.T. WHITEN	10-27-94	[signature]	10-27-94
Property Representative Signature	**Date**	**Property Management Approval**	**Date**
		[signature]	10/27/94

PART II - TO BE COMPLETED BY SHIPPING

Authorized Shipping Signature	Date

DISTRIBUTION (AFTER FINAL SIGNATURES)

White - Property Management Yellow - Shipping Green - Accounts Payable Pink - Originator Goldenrod - Property Management

*U.S. GPO: 1994-592-170/00029

Received [signature] [signature] 10/27/94 1130

54-3000-478 (01/94)

Contractor BHI	OFF-SITE PROPERTY CONTROL	CONTROL NO. (To be obtained from PROPERTY MANAGEMENT) W95-O-0001-41

PART I - TO BE COMPLETED BY ORIGINATOR

Department	Section	Unit
ER Eng Support	Field & Analytical Supp	ER Field Sampling

The following items are to be shipped from ☐ Contractor ☐ Vendor

Routing ☐ Prepaid ☐ Collect

Shipped to / Company / Address / City / Country: Quanterra (IT), 2800 George Washington Way, Richland, WA 99352 — State — Zip Code

Off-site Custodian

On-site Custodian — Payroll No.

Qty.	Property No.	Description (Include Manufacture Name, Model, Serial No.)	Acquisition Cost
1 lbs		Sample #: BOCY69 BOCY70 Cooler ID: ER-1B Polycooler with groundwater samples packed in wet ice and vermiculite	N/A
1 lbs		~~Sample #:~~ Cooler ID: Polycooler with groundwater ~~samples~~ packed in wet ice and vermiculite	

☐ Classified ☐ Unclassified ☐ Shipped Under DOE Contract ☐ Shipped Under Contractor's Use

Necessity for the off-site use of this property

☐ Required for Project Work. List Project No. 200-BP-5 TANK CHARACTERIZATION

☐ Business Trip

Bill of lading # N/A

☐ Off-site Assignment

☐ Shipment to Subcontractor. List Subcontract No. N/A

☐ Other (Please specify) Sampling supports RI/FS work in the 200-AREA

BEST COPY AVAILABLE

CERTIFICATION OF THE RADIATION MONITORING RELEASE MUST BE SECURED THE SAME DAY THAT MATERIAL IS DELIVERED TO SHIPPING.

RM Clearance for Public Release	RM Survey No.	Date
N/A	N/A	10-27-94

Location of and Contact for Property (Name/Phone No./Bldg./Area)
P. M. Butcher/ (509) 376-4388

Date Ready for Shipment	Cost Code to be Charged	Approximate Date This Property will be Returned
10-27-94	ITE 207 P51HA	

Originated By	Date	Authorized By	Date
K.T. WHITTEN	10-27-94	Kit Whitten	10-27-94
Property Representative Signature	**Date**	**Property Management Approval**	**Date**
		Fankel	10/27/94

PART II - TO BE COMPLETED BY SHIPPING

Authorized Shipping Signature	Date

DISTRIBUTION (AFTER FINAL SIGNATURES)

White - Property Management Yellow - Shipping Green - Accounts Payable Pink - Originator Goldenrod - Property Management

U.S. GPO: 1994-592-170/00028 54-3000-479 (01/94)

Received [illegible] 10/27/94 1130

00026

SAMPLE RECEIPT VARIANCE REPORT
ITAS-RICHLAND LABORATORY

WORK ORDER NUMBER: 41056909 DATE INITIATED: 10/27/94

INITIATED BY: TGilmore

DATE/TIME OF SAMPLE (AND/OR RFA & COC) RECEIPT: 10/27/94 1130

CLIENT SAMPLE NUMBER	RFA/COC NUMBERS	ANALYSIS REQUESTED
B0CY79		NO2/3 TOC

Samples were received with the following deficiencies:

- ☐ 1. Not enough sample received for proper analysis.
- ☐ 2. Sample received without proper preservative.
- ☐ 3. No sample received in container.
- ☐ 4. Sample received without a RFA/COC form.
- ☐ 5. No sample ID on container.
- ☐ 6. Sample received broken or leaking.
- ☐ 7. Holding time exceeded at receipt.
- ☐ 8. Custody tape broken.
- ☐ 9. COC not relinquished by client.
- ☐ 10. Sample information on container does not match sample information on the paper work (Explain below).
- ☐ 11. All shipping containers (coolers) on waybill not received with shipment.
  - ☐ RFA/COC received
  - ☐ RFA/COC not received
- ☐ 12. Other (Explain below).

NOTES: No Screen aliquot supplied - aliquot for NO2/3 was used for Screening

SUPERVISOR REVIEW: _____

PROJECT MANAGER REVIEW: _____

TELEPHONED TO: _____ ON _____ BY _____

TELEFAXED TO: _____ ON _____ BY _____

SIGNED ORIGINAL MUST BE RETAINED IN WORK ORDER FILE

FORM NO. LS-023, 3/92, Rev. 0

INTERNATIONAL TECHNOLOGY CORPORATION

Regional Office
2800 George Washington Way
Richland, Washington 99352

SAMPLE CHECK-IN LIST

(1 Per Shipping Container)

Date/Time Received 10/27/94 1130 Client Name BHI

Project/Client # 894-068 Batch or Case # _____

Cooler ID (if noted on the outside of cooler) ER26

1. Condition of shipping container? OK
2. Custody Seals on cooler intact? Yes ☑ No ☐
3. Custody Seals dated and signed? Yes ☑ No ☐
4. Chain of Custody record is taped on inside of cooler lid? Yes ☐ No ☑
5. Vermiculite/packing material is: Wet ☐ Dry ☑
6. Each sample is in a plastic bag? Yes ☐ No ☑
7. Number of sample containers in cooler: 26
8. Samples have: ____ tape ____ hazard labels
   ✓ custody seals ✓ appropriate sample labels
9. Samples are: ✓ in good condition ____ leaking
   ____ broken ____ have air bubbles
   ____ other
10. Coolant present? Yes ☑ No ☐

Sample temperature 4°C

11. The following paperwork should be accounted for (N/A if not applicable): N/A
    Chain of Custody #'(s) /
    Request for analysis #(s) _____
    Airbill # _____ Carrier _____
12. Have any anomalies been identified above? Yes ☐ No ☑
13. Memos have been initiated for all anomalies identified above? Yes ☐

Printed Name/Signature Tom Gilmore [signature] Date/Time 10/27/94 1130

FORM NO. LS-042, Rev.0, 2/94

INTERNATIONAL TECHNOLOGY CORPORATION

Regional Office
2800 George Washington Way
Richland, Washington 99352

SAMPLE CHECK-IN LIST

(1 Per Shipping Container)

Date/Time Received 10/27/94 1130 Client Name BHI

Project/Client # 894-068 Batch or Case # _____

Cooler ID (if noted on the outside of cooler) ER 1B

1. Condition of shipping container? ok
2. Custody Seals on cooler intact? Yes ☑ No ☐
3. Custody Seals dated and signed? Yes ☑ No ☐
4. Chain of Custody record is taped on inside of cooler lid? Yes ☐ No ☑
5. Vermiculite/packing material is: Wet ☐ Dry ☑
6. Each sample is in a plastic bag? Yes ☐ No ☑
7. Number of sample containers in cooler: 24
8. Samples have: ____ tape ____ hazard labels
   ✓ custody seals ✓ appropriate sample labels
9. Samples are: ✓ in good condition ____ leaking
   ____ broken ____ have air bubbles
   ____ other
10. Coolant present? Yes ☑ No ☐

Sample temperature 3°C

11. The following paperwork should be accounted for (N/A if not applicable): N A
    Chain of Custody #'(s) _____
    Request for analysis #(s) _____
    Airbill # _____ Carrier _____
12. Have any anomalies been identified above? Yes ☐ No ☑
13. Memos have been initiated for all anomalies identified above? Yes ☐

Printed Name/Signature Tom Gilmore [signature] Date/Time 10/27/94 1130

FORM NO. LS-042, Rev.0, 2/94

INTERNATIONAL TECHNOLOGY CORPORATION

Regional Office
2800 George Washington Way
Richland, Washington 99352

SAMPLE CHECK-IN LIST

(1 Per Shipping Container)

Date/Time Received 10-27-94 11:30 Client Name WHC

Project/Client # B94-068 Batch or Case # _____

Cooler ID (if noted on the outside of cooler) GWS 141

1. Condition of shipping container? O.K.
2. Custody Seals on cooler intact? Yes ☒ No ☐
3. Custody Seals dated and signed? Yes ☒ No ☐ ~~[illegible]~~ 10-27-94
4. Chain of Custody record is taped on inside of cooler lid? Yes ☐ No ☒
5. Vermiculite/packing material is: Wet ☐ Dry ☒
6. Each sample is in a plastic bag? Yes ☒ No ☐
7. Number of sample containers in cooler: 24
8. Samples have: X tape ____ hazard labels
   X custody seals ____ appropriate sample labels
9. Samples are: X in good condition ____ leaking
   ____ broken ____ have air bubbles
   ____ other
10. Coolant present? Yes ☒ No ☐

Sample temperature 40

11. The following paperwork should be accounted for (N/A if not applicable): N/A
    Chain of Custody #'(s) _____
    Request for analysis #(s) _____
    Airbill # _____ Carrier _____
12. Have any anomalies been identified above? Yes ☐ No ☒
13. Memos have been initiated for all anomalies identified above? Yes ☐

Printed Name/Signature Tom Gilmore [signature] Date/Time 10/27/94 1130

FORM NO. LS-042, Rev.0, 2/94

INTERNATIONAL TECHNOLOGY CORPORATION

Regional Office
2800 George Washington Way
Richland, Washington 99352

SAMPLE CHECK-IN LIST

(1 Per Shipping Container)

Date/Time Received 10/27/94 1130 Client Name BHI

Project/Client # 894-068 Batch or Case # _____

Cooler ID (if noted on the outside of cooler) ER-8

1. Condition of shipping container? ok
2. Custody Seals on cooler intact? Yes ☑ No ☐
3. Custody Seals dated and signed? Yes ☑ No ☐
4. Chain of Custody record is taped on inside of cooler lid? Yes ☐ No ☑
5. Vermiculite/packing material is: Wet ☐ Dry ☑
6. Each sample is in a plastic bag? Yes ☐ No ☑
7. Number of sample containers in cooler: 25
8. Samples have: ____ tape ____ hazard labels
   ✓ custody seals ✓ appropriate sample labels
9. Samples are: ✓ in good condition ____ leaking
   ____ broken ____ have air bubbles
   ____ other
10. Coolant present? Yes ☑ No ☐

Sample temperature 4°C

11. The following paperwork should be accounted for (N/A if not applicable): N/A
    Chain of Custody #'(s) _____
    Request for analysis #(s) _____
    Airbill # _____ Carrier _____
12. Have any anomalies been identified above? Yes ☐ No ☑
13. Memos have been initiated for all anomalies identified above? Yes ☐

Printed Name/Signature Tom Gilmore Tom G Date/Time 10/27/94 1130

FORM NO. LS-042, Rev.0, 2/94

Quanterra Environmental Services

C.U.R. and C.O.C.
COPIED TO: [illegible]
DATE: 10 28 94
TIME: 11:15
BY: Bob Cauvert

Work Order No.: 6671

Condition Upon Receipt Variance Report
St. Louis Laboratory

Client: Richland

Date: 10-28-94 0900

Project No: 550.27

Initiated by: Bob Cauvert

Analysis Requested: Refer to RFA/COC

RFA/COC Numbers: 453920

Client Sample Numbers Affected: Entire Login

Condition/Variance (Check all that apply): Circle Number to Denote that Item was Evaluated. "NA" = "Not Applicable".

1. NA Not enough sample received for proper analysis.
   Received approximately: _____
2. ☐ Sample received broken/leaking.
3. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4°C ± 2°C
     Record temperature: 4°C + 5°C of H2O T
   - ☐ pH 6-A = No H2O Blank in cooler
   - ☐ other: _____
4. ☐ Sample received in improper container.
5. ☑ Sample received without proper paperwork. Explain: Rec'd 2-40mL vials not on COC or labels
6. ☐ Paperwork received without sample.
7. ☐ No sample ID on sample container.
8. ☑ Custody tape disturbed/broken/missing. Sample BOCY79 - for NO2 didn't have seal on Cont.
9. NA Sample splits performed by lab.
10. NA Volatile sample received with approximately _____ mm headspace.
11. ☑ Sample ID on container does not match sample ID on paperwork. Explain: Sample BOCY75 - 2-40mL vials didn't have time on Cont. label
12. ☐ All coolers on airbill not received with shipment.
13. ☐ Other (explain below):
    Shipping containers not rad surveyed.

Notes:

Corrective Action:

☐ Client's Name: _____ Informed verbally on: _____ By: _____

☐ Client's Name: _____ Informed in writing on: _____ By: _____

☐ Sample(s) processed "as is". Comments: _____

☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor Review: (or designate) _____ Date: _____

Project Management Review: _____ Date: _____

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

W0279

Quanterra Environmental Services

Quanterra Incorporated
2800 George Washington Way
Richland, Washington 99352

509 375-3131 Telephone
509 375-5590 Fax

CERTIFICATE OF ANALYSIS

Bechtel Hanford, Inc.
345 Hills
Richland, WA 99352

December 12, 1994

Attention: Joan Kessner

DEC 1994
RECEIVED
Data
Log In

SAF Number	:	B94-068
Date SDG Closed	:	October 27, 1994
Number of Samples	:	Four (4)
Sample Type	:	Water
SDG Number	:	W0279
Data Deliverable	:	Summary

RECORD COPY

I. Introduction

On October 27, 1994, four water samples were received by the Quanterra Environmental Services Richland Laboratory (QTESRL) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Bechtel Hanford, Inc. (BHI) specific IDs:

QTESRL ID	BHI ID	Matrix	Date of Receipt
41057001	B0CY69	Water	10/27/94
41057002	B0CY71	Water	10/27/94
41057003	B0CY73	Water	10/27/94
41057004	B0CY75	Water	10/27/94

II. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gamma Spectroscopy
Gamma Scan by method ITAS-RD-3219
Gas Proportional Counting
Gross Alpha by method ITAS-RD-3222
Gross Beta by method ITAS-RD-3222
Strontium-90 by method ITAS-RD-3204
Liquid Scintillation Counting
Technetium-99 by method ITAS-IT-RS-0001

III. Quality Control

The analytical results for each analysis performed under SDG W0279 include a minimum of one Laboratory Control Sample (LCS), one method (reagent) blank, and one duplicate. Any exceptions have been noted in the "Comments" section.

Quality control sample results are reported in the same units as sample results.

IV. Comments

Results from the initial radioactivity screening of these samples classified them as Category I.

Gamma Spectroscopy

Gamma Scan by method ITAS-RD-3219
Pb-212 is detected but not reported in the batch blank. The Pb-212 activity that was measured in the blank is a false positive result that is believed to have been caused by background variation. The LCS, batch blank, sample and sample duplicate (duplicate of sample B0CY69) results are within contractual limits.

Gas Proportional Counting

Gross Alpha by method ITAS-RD-3222
The LCS, batch blank, sample and sample duplicate (duplicate of sample B0CY75) results are within contractual limits.

Gross Beta by method ITAS-RD-3222
The LCS, batch blank, sample and sample duplicate (duplicate of sample B0CY75) results are within contractual limits.

Strontium-90 by method ITAS-RD-3204
The LCS, batch blank, sample and sample duplicate (duplicate of sample B0CY75) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by method ITAS-IT-RS-0001
The matrix spike, LCS, batch blank, sample and sample duplicate (duplicate of sample B0CY75) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Reviewed and approved:

Suzanne Gaines

Suzanne Gaines
Project Manager

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Quanterra
Environmental Services

SAMPLE RESULTS

LAB NAME:	ITAS-RICHLAND	**SDG:**	W0279
LAB SAMPLE ID:	41057001	**MATRIX:**	WATER
CLIENT ID:	B0CY69	**DATE RECEIVED:**	10/27/94

ISOTOPE	RESULT	COUNTING ERROR (2s)	TOTAL ERROR (2s)	MDA	REPORT UNIT	YIELD	METHOD NUMBER
CO-58	-2.44E+00	4.9E+00	4.9E+00	7.99E+00	pCi/L	N/A	RD3219
CO-60	4.59E+00	3.1E+00	3.1E+00	8.50E+00	pCi/L	N/A	RD3219
CS-137DA	2.60E+00	4.0E+00	4.0E+00	8.08E+00	pCi/L	N/A	RD3219
EU-152	1.73E+01	9.2E+00	9.3E+00	2.00E+01	pCi/L	N/A	RD3219
EU-154	-1.22E+01	1.6E+01	1.6E+01	2.56E+01	pCi/L	N/A	RD3219
EU-155	-9.56E+00	9.4E+00	9.4E+00	1.47E+01	pCi/L	N/A	RD3219
FE-59	3.22E+00	9.5E+00	9.5E+00	1.91E+01	pCi/L	N/A	RD3219
ALPHA	4.01E-01	5.6E-01	5.6E-01	1.05E+00	pCi/L	100.00%	RD3214
BETA	9.99E-01	1.3E+00	1.3E+00	2.79E+00	pCi/L	100.00%	RD3214
STRONTIUM	2.11E-01	1.8E-01	1.9E-01	5.33E-01	pCi/L	94.00%	RD3204
TC-99	1.38E+00	9.8E-01	4.3E+00	2.15E+00	pCi/L	95.10%	ITAS-IT-RS-0001

Number of Results: 11

Quanterra
Environmental Services

SAMPLE RESULTS

LAB NAME:	ITAS-RICHLAND	SDG:	W0279
LAB SAMPLE ID:	41057002	MATRIX:	WATER
CLIENT ID:	B0CY71	DATE RECEIVED:	10/27/94

ISOTOPE	RESULT	COUNTING ERROR (2s)	TOTAL ERROR (2s)	MDA	REPORT UNIT	YIELD	METHOD NUMBER
CO-58	2.44E+00	3.9E+00	3.9E+00	8.20E+00	pCi/L	N/A	RD3219
CO-60	-2.55E-01	5.1E+00	5.1E+00	9.60E+00	pCi/L	N/A	RD3219
CS-137DA	-1.06E+00	4.4E+00	4.4E+00	7.73E+00	pCi/L	N/A	RD3219
EU-152	-1.19E+01	1.0E+01	1.0E+01	1.58E+01	pCi/L	N/A	RD3219
EU-154	1.08E+01	1.1E+01	1.1E+01	2.60E+01	pCi/L	N/A	RD3219
EU-155	0.00E+00	7.1E+00	7.1E+00	1.28E+01	pCi/L	N/A	RD3219
FE-59	6.61E+00	7.1E+00	7.1E+00	1.67E+01	pCi/L	N/A	RD3219
ALPHA	-2.09E-01	1.1E-01	1.1E-01	1.12E+00	pCi/L	100.00%	RD3214
BETA	2.14E+00	1.4E+00	1.5E+00	2.84E+00	pCi/L	100.00%	RD3214
STRONTIUM	2.64E-01	1.9E-01	2.0E-01	5.42E-01	pCi/L	89.50%	RD3204
TC-99	-1.43E+00	9.3E-01	4.1E+00	2.15E+00	pCi/L	95.10%	ITAS-IT-RS-0001

Number of Results: 11

Quanterra
Environmental Services

SAMPLE RESULTS

LAB NAME:	ITAS-RICHLAND	**SDG:**	W0279
LAB SAMPLE ID:	41057003	**MATRIX:**	WATER
CLIENT ID:	B0CY73	**DATE RECEIVED:**	10/27/94

ISOTOPE	RESULT	COUNTING ERROR (2s)	TOTAL ERROR (2s)	MDA	REPORT UNIT	YIELD	METHOD NUMBER
CO-58	3.25E+00	4.5E+00	4.5E+00	9.32E+00	pCi/L	N/A	RD3219
CO-60	-1.77E+00	5.9E+00	5.9E+00	1.06E+01	pCi/L	N/A	RD3219
CS-137DA	-1.23E+01	5.5E+00	5.6E+00	5.78E+00	pCi/L	N/A	RD3219
EU-152	-2.39E+00	1.1E+01	1.1E+01	1.90E+01	pCi/L	N/A	RD3219
EU-154	2.40E+00	9.3E+00	9.3E+00	2.10E+01	pCi/L	N/A	RD3219
EU-155	5.44E-01	9.3E+00	9.3E+00	1.68E+01	pCi/L	N/A	RD3219
FE-59	-6.37E+00	1.0E+01	1.0E+01	1.44E+01	pCi/L	N/A	RD3219
ALPHA	4.22E-01	7.2E-01	7.2E-01	1.51E+00	pCi/L	100.00%	RD3214
BETA	7.86E+00	1.9E+00	2.0E+00	2.94E+00	pCi/L	100.00%	RD3214
STRONTIUM	8.62E-01	2.4E-01	3.2E-01	5.54E-01	pCi/L	86.20%	RD3204
TC-99	6.77E+00	1.1E+00	4.8E+00	2.15E+00	pCi/L	95.10%	ITAS-IT-RS-0001

Number of Results: 11

Quanterra
Environmental Services

SAMPLE RESULTS

LAB NAME:	ITAS-RICHLAND	SDG:	W0279
LAB SAMPLE ID:	41057004	MATRIX:	WATER
CLIENT ID:	B0CY75	DATE RECEIVED:	10/27/94

ISOTOPE	RESULT	COUNTING ERROR (2s)	TOTAL ERROR (2s)	MDA	REPORT UNIT	YIELD	METHOD NUMBER
CO-58	7.30E-01	2.3E+00	2.3E+00	5.22E+00	pCi/L	N/A	RD3219
CO-60	0.00E+00	4.1E+00	4.1E+00	8.25E+00	pCi/L	N/A	RD3219
CS-137DA	9.18E-01	3.5E+00	3.5E+00	6.88E+00	pCi/L	N/A	RD3219
EU-152	-6.06E+00	1.0E+01	1.0E+01	1.68E+01	pCi/L	N/A	RD3219
EU-154	8.92E+00	7.3E+00	7.3E+00	2.10E+01	pCi/L	N/A	RD3219
EU-155	-1.66E+00	7.1E+00	7.1E+00	1.16E+01	pCi/L	N/A	RD3219
FE-59	6.41E+00	1.0E+01	1.0E+01	2.08E+01	pCi/L	N/A	RD3219
ALPHA	-1.95E-02	5.8E-01	5.8E-01	1.85E+00	pCi/L	100.00%	RD3214
BETA	4.75E+00	1.7E+00	1.7E+00	2.97E+00	pCi/L	100.00%	RD3214
STRONTIUM	2.02E-01	2.0E-01	2.1E-01	5.98E-01	pCi/L	87.50%	RD3204
TC-99	-1.81E+00	9.3E-01	4.1E+00	2.15E+00	pCi/L	95.10%	ITAS-IT-RS-0001

Number of Results: 11

INTERNATIONAL TECHNOLOGY CORPORATION

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LOG #: RD-94-_____ page 1 of 2

ITAS-Richland
LABORATORY NONCONFORMANCE MEMO (NCM)

PROJECT ID (Name/Number): BHI W029

NCM INITIATED BY (Name/Date): Joel T Kampman 11-8-94

PARAMETER(S): Gamma

SAMPLE NUMBER(S) AFFECTED: L1057015, F1057001, L1057018, 41057004

MATRIX: Water

AREA: ☐ SHIP/REC ☒ RADIOCHEM ☐ COUNTING ☐ BIOASSAY ☐ DATA VERIF ☐ REPORTING ☐ OTHER:

NONCONFORMANCE [check appropriate item(s)]:

1. ☐ Not enough sample received for proper analysis.
2. ☐ Holding time exceeded by _____ days due to:
   - 2.1 ☐ CATEGORY I: Out of Laboratory Control
     - ☐ Holding time expired at receipt
   - 2.2 ☐ CATEGORY II: Laboratory Dependent
     - ☐ work backlog ☐ instrument failure
     - ☐ communication ☐ other (see #10)
   - 2.3 ☐ CATEGORY III: Laboratory Reruns
     - 2.3.1 ☐ *QA/QC:*
       - ☐ surrogates ☐ internal standards
       - ☐ spike recoveries ☐ blank contamination
     - 2.3.2 ☐ *CONFIRMATION:*
       - ☐ second column ☐ contamination check
       - ☐ other (see #10)
     - 2.3.3 ☐ *DILUTION:*
       - ☐ over calibration ☐ under calibration
       - ☐ other (see #10)
     - 2.3.4 ☐ *OTHER: (see #10)*
3. ☐ Sample lost during extraction/analysis, no re-prep or re-analysis possible
4. ☐ QC data reported to client outside of
   - ☐ method limits ☐ internal limits
   - ☐ QAPP limits ☐ contract limits
   - ☐ regulatory limits ☐ blank criteria
5. ☐ Incorrect procedure(s) used. (See #10)
6. ☐ Invalid instrument calibration (See #10)
7. ☐ Incorrect/incomplete data reported to client (See #10)
8. ☐ Reported detection limit(s) higher than
   - ☐ method limits ☐ QAPP limits
   - ☐ contract limits ☐ other (see #10)

   Due to
   - ☐ sample matrix ☐ insufficient sample
   - ☐ instrumentation ☐ other (see #10)
9. ☒ Other (specify): 1S - Co 57 "detected" peak line not found - not reported.
   F1057001 - Eu 154 agreement at 4.1 or more
   1B - Pb212 marked detected - not reported
10. ☒ Comments/Explanation: 41057004 - Pb212 & Ra224 DA

NOTIFICATION [check appropriate item(s)]:

1. ☐ Client notified by (name and date) _____
   - ☐ in writing ☐ by FAX
   - ☐ by phone ☐ Other (explain)
2. ☐ Client's name _____ and response
   - ☐ process "as is" ☐ resample
   - ☐ on hold til ____ ☐ Other (explain)

PROJECT MANAGER (signature & date): Suzy Davies 11/8/94

FURTHER ACTION REQUIRED, SEE PAGE 2 OF 2

1267

IT CORPORATION

LOG #: RD-94-_____ page 2 of 2

CORRECTIVE ACTION

☒ ROOT CAUSE: INITIALS/DATE ATK 11-8-94

15-Co57 - interference of Eu152 at 122KEV Oldup - nothing detected in sample result calculated from background Sunset

1B - Pb212 - probably background variation - not reportable isotope

C4 - low concentration of analyte error > result

☒ CORRECTIVE ACTION: INITIALS/DATE ATK 11-8-94

Data accepted - note in case narrative

☐ RESPONSIBILITY FOR PERFORMING CORRECTIVE ACTION ASSIGNED TO:

☐ ACTIONS TO PREVENT RECURRENCE: INITIALS/DATE _____

FIRST LEVEL SUPERVISOR: [signature] DATE: 11-8-94

RESPONSIBLE MANAGER: [signature] DATE: 11/15/94

QC REVIEW

☐ NONCONFORMANCE ☒ DEFICIENCY ☐ RERUN

☐ FURTHER ACTION REQUIRED

ASSIGNED TO

QC COORDINATOR: C Black DATE: 11-15-94

CORRECTIVE ACTION VERIFICATION

☒ VERIFIED ☐ CANNOT VERIFY (specify reason)

REASON

NCM CLOSURE

QC COORDINATOR: C Black DATE: 11-15-94

SIGNED ORIGINAL MUST BE RETAINED IN FILE: ☐ QUALITY/OPERATIONS FILE ☒ PROJECT FILE

Westinghouse Hanford Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page 1 of 1

Date Turnaround: ☐ Priorty ☒ Normal

Collector	Company Contact: RC SMITH/MA FRANK	Telephone No.: 509-372-2537
Project Designation: 200-BP-5 TANK CHARACTERIZATION-UNIT 2	Sampling Location: 200 AREAS	SAF No.: B94-068
Ice Chest No.: ER-1B	Field Logbook No.	Method of Shipment: HAND DELIVER
Shipped To: QUANTERRA	Offsite Property No.: W95-0-000-41	Bill of Lading/Air Bill No.: N/A NA
Possible Sample Hazards/Remarks		
Special Handling and/or Storage: COOL TO 4 DEGREES CENTIGRADE		

Preservative	HNO3 <2	COOL 4	H2SO4<2	HCl <2	COOL 4	see SI	COOL 4	HNO3 <2	HCl <2	COOL 4		HCl <2			
Type of Container	G	G	P/G	Gs	aG	P/G	P/G	P/G	P/G	G/P		Gs			
No. of Container(s)	1	1	1	3	2	1	1	7	3	1		3			
Volume	500ml	500ml	500ml	40ml	1000ml	500ml	500ml	1000ml	1000ml	20ml		40ml			
SAMPLE ANALYSIS 410569	CLP ICP METALS-TAL, AA METALS, Hg	ANIONS-IC(NITRATE), pH	NO2-NO3	CLP VOA-TCL	CLP SEMI-VOA-TCL	TOC	TDS	TOTAL ALPHA/BETA, Sr-90, GAMMA SPEC(Co-60)	Tc-99	ACTIVITY SCAN 410570021 @ 10/27/94		CLP VOA			
	A	B	C	DEF	GH	I	J					ABC			

Sample No.	Matrix*	Date Sampled	Time Sampled															
B0CY69 01	W	10-24-94	1548	X	X	X	X	X	X	X	X	X	X					
B0CY70 2	W	10-24-94	1213												X			

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By	Date/Time	Received By	Date/Time
Doug Bowers	1807 10-24-94	Joseph E. Hagels	10-24-94 1807
Joseph E. Hagels	10-26-94 0930	Kim Whitten	0930 Kwhitten 10-26-94
Kim Whitten	1130 Kwhitten 10-27-94	Kwoodson	10/27/44 1130

SPECIAL INSTRUCTIONS

THE PRESERVATIVE FOR TOC IS HCl or H2SO4 pH<2

DATA DELIVERABLE - SUMMARY

SDG W0279

Matrix*

- S = Soil
- SE = Sediment
- SO = Solid
- SL = Sludge
- W = Water
- O = Oil
- A = Air
- DS = Drum Solids
- DL = Drum Liquids
- T = Tissue
- WI = Wipe
- L = Liquid
- V = Vegetation
- X = Other

LABORATORY SECTION — Received By | Title | Date/Time

FINAL SAMPLE DISPOSITION — Disposal Method | Disposed By | Date/Time

DISTRIBUTION: Original- Sample Yellow - Sampler

BC-6000-828 (12/92)

Westinghouse Hanford Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page 1 of 1

Date Turnaround: [ ] Priorty [X] Normal

Collector	Company Contact: RC SMITH/MA FRANK	Telephone No.: 509-372-2537
Project Designation: 200-BP-5 TANK CHARACTERIZATION-UNIT 2	Sampling Location: 200 AREAS	SAF No.: B94-068
Ice Chest No.: ER-8	Field Logbook No.	Method of Shipment: HAND DELIVER
Shipped To: QUANTERRA	Offsite Property No.: W95-0-0001-39	Bill of Lading/Air Bill No.: N/A N/A
Possible Sample Hazards/Remarks		

Preservative	HNO3 <2	COOL 4	H2SO4<2	HCl <2	COOL 4	see SI	COOL 4	HNO3 <2	HCl <2	COOL 4	cool 4	HCl <2			
Type of Container	G	G	P/G	Gs	aG	P/G	P/G	P/G	P/G	G/P	aG	Gs			
No. of Container(s)	1	1	1	3	12	1	1	7	3	1	2	3			
Volume	500ml	500ml	500ml	40ml	1000ml	500ml	500ml	1000ml	1000ml	20ml	500ml	40ml			
SAMPLE ANALYSIS 410569	CLP ICP METALS-TAL, AA METALS, Hg	ANIONS-IC(NITRATE), pH	NO2-NO3	CLP VOA-TCL	CLP SEMI-VOA-TCL	TOC	TDS	TOTAL ALPHA/BETA, Sr-90, GAMMA SPEC(Co-60)	Tc-99	ACTIVITY SCAN	CLP Semi-VOA-TCL	CLP VOA			
	A	B	C	DEF	G	H	I			J		ABC			

Sample No.	Matrix*	Date Sampled	Time Sampled															
BOCY71 03	W	10-24-94	1610	X	X	X	X	X	X	X	X	X	X	X				
BOCY72 4	W	10-24-94	1215												X			

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By	Date/Time	Received By	Date/Time
Doug Bowers	1807 10-24-94	Logan E. Rogers	10-24-94 1807
Logan E. Rogers	10-26-94 0930	B. Whitten	0930 10-26-94
B. Whitten	1130 10-27-94	[illegible]	1130 10/27/94

SPECIAL INSTRUCTIONS

THE PRESERVATIVE FOR TOC IS HCl or H2SO4 pH<2

DATA DELIVERABLE - SUMMARY

SDG W0279

Matrix*

- S = Soil
- SE = Sediment
- SO = Solid
- SL = Sludge
- W = Water
- O = Oil
- A = Air
- DS = Drum Solids
- DL = Drum Liquids
- T = Tissue
- WI = Wipe
- L = Liquid
- V = Vegetation
- X = Other

LABORATORY SECTION — Received By | Title | Date/Time

FINAL SAMPLE DISPOSITION — Disposal Method | Disposed By | Date/Time

DISTRIBUTION: Original- Sample Yellow - Sampler

0025

BC-6000-828 (12/92)

Westinghouse Hanford Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page 1 of 1

Date Turnaround: [ ] Priorty [X] Normal

Collector	Company Contact: RC SMITH/MA FRANK	Telephone No.: 509-372-2537
Project Designation: 200-BP-5 TANK CHARACTERIZATION-UNIT 2	Sampling Location: 200 AREAS	SAF No.: B94-068
Ice Chest No.: GWS-141	Field Logbook No.	Method of Shipment: HAND DELIVER
Shipped To: QUANTERRA	Offsite Property No.	Bill of Lading/Air Bill No.: N/A
Possible Sample Hazards/Remarks		
Special Handling and/or Storage: COOL TO 4 DEGREES CENTIGRADE		

Preservative	HNO3 <2	COOL 4	H2SO4<2	HCl <2	COOL 4	see SI	COOL 4	HNO3 <2	HCl <2	COOL 4		HCl <2			
Type of Container	G	G	P/G	Gs	aG	P/G	P/G	P/G	P/G	G/P		Gs			
No. of Container(s)	1	1	1	3	2	1	1	7	3	1		3			
Volume	500ml	500ml	500ml	40ml	1000ml	500ml	500ml	1000ml	1000ml	20ml		40ml			
SAMPLE ANALYSIS 410569	CLP ICP METALS-TAL, AA METALS, Hg	ANIONS-IC(NITRATE), pH	NO2-NO3	CLP VOA-TCL	CLP SEMI-VOA-TCL	TOC	TDS	TOTAL ALPHA/BETA, Sr-90, GAMMA SPEC(Co-60)	Tc-99	ACTIVITY SCAN		CLP VOA			
	A	B	C	DE	FG	H	I	4/05700	3			ABC			

Sample No.	Matrix*	Date Sampled	Time Sampled															
BOCY73 05	W	10-24-94	1708	Y	X	X	X	X	X	X	X	X	X					
BOCY74 6	W	10-24-94	1217												X			

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By	Date/Time	Received By	Date/Time
Doug Bowers	10-24-94 1807	[signature]	10-24-94 1807
[signature]	10-26-94 0930	[signature]	0930 10-26-94
[signature]	10-27-94 1130	[signature]	10/27/94 1130

SPECIAL INSTRUCTIONS

THE PRESERVATIVE FOR TOC IS HCl or H2SO4 pH<2

DATA DELIVERABLE - SUMMARY

SDGW0279

Matrix*

- S = Soil
- SE = Sediment
- SO = Solid
- SL = Sludge
- W = Water
- O = Oil
- A = Air
- DS = Drum Solids
- DL = Drum Liquids
- T = Tissue
- WI = Wipe
- L = Liquid
- V = Vegetation
- X = Other

LABORATORY SECTION — Received By | Title | Date/Time

FINAL SAMPLE DISPOSITION — Disposal Method | Disposed By | Date/Time

DISTRIBUTION: Original- Sample Yellow - Sampler

0026

BC-6000-828 (12/92)

Westinghouse Hanford Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Page 1 of 1

Data Turnaround: [ ] Priorty [X] Normal

Collector	Company Contact: RC SMITH/MA FRANK	Telephone No.: 509-372-2537
Project Designation: 200-BP-5 TANK CHARACTERIZATION-UNIT 2	Sampling Location: 200 AREAS	SAF No.: B94-068
Ice Chest No.: ER-26	Field Logbook No.	Method of Shipment: HAND DELIVER
Shipped To: QUANTERRA	Offsite Property No.	Bill of Lading/Air Bill No.: N/A
Possible Sample Hazards/Remarks		
Special Handling and/or Storage: COOL TO 4 DEGREES CENTIGRADE		

Preservative	HNO3 <2	COOL 4	H2SO4<2	HCl <2	COOL 4	see SI	COOL 4	HNO3 <2	HCl <2	COOL 4		HCl <2			
Type of Container	G	G	P/G	Gs	aG	P/G	P/G	P/G	P/G	G/P		Gs			
No. of Container(s)	1	1	1	3	2	1	1	7	3	1		3			
Volume	500ml	500ml	500ml	40ml	1000ml	500ml	500ml	1000ml	1000ml	20ml		40ml			
SAMPLE ANALYSIS 410569	CLP ICP METALS-TAL, AA METALS, Hg	ANIONS-IC(NITRATE), pH	NO2-NO3	CLP VOA-TCL	CLP SEMI-VOA-TCL	TOC	TDS	TOTAL ALPHA/BETA, Sr-90, GAMMA SPEC(Co-60)	Tc-99	ACTIVITY SCAN		CLP VOA			
	A	B	C	DEF	GH	I	J	410570		4		ABC			

Sample No.	Matrix*	Date Sampled	Time Sampled															
B0CY75 07	W	10-24-94 ~~10-25-94~~	1735	X	X	X	X	X	X	X	X	X	X					
B0CY76 8	W	10-24-94 ~~10-24-94~~	1221												X			

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By: Doug Bowers	Date/Time: 1807 10-24-94	Received By: Karen E. Rogers	Date/Time: 10-24-94 1807
Relinquished By: Karen E. Rogers	Date/Time: 10-26-94 0930	Received By: B.W. Hen	Date/Time: 0930 102694
Relinquished By: B.W. Hen	Date/Time: 1130 10-27-94	Received By: Tom Quantera	Date/Time: 1:00 pm 10/27/94 1130
Relinquished By	Date/Time	Received By	Date/Time

SPECIAL INSTRUCTIONS

THE PRESERVATIVE FOR TOC IS HCl or H2SO4 pH<2

DATA DELIVERABLE - SUMMARY

SDG-W0279

Matrix*

S	=	Soil
SE	=	Sediment
SO	=	Solid
SL	=	Sludge
W	=	Water
O	=	Oil
A	=	Air
DS	=	Drum Solids
DL	=	Drum Liquids
T	=	Tissue
WI	=	Wipe
L	=	Liquid
V	=	Vegetation
X	=	Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

DISTRIBUTION: Original- Sample Yellow - Sampler

0027

BC-6000-828 (12/92)

PROPERTY CONTROL

PART I TO BE COMPLETED BY ORIGINATOR

ER Em Support Field & Analytical Support

The following items are to be shipped from [illegible] Contractor

Routing [illegible] Prepaid

Shipped to: Quanterra (IT)
2800 George Washington Way
Richland, WA 99352

Off site Custodian

On-site Custodian

Qty.	Property No.	Description (Include Manufacturer Name, Model [illegible])
1 lbs		Sample #: B0CY60, B0CY70 Cooler ID: [illegible] Polycooler with groundwater samples packed in wet [illegible] and vermiculite
1 lbs		~~Sample #:~~ Cooler ID: Polycooler with groundwater ~~samples~~ packed in wet ice and vermiculite

☐ Classified ☒ Unclassified ☐ Shipped Under DOE Contract ☐ Shipped Under Contractor's Use Permit Contract

Necessity for the off-site use of this property

☐ Required for Project Work. List Project No. 200-BP-5 TANK CHARACTERIZATION UNIT A2

☐ Business Trip

☐ Off-site Assignment

Bill of lading # N/A

☐ Shipment to Subcontractor. List Subcontract No. N/A

☐ Other (Please specify) Sampling supports RI/FS work in the 200-AREA

CERTIFICATION OF THE RADIATION MONITORING RELEASE MUST BE SECURED THE SAME DAY THAT MATERIAL IS DELIVERED TO SHIPPING.

RM Clearance for Public Release	RM Survey No.	Date
[illegible]	PS-Off-0170	10-27-94

Location of and Contact for Property (Name/Phone No./Bldg./Area)
P. M. Butcher/ (509) 376-4388

BEST AVAILABLE COPY

Date Ready for Shipment	Cost Code to be Charged	Approximate Date This Property will be Returned
10-27-94	ITE 2072 P51HA	

Originated By	Date	Authorized By	Date
B.T. WHITTEN	10-27-94	[signature]	10-27-94

Property Representative Signature	Date	Property Management Approval	Date
		[signature]	10/27/94

PART II - TO BE COMPLETED BY SHIPPING

Authorized Shipping Signature	Date

DISTRIBUTION (AFTER FINAL SIGNATURES)

White - Property Management Yellow - Shipping Green - Accounts Payable Pink - Originator Goldenrod - Property Management

*U.S. GPO: 1994-592-170/00029

Received [signature] 10/27/94 1130

54-3000-479 (01/94)

0028

Contractor	OFF-SITE PROPERTY CONTROL	CONTROL NO. (To be obtained from PROPERTY MANAGEMENT)
BHI		W95-0-000139

PART I - TO BE COMPLETED BY ORIGINATOR

Department	Section	Unit
ER Eng Support	Field & Analytical Supp	ER Field Sampling

The following items are to be shipped from ☒ Contractor ☐ Vendor

Routing ☐ Prepaid ☐ Collect

Shipped to
Company: Quanterra (IT)
Address: 2800 George Washington Way
City: Richland State: WA Zip Code: 99352
Country:

Off-site Custodian:

On-site Custodian: Payroll No.:

Qty.	Property No.	Description (include Manufacture Name, Model, Serial No.)	Acquisition Cost
1 lbs		Sample #: B00516 B00517 Cooler ID: GWS-013 Polycooler with groundwater samples packed in wet ice and vermiculite	N/A
1 lbs.		Sample #: BOCY71 BOCY72 Cooler ID: ER-8 Polycooler with groundwater samples packed in wet ice and vermiculite	N/A

☐ Classified ☒ Unclassified ☐ Shipped Under DOE Contract ☐ Shipped Under Contractor's Use Permit Contract

Necessity for the off-site use of this property

☒ Required for Project Work. List Project No. 200-BP-5

☐ Business Trip

☐ Off-site Assignment

Bill of lading # N/A

☐ Shipment to Subcontractor. List Subcontract No. N/A

☐ Other (Please specify) Sampling supports RI/FS work in the 200-AREA

CERTIFICATION OF THE RADIATION MONITORING RELEASE MUST BE SECURED THE SAME DAY THAT MATERIAL IS DELIVERED TO SHIPPING.

RM Clearance for Public Release	RM Survey No.	Date
J. Zikes	YO-OFF-0170	10-27-94

Location of and Contact for Property (Name/Phone No./Bldg./Area)
P. H. Butcher/(509)376-4388

BEST AVAILABLE COPY

Date Ready for Shipment	Cost Code to be Charged	Approximate Date This Property will be Returned
10-27-94	ITE2072/ PL531	

Originated By	Date	Authorized By	Date
B.T. WHITEN	10-27-94	[signature]	10-27-94
Property Representative Signature	**Date**	**Property Management Approval**	**Date**
		[signature]	10/27/94

PART II - TO BE COMPLETED BY SHIPPING

Authorized Shipping Signature	Date

DISTRIBUTION (AFTER FINAL SIGNATURES)

White - Property Management Yellow - Shipping Green - Accounts Payable Pink - Originator Goldenrod - Property Management

*U.S. GPO: 1994-592-170/00029

Received [signature] 10/27/94 1130

54-3000-479 (01/94)

0029

Contractor: BHI

PROPERTY CONTROL

PART I - TO BE COMPLETED BY ORIGINATOR

Department: Eng Support | Section: Field Analytical Supp

The following items are to be shipped from: ☐ Contractor ☐ Vend

Routing: ☐ Prepaid ☐ Colle

Shipped to
Company: Quanterra (IT)
Address: 2800 George Washington Way
City: Richland, WA 99352 State: Zip Cod
Country:

Off-site Custodian:
On-site Custodian: Payroll No.

Qty.	Property No.	Description *Include Manufacture Name, Model, Serial No*	Acquisition Cost
#1 lbs		Sample #: BOCY79 BOCY75 BOCY76 Cooler ID: ER-26 Polycooler with groundwater samples packed in wet ice and vermiculite	N/A
1 lbs		Sample #: BOCY73 BOCY74 Cooler ID: GWS-141 Polycooler with groundwater samples packed in wet ice and vermiculite	N/A

☐ Classified ☒ Unclassified ☐ Shipped Under DOE Contract ☐ Shipped Under Contractor's Use Permit Contract

Necessity for the off-site use of this property

☐ Required for Project Work. List Project No. 200-BP-5 TANK CHARACTERIZATION

☐ Business Trip

Bill of lading # N/A

☐ Off-site Assignment

☐ Shipment to Subcontractor. List Subcontract No. N/A

☐ Other *(Please specify)* Sampling supports RI/FS work in the 200 AVFA

CERTIFICATION OF THE RADIATION MONITORING RELEASE MUST BE SECURED THE SAME DAY THAT MATERIAL IS DELIVERED TO SHIPPING.

RM Clearance for Public Release	RM Survey No.	Date
J. Hill	KC-OFF-0170	10-27-94

Location of and Contact for Property *(Name/Phone No./Bldg./Area)*
P. H. Butcher/ (509) 376-4388

BEST AVAILABLE COPY

Date Ready for Shipment	Cost Code to be Charged	Approximate Date This Property will be Returned
10-27-94	ITE 2072 PSIHA	

Originated By	Date	Authorized By	Date
D.T. WHITTEN	10-27-94	[signature]	10-27-94

Property Representative Signature	Date	Property Management Approval	Date
		[signature]	10/27/94

PART II - TO BE COMPLETED BY SHIPPING

Authorized Shipping Signature	Date

DISTRIBUTION (AFTER FINAL SIGNATURES)

White - Property Management Yellow - Shipping Green - Accounts Payable Pink - Originator Goldenrod - Property Management

*U.S. GPO: 1994-592-170/00029

Received [signature] 10/27/94 1130

0030

54-3000-479 (01/94)

SAMPLE STATUS REPORT FOR N 3597. RAD SCREEN BOCY69 TIME: 10/27/94 10:13
DISPATCHED: 10/27/94 10: 9 SAMPLE HAS NOT BEEN SLURPED
RECEIVED: 10/27/94 10:10

EXT.	DETER.	RESULTS OR STATUS	OUT OF RANGE?	GOOD ANS?	CHARGE CODE
****	********	**********	***	***	******
4271	TOT-ACT	< 5.00000E 01 pCi/G	N	Y	P51HC

END OF REPORT

BOCY69
BOCY70
BW
10-27-94

SAMPLE STATUS REPORT FOR E 8473. E-BLANK BOCY71 TIME: 10/27/94 9:45
DISPATCHED: 9/ 1/94 13:23 SAMPLE HAS NOT BEEN SLURPED
RECEIVED: 10/26/94 18:45

EXT.	DETER.	RESULTS OR STATUS	OUT OF RANGE?	GOOD ANS?	CHARGE CODE
****	********	**********	***	***	******
2162	GEA-LIQ	INCOMPLETE			VOGEL
3421	Pu-LIQ	INCOMPLETE			VOGEL
3862	Sr-LIQ	INCOMPLETE			VOGEL
4271	TOT-ACT	< 5.00000E 01 pCi/G	N	Y	VOGEL

END OF REPORT

BOC 471
BOC 472

BW
10-27-94

SAMPLE STATUS REPORT FOR E 8475. E-BLANK BOCY73 TIME: 10/27/94 9:45
DISPATCHED: 9/ 1/94 13:24 SAMPLE HAS NOT BEEN SLURPED
RECEIVED: 10/26/94 18:45

EXT.	DETER.	RESULTS OR STATUS	OUT OF RANGE?	GOOD ANS?	CHARGE CODE
****	********	**********	***	***	******
2162	GEA-LIQ	INCOMPLETE			VOGEL
3421	Pu-LIQ	INCOMPLETE			VOGEL
3862	Sr-LIQ	INCOMPLETE			VOGEL
4271	TOT-ACT	< 5.00000E 01 pCi/G	N	Y	VOGEL

END OF REPORT

BOCY73
BOCY74
BW
10-27-94

SAMPLE STATUS REPORT FOR E 8477. E-BLANK BOCY75 TIME: 10/27/94 9:45
DISPATCHED: 9/ 1/94 13:25 SAMPLE HAS NOT BEEN SLURPED
RECEIVED: 10/26/94 18:46

EXT.	DETER.	RESULTS OR STATUS	OUT OF RANGE?	GOOD ANS?	CHARGE CODE
****	********	**********	***	***	******
2162	GEA-LIQ	INCOMPLETE			VOGEL
3421	Pu-LIQ	INCOMPLETE			VOGEL
3862	Sr-LIQ	INCOMPLETE			VOGEL
4271	TOT-ACT	< 5.00000E 01 pCi/G	N	Y	VOGEL

END OF REPORT

BOCY75
BOCY76
BW
10-27-94

INTERNATIONAL TECHNOLOGY CORPORATION

Regional Office
2800 George Washington Way
Richland, Washington 99352

SAMPLE CHECK-IN LIST

(1 Per Shipping Container)

Date/Time Received 10/27/94 1130 Client Name BHI

Project/Client # 894-068 Batch or Case # _____

Cooler ID (if noted on the outside of cooler) ER 1B

1. Condition of shipping container? ok
2. Custody Seals on cooler intact? Yes ☑ No ☐
3. Custody Seals dated and signed? Yes ☑ No ☐
4. Chain of Custody record is taped on inside of cooler lid? Yes ☐ No ☑
5. Vermiculite/packing material is: Wet ☐ Dry ☑
6. Each sample is in a plastic bag? Yes ☐ No ☑
7. Number of sample containers in cooler: 24
8. Samples have: ____ tape ____ hazard labels
   ✓ custody seals ✓ appropriate sample labels
9. Samples are: ✓ in good condition ____ leaking
   ____ broken ____ have air bubbles
   ____ other
10. Coolant present? Yes ☑ No ☐

Sample temperature 3°C

11. The following paperwork should be accounted for (N/A if not applicable): N/A
    Chain of Custody #'(s) _____
    Request for analysis #(s) _____
    Airbill # _____ Carrier _____
12. Have any anomalies been identified above? Yes ☐ No ☑
13. Memos have been initiated for all anomalies identified above? Yes ☐

Printed Name/Signature Tom Gilmore [signature] Date/Time 10/27/94 1130

FORM NO. LS-042, Rev.0, 2/94

INTERNATIONAL TECHNOLOGY CORPORATION

Regional Office
2800 George Washington Way
Richland, Washington 99352

SAMPLE CHECK-IN LIST

(1 Per Shipping Container)

Date/Time Received 10/27/94 1130 Client Name BHI

Project/Client # B94-068 Batch or Case # _____

Cooler ID (if noted on the outside of cooler) ER-8

1. Condition of shipping container? ok
2. Custody Seals on cooler intact? Yes ☑ No ☐
3. Custody Seals dated and signed? Yes ☑ No ☐
4. Chain of Custody record is taped on inside of cooler lid? Yes ☐ No ☑
5. Vermiculite/packing material is: Wet ☐ Dry ☑
6. Each sample is in a plastic bag? Yes ☐ No ☑
7. Number of sample containers in cooler: 25
8. Samples have: ____ tape ____ hazard labels
   ✓ custody seals ✓ appropriate sample labels
9. Samples are: ✓ in good condition ____ leaking
   ____ broken ____ have air bubbles
   ____ other
10. Coolant present? Yes ☑ No ☐

Sample temperature 4°C

11. The following paperwork should be accounted for (N/A if not applicable): N/A
    Chain of Custody #'(s) _____
    Request for analysis #(s) _____
    Airbill # _____ Carrier _____
12. Have any anomalies been identified above? Yes ☐ No ☑
13. Memos have been initiated for all anomalies identified above? Yes ☐

Printed Name/Signature Tom Gilmore [signature] Date/Time 10/27/94 1130

FORM NO. LS-042, Rev.0, 2/94

INTERNATIONAL TECHNOLOGY CORPORATION

Regional Office
2800 George Washington Way
Richland, Washington 99352

SAMPLE CHECK-IN LIST

(1 Per Shipping Container)

Date/Time Received 10-27-94 11:30 Client Name WHC

Project/Client # B94-068 Batch or Case # _____

Cooler ID (if noted on the outside of cooler) GWS 141

1. Condition of shipping container? O.K.
2. Custody Seals on cooler intact? Yes ☒ No ☐
3. Custody Seals dated and signed? Yes ☒ No ☐ ~~[illegible]~~ 10-27-94
4. Chain of Custody record is taped on inside of cooler lid? Yes ☐ No ☒
5. Vermiculite/packing material is: Wet ☐ Dry ☒
6. Each sample is in a plastic bag? Yes ☒ No ☐
7. Number of sample containers in cooler: 24
8. Samples have: X tape ____ hazard labels
   X custody seals ____ appropriate sample labels
9. Samples are: X in good condition ____ leaking
   ____ broken ____ have air bubbles
   ____ other
10. Coolant present? Yes ☒ No ☐

Sample temperature NO

11. The following paperwork should be accounted for (N/A if not applicable): N/A
    Chain of Custody #'(s) _____
    Request for analysis #(s) _____
    Airbill # _____ Carrier _____
12. Have any anomalies been identified above? Yes ☐ No ☒
13. Memos have been initiated for all anomalies identified above? Yes ☐

Printed Name/Signature Tom Gilmore [signature] Date/Time 10/27/94 1130

FORM NO. LS-042, Rev.0, 2/94

INTERNATIONAL TECHNOLOGY CORPORATION

Regional Office
2800 George Washington Way
Richland, Washington 99352

SAMPLE CHECK-IN LIST

(1 Per Shipping Container)

Date/Time Received 10/27/94 1130 Client Name BHI

Project/Client # B94-068 Batch or Case # _____

Cooler ID (if noted on the outside of cooler) ER26

1. Condition of shipping container? ok
2. Custody Seals on cooler intact? Yes ☑ No ☐
3. Custody Seals dated and signed? Yes ☑ No ☐
4. Chain of Custody record is taped on inside of cooler lid? Yes ☐ No ☑
5. Vermiculite/packing material is: Wet ☐ Dry ☑
6. Each sample is in a plastic bag? Yes ☐ No ☑
7. Number of sample containers in cooler: 26
8. Samples have: ____ tape ____ hazard labels
   1 custody seals 1 appropriate sample labels
9. Samples are: 1 in good condition ____ leaking
   ____ broken ____ have air bubbles
   ____ other
10. Coolant present? Yes ☑ No ☐

Sample temperature 4°C

11. The following paperwork should be accounted for (N/A if not applicable): N/A
    Chain of Custody #'(s) /
    Request for analysis #(s) _____
    Airbill # _____ Carrier _____
12. Have any anomalies been identified above? Yes ☐ No ☑
13. Memos have been initiated for all anomalies identified above? Yes ☐

Printed Name/Signature Tom Gilmore [signature] Date/Time 10/27/94 1130

FORM NO. LS-042, Rev.0, 2/94

SAMPLE RECEIPT VARIANCE REPORT
ITAS-RICHLAND LABORATORY

WORK ORDER NUMBER: 41056909 DATE INITIATED: 10/27/94

INITIATED BY: TGilmore

DATE/TIME OF SAMPLE (AND/OR RFA & COC) RECEIPT: 10/27/94 1130

CLIENT SAMPLE NUMBER	RFA/COC NUMBERS	ANALYSIS REQUESTED
B0CY79		NO2/3 TOC

Samples were received with the following deficiencies:

- ☐ 1. Not enough sample received for proper analysis.
- ☐ 2. Sample received without proper preservative.
- ☐ 3. No sample received in container.
- ☐ 4. Sample received without a RFA/COC form.
- ☐ 5. No sample ID on container.
- ☐ 6. Sample received broken or leaking.
- ☐ 7. Holding time exceeded at receipt.
- ☐ 8. Custody tape broken.
- ☐ 9. COC not relinquished by client.
- ☐ 10. Sample information on container does not match sample information on the paper work (Explain below).
- ☐ 11. All shipping containers (coolers) on waybill not received with shipment.
  - ☐ RFA/COC received
  - ☐ RFA/COC not received
- ☐ 12. Other (Explain below).

NOTES: No Screen aliquot supplied - aliquot for NO2/3 was used for Screening

SUPERVISOR REVIEW: Tami Heidelberg

PROJECT MANAGER REVIEW:

TELEPHONED TO: ON BY

TELEFAXED TO: ON BY

SIGNED ORIGINAL MUST BE RETAINED IN WORK ORDER FILE

FORM NO. LS-023, 3/92, Rev. 0

102694A.WQ2

TENNELEC #2

SCREENING CALCULATION SPREADSHEET

"No" = Cat. II, "Yes" = Cat. I.
JRM 27 Oct 94

Customer Code	Recieved Date		Screening Prep Date		Count Date	Mnts. Cntd	BACKGROUND Alpha	Beta	Mnts
WHC	10-27-94		10-27		10-2	10	20	202	240

	Customer ID WHC	Sample Matrix Solid/Liquid	Residue Wght mg	Vol. Anal. mg ml	Sample Size Gm L	SMPLE CNT DATA Hldr Num.	Total Counts Alpha	Beta	Net Sample Counts/Minute Alpha	Beta	DPM / Aliquot Alpha	Beta	uCi per Sample Alpha	Beta	pCi / Gm or L Alpha	Beta	1-sigma error pCi/ Gm or L Alpha	Beta	Category 1 Yes/No	Aliquot to Cat 1 Gm or L Alpha	Beta
7+8	B0CY75 4	LIQUID	8.2	10.0	1.0	60	0	11	-0.08	0.28	-3.4E-01	8.04E-01	0.0E+00	2.7E-05	-1.5E+01	2.7E+01	39.10	33.34	Yes	-6.6E+02	3.7E+03
9	B0CY79	LIQUID	2.4	10.0	0.5	63	9	24	0.82	1.56	3.12E+00	2.78E+00	7.0E-05	6.3E-05	1.4E+02	1.3E+02	60.12	45.11	Yes	7.1E+01	8.0E+02
5+6	B0CY73 3	LIQUID	5.7	10.0	1.0	59	0	14	-0.08	0.56	-3.5E-01	1.24E+00	0.0E+00	5.6E-05	-1.6E+01	5.6E+01	38.99	37.18	Yes	-6.3E+02	1.8E+03
1+2	B0CY69 1	LIQUID	1.2	10.0	1.0	58	2	9	0.12	0.06	4.53E-01	4.78E-02	2.0E-05	2.2E-06	2.0E+01	2.2E+00	44.80	29.59	Yes	4.9E+02	4.6E+04
3+4	B0CY71 2	LIQUID	2.4	10.0	1.0	61	1	13	0.02	0.46	4.26E-02	9.64E-01	1.9E-06	4.3E-05	1.9E+00	4.3E+01	41.94	35.56	Yes	5.2E+03	2.3E+03
	B0D552	SOLID	66.6	66.6	830.0	52	3	31	0.22	2.26	1.20E+00	5.07E+00	5.1E-03	2.2E-02	8.1E+00	3.4E+01	11.13	8.71	Yes	1.2E+03	2.9E+03
	B0D546	SOLID	43.4	43.4	785.0	46	4	24	0.32	1.56	1.58E+00	3.26E+00	1.3E-02	2.7E-02	1.6E+01	3.4E+01	15.31	11.31	No	8.1E+02	3.0E+03
	B0D553	SOLID	65.3	65.3	725.0	47	3	31	0.22	2.26	1.19E+00	5.06E+00	5.9E-03	2.5E-02	8.2E+00	3.5E+01	11.25	8.86	Yes	1.2E+03	2.9E+03
	B0D548	SOLID	81.5	81.5	875.0	53	5	50	0.42	4.16	2.55E+00	9.51E+00	1.2E-02	4.6E-02	1.4E+01	5.3E+01	10.91	9.15	No	7.1E+02	1.9E+03
	B0D4Q0	LIQUID	1.5	10.0	1.0	62	9	24	0.82	1.56	3.12E+00	2.78E+00	1.4E-04	1.3E-04	1.4E+02	1.3E+02	60.12	45.11	Yes	7.1E+01	8.0E+02

CHEM

RAD

410569 Chem

410570 Rad

SDW W0279

0040

*** GAMMA ***

11/10/94
B94-068

CHAIN-OF-CUSTODY BATCH ANALYSIS RECORD

27-Oct-1994
Page 1

CUSTOMER: BHI

SAMPLE DELIVERY GROUP W0279

MATRIX : WATER

PRIORITY

BATCH NUMBER 10-570

	ITAS ID	DUP	ACCOUNT	CUSTOMER ID	COMMENTS
	L1057018 L1057015				
1)	41057001 F1057001		BHI	BOCY69	
2)	41057002		BHI	BOCY71	
3)	41057003		BHI	BOCY73	
4)	41057004		BHI	BOCY75	

ACTIONS (Initial & Date)

1) INITIATED 10/27/94

2) PREP LAB RECEIVED 11/2/94

3) SAMPLE REMAINDER STORED 11/2/94

4) SEPARATION LAB RECEIVED N/A

5) COUNTING/MEASUREMENT LAB 11/4/94 11/5/94

6) DATA REVIEWED AND ANALYTICAL PREP STORED 11-7-94

No additional Bofge requests on SAF or Sample COC's. 11-8-94

*** ALPHA ***

11/16/94
894-068

CHAIN-OF-CUSTODY BATCH ANALYSIS RECORD

27-Oct-1994
Page 1

CUSTOMER: BHI

SAMPLE DELIVERY GROUP W0279

MATRIX : WATER

PRIORITY

BATCH NUMBER 10-570

	ITAS ID	DUP	ACCOUNT	CUSTOMER ID	COMMENTS
	L1057018 L1057015		EQEG 499	4.5122 & '040729	
1)	41057001		BHI	BOCY69	
2)	41057002		BHI	BOCY71	
3)	41057003		BHI	BOCY73	
4)	41057004 F1057004		BHI	BOCY75	

ACTIONS (Initial & Date)

1) INITIATED 10/27/94

2) PREP LAB RECEIVED 11/2/94

3) SAMPLE REMAINDER STORED 11-2-94

4) SEPARATION LAB RECEIVED N/A

5) COUNTING/MEASUREMENT LAB 11/4/94

6) DATA REVIEWED AND ANALYTICAL PREP STORED 11-7-94

11/10/94
B94-068

CHAIN-OF-CUSTODY BATCH ANALYSIS RECORD

27-Oct-1994
Page 1

PRIORITY

CUSTOMER: BHI

SAMPLE DELIVERY GROUP W0279

MATRIX : WATER

BATCH NUMBER 10-570

	ITAS ID	DUP	ACCOUNT	CUSTOMER ID	COMMENTS
	L1057018 L1057015		EQAH 2430	4.4781 ± .063196 pCi	
1)	41057001		BHI	BOCY69	
2)	41057002		BHI	BOCY71	
3)	41057003		BHI	BOCY73	
4)	41057004 F1057004		BHI	BOCY75	

ACTIONS (Initial & Date)

1) INITIATED 10/27/94

2) PREP LAB RECEIVED 11-2-94

3) SAMPLE REMAINDER STORED 11-2-94

4) SEPARATION LAB RECEIVED N/A

5) COUNTING/MEASUREMENT LAB OD 11/4/94

6) DATA REVIEWED AND ANALYTICAL PREP STORED 11-8-94

11/10/94
894-068

CHAIN-OF-CUSTODY BATCH ANALYSIS RECORD

27-Oct-1994
Page 1

CUSTOMER: BHI

SAMPLE DELIVERY GROUP W0279

MATRIX : WATER

PRIORITY

BATCH NUMBER 10-570

	ITAS ID	DUP	ACCOUNT	CUSTOMER ID	COMMENTS
	L1057018 L1057015	EQL 1159		30.222 ± .42629	
1)	41057001		BHI	BOCY69	
2)	41057002		BHI	BOCY71	
3)	41057003		BHI	BOCY73	
4)	41057004 F1057004		BHI	BOCY75	

ACTIONS (Initial & Date)

1) INITIATED 10/27/94

2) PREP LAB RECEIVED 11/3/94

3) SAMPLE REMAINDER STORED N/A

4) SEPARATION LAB RECEIVED 11-3-94

5) COUNTING/MEASUREMENT LAB 11-5-94

6) DATA REVIEWED AND ANALYTICAL PREP STORED WFM 11/8/94