W02086

Quanterra
Environmental Services

Quanterra Incorporated
13715 Rider Trail North
Earth City, Missouri 63045

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0048749

CASE NARRATIVE

Bechtel Hanford Incorporated
3350 George Washington Way
Richland, Washington 99352

January 20, 1998

Attention: Joan Kessner

MAR 1998 RECEIVED EDMC

JAN 1998 RECEIVED Data Log In

Project number	:	550.230
Date Received by Lab	:	November 25, 1997
Number of Samples	:	One (1)
Sample Type	:	Water
SDG Number	:	W02086
Data Deliverable	:	Summary

I. Introduction

On November 25, 1997, one (1) water sample was received by Quanterra, Richland and was transferred to Quanterra, St. Louis for chemical analysis. Upon receipt, the sample was given the following laboratory ID number to correspond with the specific client ID:

St. Louis ID	BHI ID	Richland ID	Matrix	Date of Receipt
16367-001	B0MJ69	71144501	Water	25-NOV-97

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: Volatiles by EPA 8260. Total Residual Chlorine by EPA Method 330.1. Sulfate by EPA Method 375.4. pH by EPA Method 150.1.

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 were performed per the protocol for each analyte in this SDG. Total Residual Chlorine and pH require only a Sample Duplicate for matrix QC.

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

Shipping and Receiving
There were no variances associated with sample receipt.

Volatiles-8260
There are no comments or nonconformances associated with this analysis.

Wet Chemistry
There are no comments or nonconformances associated with these analyses.

Quanterra
Environmental Services

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
e:\\price$\hanford\hanw2086.nar

W02086

Quanterra December 02, 1997 11:09 am
Account: 10722 Project: 550.230 Quanterra-Richland QAS No. 550.23 Rev. 1
Master Sample Login: 16367

Project Manager: W. Price

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

Sample Header Template:

Sample No. / #	Client ID / Container Type	C-Matrix / Analysis	Date: Collected / Class	Received / Preservative	Due / Anal. Due Date	Shipper / Hold Date	Site	Rad Category / Comments	Rad Sample No. / (Container Numbers:% Filled)
16367-001	B0MJ69	Water	25-NOV-97 07:58	25-NOV-97 10:52	30-DEC-97	AIR BORNE		1	Screening not Required
RICHLAND I.D. 71144501									
3	VI - Vial-40ml	VOA/8260/Q4	S	HCL	23-DEC-97	09-DEC-97	109N		(343397:100 343398:99 343399:98)
1	PN - Plastic-1L	CL/330.3/Q4	S	COLD	23-DEC-97	27-NOV-97	S17C		(343396:100)
1	PN - Plastic-250ml	SO4/375.4/Q4	S	COLD	23-DEC-97	23-DEC-97	S17C		(343400:97)
1	PN - Plastic-120ml	PH/150.1/Q4	S	COLD	23-DEC-97	26-NOV-97	S17C		(343395:100)
16367-001DUP	B0MJ69	Water	25-NOV-97 07:58	25-NOV-97 10:52	30-DEC-97	AIR BORNE		1	Screening not Required
RICHLAND I.D. 71144501									
1	PN - Plastic-1L	CL/330.3/Q4	S	COLD	23-DEC-97	27-NOV-97	S17C		(343396:100)
1	PN - Plastic-250ml	SO4/375.4/Q4	S	COLD	23-DEC-97	23-DEC-97	S17C		(343400:97)
1	PN - Plastic-120ml	PH/150.1/Q4	S	COLD	23-DEC-97	26-NOV-97	S17C		(343395:100)
16367-001MS	B0MJ69	Water	25-NOV-97 07:58	25-NOV-97 10:52	30-DEC-97	AIR BORNE		1	Screening not Required
RICHLAND I.D. 71144501									
3	VI - Vial-40ml	VOA/8260/Q4	S	HCL	23-DEC-97	09-DEC-97	109N		(343397:100 343398:99 343399:98)
1	PN - Plastic-250ml	SO4/375.4/Q4	S	COLD	23-DEC-97	23-DEC-97	S17C		(343400:97)
16367-001MSD	B0MJ69	Water	25-NOV-97 07:58	25-NOV-97 10:52	30-DEC-97	AIR BORNE		1	Screening not Required
RICHLAND I.D. 71144501									
3	VI - Vial-40ml	VOA/8260/Q4	S	HCL	23-DEC-97	09-DEC-97	109N		(343397:100 343398:99 343399:98)

Data:

3*=Sample has not been rad screened.

00005

[redacted] S17C Temp 6°C CUR# 13502 13483 ST LOUIS

Chain of Custody Record

Quanterra

QUA-4124 0797

Client: Bechtel	Project Manager: A. Koprina	Date: 11-26-97	Chain of Custody Number: 00205
Address:	Telephone Number (Area Code)/Fax Number:	Lab Number:	Page 1 of 1
City / State / Zip Code:	Site Contact:	Lab Contact:	
Project Name: SAF B98-009	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): SEE COC	Special Instructions/ Conditions of Receipt
71144501 BOMJ69	all	bottles											

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☒ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other _____

QC Requirements (Specify): SDG W02086

1. Relinquished By: Heidelberg Quanterra	Date: 11-26-97	Time: 16:00	1. Received By: Lud M Schut	Date: 11-28-97	Time: 09:00
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

B98-009-04

Collector R. Nielson/R. Harris	**Company Contact** RL Martin	**Telephone No.** 373-4483	**Project Coordinator** KOERNER, CC
Project Designation 183N Backwash Discharge Pond -- Permit Monitoring 1998	**Sampling Location** 100N/183 Backwash		**SAF No.** B98-009
Ice Chest No.	**Field Logbook No.** EL-1309-1		**Method of Shipment** Hand Delivered
Shipped To Quanterra Incorporated	**Offsite Property No.**		**Bill of Lading/Air Bill No.**

Data Turnaround 45 Days

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage cool to 4 degrees C

Preservation	None	None	Cool 4C	None	HCl or H2SO4 to pH <2 Coo					
Type of Container	P	P	P	P	sGs*					
No. of Container(s)	1	1	1	1	3					
Volume	20ml	125ml	250ml	1000ml	40ml					

SAMPLE ANALYSIS 71144501 SDG W02086

Sample No.	Matrix *	Sample Date	Sample Time	Activity Scan	pH - 150.1	Sulfate -- 375.4	Chlorine (Total residual) - 330.3	VOA - 8260A (TCL)					
B0MJ69	Water	11/25/97	0758	X	X	X	X	X					
					100	100	100	3x100 11-26					

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By	Date/Time	Received By	Date/Time
Karen Nielson	11/25/97 1052	[illegible] Wagner	11-25-97 1052
		[illegible]	

SPECIAL INSTRUCTIONS

** Close SDG upon receipt of samples.

** EPA330.3 - The ERC Contractor acknowledges the specified holding time is not likely achievable.

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

Figure 1

SAMPLE CHECK-IN LIST

Date/Time Received: 11-25-97 SG#: BHI W02086

Work Order Number: 711445 SAF #: B97-159, B98-009 + B98-0

Shipping Container ID: 96-019 Chain of Custody # B97-159-124+129; B98-009-B98-007

1. Custody Seals on shipping container intact? Yes [✓] No [ ]
2. Custody Seals dated and signed? Yes [✓] No [ ]
3. Chain-of-Custody record present? Yes [✓] No [ ]
4. Cooler temperature 3°C
5. Vermiculite/packing materials is Wet [ ] Dry [ ] N/A
6. Number of samples in shipping container: 18/19
7. Sample holding times exceeded? JW 11-25-97 Yes [ ] No [✓]

8. Samples have:
   - ✓ tape
   - ✓ custody seals
   - ____ hazard labels
   - ____ appropriate sample labels

9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles

10. Where any anomalies identified in sample receipt? Yes [ ] No [✓]
11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: [signature] Date: 11-25-97

Telephoned To: _____ On _____ By _____

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

B98-009-04

Collector R. Nielson/R Harris	**Company Contact** RL Martin	**Telephone No.** 373-4483	**Project Coordinator** KOERNER, CC
Project Designation 183N Backwash Discharge Pond -- Permit Monitoring 1998	**Sampling Location** 100N/183 Backwash		**SAF No.** B98-009
Ice Chest No.	**Field Logbook No.** EL-1309-1		**Method of Shipment** Hand Delivered
Shipped To Quanterra Incorporated	**Offsite Property No.**		**Bill of Lading/Air Bill No.**

Data Turnaround 45 Days

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage cool to 4degrees C

SAMPLE ANALYSIS												
Preservation				None	None	Cool 4C	None	HCl or H2SO4 to pH <2 Coo				
Type of Container				P	P	P	P	aGz*				
No. of Container(s)				1	1	1	1	3				
Volume				20ml	125ml	250ml	1000ml	40ml				
				Activity Scan	pH - 150.1	Sulfate -- 375.4	Chlorine (Total residual) - 330.3	VOA - 8260A (TCL)				
Sample No.	Matrix *	Sample Date	Sample Time									
B0MJ69	Water	11/25/97	0758	X	X	X	X	X				
								3x(03%				
								11-26				
								Labels List ~~8x~~ 8260A				

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By	Date/Time	Received By	Date/Time
Robert Nielson	11/25/97 1052	Wagar	11-25-97 1052
Wagar	11-25-97 1600		

SPECIAL INSTRUCTIONS

** Close SDG upon receipt of samples.

** EPA330.3 - The ERC Contractor acknowledges the specified holding time is not likely achievable.

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

Quanterra Environmental Services

BW & WP

013483

Login No.: _____

Condition Upon Receipt Variance Report
St. Louis Laboratory

Client: _____

Project No: _____

Shipper/No: AB 599 9684 316

Date: 11-26-97 Time: 0830

Initiated by: [illegible]

RFA/COC Numbers: B98-009

No RichCoc

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4C ± 2C
     Record temperature: _____
   - ☐ pH _____
   - ☐ other: _____
3. ☐ Sample received in improper container.
4. ☐ Sample received without proper paperwork. Explain: _____
5. ☐ Paperwork received without sample.
6. ☐ No sample ID on sample container.
7. ☐ Custody tape disturbed/broken/missing.
8. ☐ Sample ID on container does not match sample ID on paperwork. Explain: _____
9. ☐ All coolers on airbill not received with shipment.
10. ☒ Other (explain below):
    Labels Lost 8620A
    Coc Lost 8260A

☐ No variances were noted during sample receipt. Cooler Temperature Upon Receipt: 4°C

Notes: VOA's B98-009 - 84

Corrective Action:

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

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

☐ Sample(s) processed "as is". _____

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

Sample Control Supervisor Review: [illegible] Date: 11-26-97

Project Management Review: [illegible] Date: 12/2/97

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

000010

SL-ADMIN-0004, Revised 11/24/95

Quanterra Environmental Services

: Bwtwe

013502

Login No.: 16367

Condition Upon Receipt Variance Report
St. Louis Laboratory

Client: Richland

Date: 11-28-97 Time: 11-28-97

Project No: 550230

Initiated by: Lisa Mitchell

Shipper/No: AB 5999685 311

RFA/COC Numbers: 205

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4C ± 2C
     Record temperature: _____
   - ☐ pH _____
   - ☐ other: _____
3. ☐ Sample received in improper container.
4. ☐ Sample received without proper paperwork. Explain: _____
5. ☐ Paperwork received without sample.
6. ☐ No sample ID on sample container.
7. ☐ Custody tape disturbed/broken/missing.
8. ☐ Sample ID on container does not match sample ID on paperwork. Explain: _____
9. ☐ All coolers on airbill not received with shipment.
10. ☐ Other (explain below): _____

☐ No variances were noted during sample receipt. Cooler Temperature Upon Receipt: 6°C

Notes: Lab Rec 11-26-97

Corrective Action:

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

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

☐ Sample(s) processed "as is"

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

Sample Control Supervisor Review: Lisa Mitchell Date: 11-28-97

Project Management Review: [illegible] Date: 12/2/97

SIGNED ORIGINAL MUST BE RETURNED IN THE PROJECT FILE

SL-ADMIN-0004, Revised 11/24/95

GEC011

Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: Volatiles 8260 (TCL)
Method: EPA 8260
Matrix: LIQUID

Sample Date : 11/25/97
Receipt Date : 11/25/97
Report Date : 01/13/98

Client ID: B0MJ69

Quanterra ID : 16367-001

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Chloromethane	74-87-3	QCBLK160043-1	12/02/97	12/02/97	10	UG/L	U	10	1
Bromomethane	74-83-9	QCBLK160043-1	12/02/97	12/02/97	10	UG/L	U	10	1
Vinyl Chloride	75-01-4	QCBLK160043-1	12/02/97	12/02/97	10	UG/L	U	10	1
Chloroethane	75-00-3	QCBLK160043-1	12/02/97	12/02/97	10	UG/L	U	10	1
Methylene Chloride	75-09-2	QCBLK160043-1	12/02/97	12/02/97	3	UG/L	J	5	1
Acetone	67-64-1	QCBLK160043-1	12/02/97	12/02/97	22	UG/L		20	1
Carbon Disulfide	75-15-0	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
1,1-Dichloroethene	75-35-4	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
1,1-Dichloroethane	75-34-3	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
1,2-Dichloroethene (total)	540-59-0	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
Chloroform	67-66-3	QCBLK160043-1	12/02/97	12/02/97	64	UG/L		5	1
1,2-Dichloroethane	107-06-2	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
2-Butanone (MEK)	78-93-3	QCBLK160043-1	12/02/97	12/02/97	20	UG/L	U	20	1
1,1,1-Trichloroethane	71-55-6	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
Carbon Tetrachloride	56-23-5	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
Bromodichloromethane	75-27-4	QCBLK160043-1	12/02/97	12/02/97	2	UG/L	J	5	1
1,2-Dichloropropane	78-87-5	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
cis-1,3-Dichloropropene	10061-01-5	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
Trichloroethene	79-01-6	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
Dibromochloromethane	124-48-1	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
1,1,2-Trichloroethane	79-00-5	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
Benzene	71-43-2	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
trans-1,3-Dichloropropene	10061-02-6	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
Bromoform	75-25-2	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
4-Methyl-2-Pentanone (MIBK)	108-10-1	QCBLK160043-1	12/02/97	12/02/97	20	UG/L	U	20	1
2-Hexanone	591-78-6	QCBLK160043-1	12/02/97	12/02/97	20	UG/L	U	20	1
Tetrachloroethene	127-18-4	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
1,1,2,2-Tetrachloroethane	79-34-5	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
Toluene	108-88-3	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
Chlorobenzene	108-90-7	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
EthylBenzene	100-41-4	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
Styrene	100-42-5	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
Xylene (total)	1330-20-7	QCBLK160043-1	12/02/97	12/02/97	5	UG/L	U	5	1
Toluene-d8	2037-26-5	QCBLK160043-1	12/02/97	12/02/97	98	%REC			1
Bromofluorobenzene	460-00-4	QCBLK160043-1	12/02/97	12/02/97	100	%REC			1
Dibromofluoromethane	1868-53-7	QCBLK160043-1	12/02/97	12/02/97	115	%REC			1

Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: Volatiles 8260 (TCL)
Method: EPA 8260
Matrix: LIQUID

Client ID: BOMJ69

Sample Date : 11/25/97
Receipt Date : 11/25/97
Report Date : 01/19/98

Quanterra ID : 16367-001MS

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
1,1-Dichloroethene	75-35-4	QCBLK160043-1	12/02/97	12/02/97	106	%REC			1
Trichloroethene	79-01-6	QCBLK160043-1	12/02/97	12/02/97	84	%REC			1
Benzene	71-43-2	QCBLK160043-1	12/02/97	12/02/97	85	%REC			1
Toluene	108-88-3	QCBLK160043-1	12/02/97	12/02/97	77	%REC			1
Chlorobenzene	108-90-7	QCBLK160043-1	12/02/97	12/02/97	79	%REC			1
Toluene-d8	2037-26-5	QCBLK160043-1	12/02/97	12/02/97	98	%REC			1
Bromofluorobenzene	460-00-4	QCBLK160043-1	12/02/97	12/02/97	100	%REC			1
Dibromofluoromethane	1868-53-7	QCBLK160043-1	12/02/97	12/02/97	107	%REC			1

Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: Volatiles 8260 (TCL)
Method: EPA 8260
Matrix: LIQUID

Client ID: BOMJ69

Sample Date : 11/25/97
Receipt Date : 11/25/97
Report Date : 01/19/98

Quanterra ID : 16367-001MSD

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
1,1-Dichloroethene	75-35-4	QCBLK160137-1	12/04/97	12/04/97	110	%REC			1
Trichloroethene	79-01-6	QCBLK160137-1	12/04/97	12/04/97	86	%REC			1
Benzene	71-43-2	QCBLK160137-1	12/04/97	12/04/97	90	%REC			1
Toluene	108-88-3	QCBLK160137-1	12/04/97	12/04/97	76	%REC			1
Chlorobenzene	108-90-7	QCBLK160137-1	12/04/97	12/04/97	79	%REC			1
Toluene-d8	2037-26-5	QCBLK160137-1	12/04/97	12/04/97	97	%REC			1
Bromofluorobenzene	460-00-4	QCBLK160137-1	12/04/97	12/04/97	93	%REC			1
Dibromofluoromethane	1868-53-7	QCBLK160137-1	12/04/97	12/04/97	111	%REC			1

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOMJ69

Lab Name: QUANTERRA MO Contract: 550.230

Lab Code: ITMO Case No.: SAS No.: SDG No.: W02086

Matrix: (soil/water) WATER Lab Sample ID: 16367-001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: BSMP0415

Level: (low/med) LOW Date Received: 11/25/97

% Moisture: not dec. _____ Date Analyzed: 12/02/97

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	22	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	64	
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	20	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	2	J
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Chlorodibromomethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylenes (total)	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BOMJ69

Lab Name: QUANTERRA MO Contract: 550.230

Lab Code: ITMO Case No.: SAS No.: SDG No.: W02086

Matrix: (soil/water) WATER Lab Sample ID: 16367-001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: BSMP0415

Level: (low/med) LOW Date Received: 11/25/97

% Moisture: not dec. _____ Date Analyzed: 12/02/97

Column: (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: pH EPA 150.1
Method: EPA 150.1
Matrix: LIQUID

Sample Date : 11/25/97
Receipt Date : 11/25/97
Report Date : 01/13/98

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil
B0MJ69	16367-001	pH	PH	QCBLK159835-1	12/02/97	12/02/97	6.88	PH			1
B0MJ69	16367-001DUP	pH	PH	QCBLK159835-1	12/02/97	12/02/97	6.97	PH			1
NA	QCBLK159835-1	pH	PH	QCBLK159835-1	12/02/97	12/02/97	4.83	PH			1

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Project: 550.230

Category: Total Residual Chlorine
Method: EPA 330.3
Matrix: LIQUID

Sample Date : 11/25/97
Receipt Date : 11/25/97
Report Date : 01/19/98

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Di
B0MJ69	16367-001	Residual Chlori	7782-50-5a	QCBLK159836-1	12/02/97	12/02/97	0.63	MG/L		0.10	
B0MJ69	16367-001DUP	Residual Chlori	7782-50-5a	QCBLK159836-1	12/02/97	12/02/97	0.72	MG/L		0.10	
NA	QCBLK159836-1	Residual Chlori	7782-50-5a	QCBLK159836-1	12/02/97	12/02/97	0.10	MG/L	U	0.10	
NA	QCLCS159836-1	Residual Chlori	7782-50-5a	QCBLK159836-1	12/02/97	12/02/97	101	%REC			

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Project: 550.230

Category: Sulfate
Method: EPA 375.4
Matrix: LIQUID

Sample Date : 11/25/97
Receipt Date : 11/25/97
Report Date : 01/13/98

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil
BOMJ69	16367-001	Sulfate	14808-79-8	QCBLK160152-1	12/04/97	12/04/97	28.2	MG/L		5.00	1
BOMJ69	16367-001DUP	Sulfate	14808-79-8	QCBLK160152-1	12/04/97	12/04/97	28.4	MG/L		5.00	1
BOMJ69	16367-001MS	Sulfate	14808-79-8	QCBLK160152-1	12/04/97	12/04/97	97	%REC			1
NA	QCBLK160152-1	Sulfate	14808-79-8	QCBLK160152-1	12/04/97	12/04/97	5.00	MG/L	U	5.00	1
NA	QCLCS160152-1	Sulfate	14808-79-8	QCBLK160152-1	12/04/97	12/04/97	98	%REC			1