W02310

Quanterra
Environmental Services

Quanterra Incorporated
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Earth City, Missouri 63045

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0049528

CASE NARRATIVE

AUG 1998 RECEIVED EDMC

MAY 1998 RECEIVED Data Log In

Bechtel Hanford Incorporated
3350 George Washington Way
Richland, Washington 99352

May 15, 1998

Attention: Joan Kessner

Project Number	:	550.230
SDG	:	W02310
Number of Samples	:	Two (2)
Sample Matrix	:	Water
Data Deliverable	:	Summary
Date SDG Closed	:	April 2, 1998

II. Introduction

On April 2, 1998, two (2) "water" samples were received by Quanterra, Richland and transferred to Quanterra, St. Louis for chemical analysis. There are no comments or nonconformances associated with the shipping and receiving of these samples. Upon receipt, the samples were given the following laboratory ID numbers to correspond with the specific client ID's:

St. Louis ID	BHI ID	Richland ID	Matrix	Date of Receipt
17397-001	B0NJP2	80405001	Water	02-APR-98
17397-002	B0NJP3	80404901	Water	02-APR-98

III. 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:	pH by EPA method 150.1. Sulfate by EPA method 375.4. TDS by EPA method 160.1. TSS by EPA method 160.2. Arsenic by EPA method 7060 - (GFFA). ICP Metals by EPA method 6010A. Chlorine (Total residual) by EPA method 330.3. Acrylamide by EPA method 8316. Volatiles by EPA method 8240 (Append IX). Volatiles by EPA method 8260 (TCL).
Deviation from Request:	No Deviation from requested methods.

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

General: The ERC Contractor acknowledges the specified holding time is not likely achievable for EPA 330.3.

Priority results for B0NJP3 were transmitted on April 13, 1998.

Inorganics: A Laboratory Control Sample, Method Blank, Matrix Spike and Matrix Spike Duplicate were analyzed with each preparation batch per the protocol for this analysis.

The recovery of the Silver matrix spike duplicate (76.8%) was less than 80% therefore all associated data was flagged with a "N". The recovery of the Silver matrix spike (93.5%) met criteria.

The percent differences for the serial dilution for Magnesium (12.3) and Sodium (14.5) were greater than 10 which was indicated on the form one by the "E" flag.

Volatiles by 8240: A Laboratory Control Sample, Method Blank, Matrix Spike and Matrix Spike Duplicate were analyzed with each preparation batch per the protocol for this analysis.

No problems were noted during the analyses of these samples.

Volatiles by 8260: A Laboratory Control Sample, Method Blank, Matrix Spike and Matrix Spike Duplicate were analyzed with each preparation batch per the protocol for this analysis.

The blank VBLK98A had levels of Methylene Chloride that exceed the acceptance criteria. The maximum amount allowed is 25 ug/l. The blank has 50 ug/l. The sample associated with this blank had 1 ug/l of Methylene Chloride. See NCM#4060.

Sample 17397-001MSD had high recovery of the surrogate DFM and Trichloroethene recovered low in the MSD.

Acrylamide: A Laboratory Control Sample, Method Blank, Matrix Spike and Matrix Spike Duplicate were analyzed with each preparation batch per the protocol for this analysis.

No problems were noted during the analyses of these samples.

Wet Chemistry: A Laboratory Control Sample, Method Blank, Matrix Spike and Laboratory Duplicate were analyzed with each preparation batch per the protocol for this analysis.

The Total Residual Chlorine for sample 17397-001 was received at Quanterra, St. Louis on the last day of holding time and analyzed outside of holding time.

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:

Robert E. White
Project Manager

LOG: 3/5 1060
17263 = V379
17296 = WO2296 ✓
17231 = V375
17324 = WO2298 ✓
17397 = WO2310

LABORATORY NONCONFORMANCE MEMO (NCM)

Quanterra Incorporated

Project ID/Client: 550.253 Hanford / 625.01

NCM Initiated by/Date: Tillman 4/17/98 Project Manager: 4/17/98 REW AMF

Sample Numbers/QC batch or lot numbers: 17296-003/004, 17231-002 ~~17295~~-001/002 & ~~17397-001MS/MSD~~ & 17397-001MS 17263 17324

Tests: 169572

Analytical Area (check appropriate area):

- ☐ Sample control
- ☐ Organic preparation
- ☐ Inorganic preparation
- ☐ GC
- ☐ HPLC
- ☑ GC/MS
- ☐ Wet chemistry
- ☐ Metals
- ☐ Reporting
- ☐ Data review
- ☐ Radiochemistry
- ☐ _____

Nonconformance (check appropriate area): *To be completed by analyst*

Holding Time Violations (exceeded by _____ days)

Category I: Laboratory Independent

- ☐ 1. Holding time expired in transit
- ☐ 2. Sample rec'd > 48 hrs after sampling. or ½ holding time has expired
- ☐ 3. Test added by client after expiration

Category II: Laboratory Dependent

- ☐ 4. Instrument failure
- ☐ 5. Analyst error
- ☐ 6. Log-in error
- ☐ 7. Miscommunication
- ☐ 8. Other (explanation required)_____

Category III: Analysis Reruns (QA/QC)

- ☐ 9. Surrogates
- ☐ 10. Internal standards
- ☐ 11. Spike recoveries
- ☐ 12. Blank contamination

Category IV: Analysis Reruns (Confirmation)

- ☐ 13. Second column
- ☐ 14. Contamination check
- ☐ 15. Confirmation of matrix effects
- ☐ 16. Other (explanation required)_____

Category V: Analysis Reruns (Dilution)

- ☐ 17. Over calibration
- ☐ 18. Under calibration
- ☐ 19. Other (explanation required)_____

Quality Assurance/Quality Control

- ☑ 20. QC data reported outside of controls
- ☐ 21. Incorrect procedure used
- ☐ 22. SOP intentionally modified with QA and tech approval
- ☐ 23. Invalid instrument calibration
- ☐ 24. Received insufficient sample for proper analysis

Incorrect or Incomplete Client Deliverable

- ☐ 25. Hardcopy deliverable error
- ☐ 26. Electronic deliverable error

Reported Detection Limits Elevated Due to:

- ☐ 27. Sample matrix: Does not include high analyte content
- ☐ 28. Insufficient sample volume
- ☐ 29. Other (explanation required)

Miscellaneous

- ☐ 30. Instrument/equipment Tag-out
- ☐ 31. Other (explanation required)

Notification (check appropriate area): ☐ Required ☐ Not Required *To be completed by project manager*

Client notified by (name and date): Bob White 4/21/98

- ☑ In writing
- ☐ By telephone
- ☐ By facsimile
- ☐ Other (explain)

Client's name and response: Joan Kessner

- ☐ Process "as is"
- ☐ Re-sample
- ☐ On hold until _____
- ☑ Other (explain)

Project manager (signature and date): Robert E. White 4/21/98 noted in case narrative (2298)

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QUANTERRA LABORATORY NONCONFORMANCE MEMO

LOG #: -060

Corrective Action: *To be completed and reviewed by all associates involved*

Problem Description/Root Cause Author's initials and date:

Sample were run with Blank above allowed MECl2 limits 25ppb 7ppb found in Blank

Corrective Actions (Short Term) Author's initials and date:

NONE AS IS

Corrective Actions to Prevent Reoccurrence (Long Term) Review data in more timely manner

Corrective Action approved by (Supervisor/Group Leader) and date:

Additional Comments:

Corrective Action to be completed by (if other than Supervisor/Group Leader):

Date Corrective Action is to be completed:

Quality Assurance Review *To be completed by a QA associate*

☒ Anomaly ☒ Deficiency ☐ Notified Ops/Sys Manager (Initials)

☐ Further action required:

Further action assigned to:

QA signature: K Wunder Date: 4/17/98

Corrective Action Verification: *To be completed by a QA associate*

☒ Verification not required or requested will review future NCMs for recurrence

☐ Verified / CA completed on: by

☐ Cannot verify (specify reason)

Verified by: Date:

Nonconformance Memo Closure:

QA signature: Wunder Date: 4/17/98

The Office of Quality Assurance maintains a copy of this NCM indicating its final status.

000004C

W02310 9

W02310P1 - Fax.

Quanterra April 06, 1998 09:37 am
Account: 10722 Project: 550.230 Quanterra-Richland QAS No. 550.23 Rev. 1
Master Sample Login: 17397

Project Manager: W. Price

Draft: (Final:) Entered and Reviewed by: [signature] PM Review: [signature]

Sample Header Template:

Sample No. / # Data:	Client ID / Comments	C-Matrix / Container Type	Analysis	Date: Collected	Received	Due	Shipper	Class	Preservative	Anal. Due Date	Hold Date	Site	Rad Category	Rad Sample No. (Container Numbers:% Filled)
17397-001	BONJP2	Water		02-APR-98 08:45	02-APR-98 11:25	22-APR-98	AIRBORNE						1	Screening not Required
	RICHLAND ID 80405001													
3		VI - Vial-40ml	HPLC/8316/Q4					S	HCL	16-APR-98	16-APR-98	109H		(367975:99 367976:98 367977:97)
3			VOA/8240APPIX/Q4					S	HCL	16-APR-98	16-APR-98	109H		(367969:92 367970:91 367971:90)
3			VOA/8260/Q4					S	HCL	16-APR-98	16-APR-98	109H		(367972:89 367973:88 367974:87)
1		PN - Plastic-1L	CL/330.3/Q4					S	COLD	16-APR-98	04-APR-98	T3B		(367968:93)
1		PN - Plastic-500ml	AS/7060/Q4					S	HNO3	16-APR-98	29-SEP-98	T3B		(367978:86)
1			ICAP/6010/Q4					S	HNO3	16-APR-98	29-SEP-98	T3B		(367979:85)
1			TDS/160.1/Q4					S	COLD	16-APR-98	09-APR-98	T3B		(367966:95)
1			TSS/160.2/Q4					S	COLD	16-APR-98	09-APR-98	T3B		(367967:94)
1		PN - Plastic-250ml	SO4/375.4/Q4					S	COLD	16-APR-98	30-APR-98	T3B		(367965:98)
1		PW - Plastic-128oz	PH/150.1/Q4					S	COLD	16-APR-98	03-APR-98	T3B		(367964:99)
17397-001DUP	BONJP2	Water		02-APR-98 08:45	02-APR-98 11:25	22-APR-98	AIRBORNE						1	Screening not Required
	RICHLAND ID 80405001													
1		PN - Plastic-1L	CL/330.3/Q4					S	COLD	16-APR-98	04-APR-98	T3B		(367968:93)
1		PN - Plastic-500ml	TDS/160.1/Q4					S	COLD	16-APR-98	09-APR-98	T3B		(367966:95)
1			TSS/160.2/Q4					S	COLD	16-APR-98	09-APR-98	T3B		(367967:94)
1		PN - Plastic-250ml	SO4/375.4/Q4					S	COLD	16-APR-98	30-APR-98	T3B		(367965:98)
1		PW - Plastic-128oz	PH/150.1/Q4					S	COLD	16-APR-98	03-APR-98	T3B		(367964:99)
17397-001MS	BONJP2	Water		02-APR-98 08:45	02-APR-98 11:25	22-APR-98	AIRBORNE						1	Screening not Required
	RICHLAND ID 80405001													
3		VI - Vial-40ml	HPLC/8316/Q4					S	HCL	16-APR-98	16-APR-98	109H		(367975:99 367976:98 367977:97)
3			VOA/8240APPIX/Q4					S	HCL	16-APR-98	16-APR-98	109H		(367969:92 367970:91 367971:90)
3			VOA/8260/Q4					S	HCL	16-APR-98	16-APR-98	109H		(367972:89 367973:88 367974:87)
1		PN - Plastic-500ml	AS/7060/Q4					S	HNO3	16-APR-98	29-SEP-98	T3B		(367978:86)
1			ICAP/6010/Q4					S	HNO3	16-APR-98	29-SEP-98	T3B		(367979:85)
1		PN - Plastic-250ml	SO4/375.4/Q4					S	COLD	16-APR-98	30-APR-98	T3B		(367965:98)
17397-001MSD	BONJP2	Water		02-APR-98 08:45	02-APR-98 11:25	22-APR-98	AIRBORNE						1	Screening not Required
	RICHLAND ID 80405001													
3		VI - Vial-40ml	HPLC/8316/Q4					S	HCL	16-APR-98	16-APR-98	109H		(367975:99 367976:98 367977:97)
3			VOA/8240APPIX/Q4					S	HCL	16-APR-98	16-APR-98	109H		(367969:92 367970:91 367971:90)
3			VOA/8260/Q4					S	HCL	16-APR-98	16-APR-98	109H		(367972:89 367973:88 367974:87)
1		PN - Plastic-500ml	AS/7060/Q4					S	HNO3	16-APR-98	29-SEP-98	T3B		(367978:86)
1			ICAP/6010/Q4					S	HNO3	16-APR-98	29-SEP-98	T3B		(367979:85)

Sample has not been rad screened.

000005

Quanterra April 06, 1998 09:37 am
Account: 10722 Project: 550.230 Quanterra-Richland QAS No. 550.23 Rev. 1
Master Sample Login: 17397

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.
17397-002	BONJP3	Water	02-APR-98 09:33	02-APR-98 11:25	09-APR-98	AIRBORNE	1	Screening not Required
RICHLAND ID 80404901								

#	Container Type	Analysis	Class	Preservative	Anal. Due Date	Hold Date	Site	(Container Numbers:% Filled)
3	VI - Vial-40ml	VOA/8260/Q4	S	HCL	08-APR-98	16-APR-98	109H	(367988:89 367989:88 367990:87)

Data:

3*=Sample has not been rad screened.

[redacted]

1 3B Temp. 4°C Cuk# 14207
St Louis

Chain of Custody Record

Quanterra

QUA-4124 0797

Client: Bechtel	Project Manager: A. Koprivia	Date: 4-3-98	Chain of Custody Number: 10499
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.			

Analysis (Attach list if more space is needed): SEE QC

Special Instructions/ Conditions of Receipt

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
80404901 BONJP3	All Bottles											
80405001 ↓ JP2												

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 WO2310 (closed)

1. Relinquished By: Hudelburg QES	Date: 4-3-98	Time: 16:00	1. Received By: [signature]	Date: 4-4-98	Time: 08:45
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: BONJP3 - 7day TAT BONJP2 - 45day TAT

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

Bechtel Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	B98-009-14	Page 1 of 1

Collector R. Fahlberg	Company Contact Joe Zoric	Telephone No. 373-4315	Project Coordinator KOERNER, CC	Data Turnaround ~~45 Days~~ 4/1/98 7 day RWN
Project Designation 183N Backwash Discharge Pond -- Permit Monitoring 1998	Sampling Location 100N		SAF No. B98-009	
Ice Chest No.	Field Logbook No. EL-1309-1		Method of Shipment Gov Vehicle	
Shipped To Quanterra Incorporated	Offsite Property No.		Bill of Lading/Air Bill No.	
Waste Designation			COA	

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage
Cool to 4C

Preservation	HCl to pH <2 Cool 4C											
Type of Container	aGs*											
No. of Container(s)	3											
Volume	40ml											
SAMPLE ANALYSIS SDG W02310 80404901	VOA - 8260A (TCL)											
Sample No.	Matrix *	Sample Date	Sample Time									
B0NJP3	Water	4-2-98	0933	X								
				3x10N								
				4-3								

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By 4-2-98 R. Fahlberg / R. Fahlberg	Date/Time 1125	Received By Schidlburg / Schidlburg	Date/Time 4/2/98 1125
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

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

000008

Bechtel Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	B98-009-13	Page 1 of 2

Collector R. Fahlberg	**Company Contact** Joe Zoric	**Telephone No.** 373-4315	**Project Coordinator** KOERNER, CC	**Data Turnaround** 45 Days
Project Designation 183N Backwash Discharge Pond – Permit Monitoring 1998	**Sampling Location** 100N		**SAF No.** B98-009	
Ice Chest No.	**Field Logbook No.** EL-1309-1		**Method of Shipment** Gov Vehicle	
Shipped To Quanterra Incorporated	**Offsite Property No.**		**Bill of Lading/Air Bill No.**	
Waste Designation			COA pH = 1 1	

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage Cool to 4C

Preservation	None	None	Cool 4C	Cool 4C	Cool 4C	HNO3 to pH <2	HNO3 to pH <2	None	Cool 4C	HCl to pH <2 Cool 4C
Type of Container	P	P	P	P	P	P	P	P	aGs*	aGs*
No. of Container(s)	1	1	1	1	1	1	1	1	3	3
Volume	20ml	125ml	250ml	500ml	500ml	500ml	500ml	1000ml	40ml	40ml
SAMPLE ANALYSIS	Activity Scan	pH - 150.1	Sulfate – 375.4	TDS - 160.1	TSS - 160.2	Arsenic - 7060 - (GFAA)	ICP Metals - 6010A (TAL)	Chlorine (Total residual) - 330.3	Acrylamide - 8316	VOA - 8240A (Append IX)

80405001

Sample No.	Matrix *	Sample Date	Sample Time										
B0NJP2	Water	4·2·98	0845	X	X/	X/	X/	X/	X/	X/	X	X/	X/
					100	100	100	100	100	100		3X100	3X100

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By 4-2-98 R. Fahlberg / R. Fahlberg 1125	Date/Time	Received By Fahlberg 4/2/98 1125	Date/Time
Relinquished By	Date/Time	Received By 2100pm	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

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

Bechtel Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	B98-009-13	Page 2 of 2

Collector R. Fahlberg	**Company Contact** Joe Zoric	**Telephone No.** 373-4315	**Project Coordinator** KOERNER, CC	**Data Turnaround** 45 Days
Project Designation 183N Backwash Discharge Pond -- Permit Monitoring 1998	**Sampling Location** 100N		**SAF No.** B98-009	
Ice Chest No.	**Field Logbook No.** EL-1309-1		**Method of Shipment** Gov Vehicle	
Shipped To Quanterra Incorporated	**Offsite Property No.**		**Bill of Lading/Air Bill No.**	
Waste Designation			**COA**	

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage Cool to 4C

Preservation	HCl to pH <2 Cool 4C											
Type of Container	aGs*											
No. of Container(s)	3											
Volume	40ml											
SAMPLE ANALYSIS	VOA - 8260A (TCL)											
80405001												
Sample No.	Matrix *	Sample Date	Sample Time									
B0NJP2	Water	4.2.98	0845	X 3x40								

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By 4.2.98 R. Fahlberg / R. Fahlberg	Date/Time 1125	Received By Dill Lerg	Date/Time 4/2/98 1125
Relinquished By	Date/Time	Received By Lloodcomp	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

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

0000010

Figure 1

SAMPLE CHECK-IN LIST

Date/Time Received: 4/2 1120 SG#: 002310

Work Order Number: 804049 +050 SAF #: B98-009

Shipping Container ID: 96-036 Chain of Custody # B98-009-13 + 14

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 4°
5. Vermiculite/packing materials is Wet [ ] Dry [✓] n/a
6. Number of samples in shipping container: 20
7. Sample holding times exceeded? 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: 4/2/98

Telephoned To: _____ On _____ By _____

Quanterra Environmental Services

BW&SL

014207

Login No.: 17397

Condition Upon Receipt Variance Report
St. Louis Laboratory

Client: Richland

Date: 4-4-98 Time: 09 45

Project No: 550.230

Initiated by: [illegible]

Shipper/No: AS 471 9410 614

RFA/COC Numbers: 10499

Condition/Variance (Check all that apply):

1. ☐ Sample received broken/leaking.
2. ☐ Sample received without proper preservative.
   - ☐ Cooler temperature not within 4°C ± 2°C
     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: 4°C

Notes: _____

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: (or designate) [illegible] Date: 4-4-98

Project Management Review: Robert E. White Date: 4-6-98

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

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

000012

Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: Volatiles 8240-Appendix IX
Method: EPA 8240
Matrix: LIQUID

Client ID: BONJP2

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 05/15/98

Quanterra ID : 17397-001

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Chloromethane	74-87-3	QCBLK169745-1	04/09/98	04/09/98	10	UG/L	U	10	1
Bromomethane	74-83-9	QCBLK169745-1	04/09/98	04/09/98	10	UG/L	U	10	1
Vinyl Chloride	75-01-4	QCBLK169745-1	04/09/98	04/09/98	10	UG/L	U	10	1
Chloroethane	75-00-3	QCBLK169745-1	04/09/98	04/09/98	10	UG/L	U	10	1
Methylene Chloride	75-09-2	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	BJ	5	1
Acetone	67-64-1	QCBLK169745-1	04/09/98	04/09/98	20	UG/L	U	20	1
Carbon Disulfide	75-15-0	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
1,1-Dichloroethene	75-35-4	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
1,1-Dichloroethane	75-34-3	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
1,2-Dichloroethene (total)	540-59-0	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
Chloroform	67-66-3	QCBLK169745-1	04/09/98	04/09/98	10	UG/L		5	1
1,2-Dichloroethane	107-06-2	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
2-Butanone (MEK)	78-93-3	QCBLK169745-1	04/09/98	04/09/98	20	UG/L	U	20	1
1,1,1-Trichloroethane	71-55-6	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
Carbon Tetrachloride	56-23-5	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
Vinyl Acetate	108-05-4	QCBLK169745-1	04/09/98	04/09/98	10	UG/L	U	10	1
Bromodichloromethane	75-27-4	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
1,2-Dichloropropane	78-87-5	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
cis-1,3-Dichloropropene	10061-01-5	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
Trichloroethene	79-01-6	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
Dibromochloromethane	124-48-1	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
1,1,2-Trichloroethane	79-00-5	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
Benzene	71-43-2	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
trans-1,3-Dichloropropene	10061-02-6	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
Bromoform	75-25-2	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
4-Methyl-2-Pentanone (MIBK)	108-10-1	QCBLK169745-1	04/09/98	04/09/98	20	UG/L	U	20	1
2-Hexanone	591-78-6	QCBLK169745-1	04/09/98	04/09/98	20	UG/L	U	20	1
Tetrachloroethene	127-18-4	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
Toluene	108-88-3	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
1,1,2,2-Tetrachloroethane	79-34-5	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
Chlorobenzene	108-90-7	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
EthylBenzene	100-41-4	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
Styrene	100-42-5	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
Xylene (total)	1330-20-7	QCBLK169745-1	04/09/98	04/09/98	5	UG/L	U	5	1
Toluene-d8	2037-26-5	QCBLK169745-1	04/09/98	04/09/98	102	%REC			1
Bromofluorobenzene	460-00-4	QCBLK169745-1	04/09/98	04/09/98	88	%REC			1
1,2-Dichloroethane-d4	17070-07-0	QCBLK169745-1	04/09/98	04/09/98	85	%REC			1

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3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: Volatiles 8240-Appendix IX
Method: EPA 8240
Matrix: LIQUID

Client ID: BONJP2

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 05/15/98

Quanterra ID : 17397-001MS

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
1,1-Dichloroethene	75-35-4	QCBLK169745-1	04/09/98	04/09/98	103	%REC			1
Trichloroethene	79-01-6	QCBLK169745-1	04/09/98	04/09/98	84	%REC			1
Benzene	71-43-2	QCBLK169745-1	04/09/98	04/09/98	84	%REC			1
Toluene	108-88-3	QCBLK169745-1	04/09/98	04/09/98	80	%REC			1
Chlorobenzene	108-90-7	QCBLK169745-1	04/09/98	04/09/98	81	%REC			1
Toluene-d8	2037-26-5	QCBLK169745-1	04/09/98	04/09/98	97	%REC			1
Bromofluorobenzene	460-00-4	QCBLK169745-1	04/09/98	04/09/98	90	%REC			1
1,2-Dichloroethane-d4	17070-07-0	QCBLK169745-1	04/09/98	04/09/98	104	%REC			1

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Project: 550.230

Category: Volatiles 8240-Appendix IX
Method: EPA 8240
Matrix: LIQUID

Client ID: BONJP2

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 05/15/98

Quanterra ID : 17397-001MSD

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
1,1-Dichloroethene	75-35-4	QCBLK169745-1	04/09/98	04/09/98	104	%REC			1
Trichloroethene	79-01-6	QCBLK169745-1	04/09/98	04/09/98	86	%REC			1
Benzene	71-43-2	QCBLK169745-1	04/09/98	04/09/98	86	%REC			1
Toluene	108-88-3	QCBLK169745-1	04/09/98	04/09/98	79	%REC			1
Chlorobenzene	108-90-7	QCBLK169745-1	04/09/98	04/09/98	81	%REC			1
Toluene-d8	2037-26-5	QCBLK169745-1	04/09/98	04/09/98	92	%REC			1
Bromofluorobenzene	460-00-4	QCBLK169745-1	04/09/98	04/09/98	89	%REC			1
1,2-Dichloroethane-d4	17070-07-0	QCBLK169745-1	04/09/98	04/09/98	107	%REC			1

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BONJP2

Lab Name: QUANTERRA MO Contract: 550.230

Lab Code: ITMO Case No.: SAS No.: SDG No.: W02310

Matrix: (soil/water) WATER Lab Sample ID: L7397-001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: GSMP0358

Level: (low/med) LOW Date Received: 04/02/98

% Moisture: not dec. _____ Date Analyzed: 04/09/98

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	5	JB
67-64-1	Acetone	20	U
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	10	
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
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
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	Dibromochloromethane	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.

BONJP2

Lab Name: QUANTERRA MO Contract: 550.230

Lab Code: ITMO Case No.: SAS No.: SDG No.: W02310

Matrix: (soil/water) WATER Lab Sample ID: 17397-001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: GSMP0358

Level: (low/med) LOW Date Received: 04/02/98

% Moisture: not dec. _____ Date Analyzed: 04/09/98

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.				
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Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

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

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/17/98

Client ID: BONJP2

Quanterra ID : 17397-001MSD

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
1,1-Dichloroethene	75-35-4	QCBLK169572-1	04/08/98	04/08/98	80	%REC			1
Trichloroethene	79-01-6	QCBLK169572-1	04/08/98	04/08/98	69	%REC	*		1
Benzene	71-43-2	QCBLK169572-1	04/08/98	04/08/98	101	%REC			1
Toluene	108-88-3	QCBLK169572-1	04/08/98	04/08/98	88	%REC			1
Chlorobenzene	108-90-7	QCBLK169572-1	04/08/98	04/08/98	91	%REC			1
Bromofluorobenzene	460-00-4	QCBLK169572-1	04/08/98	04/08/98	83	%REC			1
Dibromofluoromethane	1868-53-7	QCBLK169572-1	04/08/98	04/08/98	124	%REC	*		1
Toluene-d8	2037-26-5	QCBLK169572-1	04/08/98	04/08/98	101	%REC			1

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Project: 550.230

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

Client ID: BONJP2

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/17/98

Quanterra ID : 17397-001

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Chloromethane	74-87-3	QCBLK169673-1	04/10/98	04/10/98	10	UG/L	U	10	1
Bromomethane	74-83-9	QCBLK169673-1	04/10/98	04/10/98	10	UG/L	U	10	1
Vinyl Chloride	75-01-4	QCBLK169673-1	04/10/98	04/10/98	10	UG/L	U	10	1
Chloroethane	75-00-3	QCBLK169673-1	04/10/98	04/10/98	10	UG/L	U	10	1
Methylene Chloride	75-09-2	QCBLK169673-1	04/10/98	04/10/98	6	UG/L	B	5	1
Acetone	67-64-1	QCBLK169673-1	04/10/98	04/10/98	7	UG/L	BJ	20	1
Carbon Disulfide	75-15-0	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
1,1-Dichloroethene	75-35-4	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
1,1-Dichloroethane	75-34-3	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
1,2-Dichloroethene (total)	540-59-0	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Chloroform	67-66-3	QCBLK169673-1	04/10/98	04/10/98	9	UG/L		5	1
1,2-Dichloroethane	107-06-2	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
2-Butanone (MEK)	78-93-3	QCBLK169673-1	04/10/98	04/10/98	20	UG/L	U	20	1
1,1,1-Trichloroethane	71-55-6	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Carbon Tetrachloride	56-23-5	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Bromodichloromethane	75-27-4	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
1,2-Dichloropropane	78-87-5	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
cis-1,3-Dichloropropene	10061-01-5	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Trichloroethene	79-01-6	QCBLK169673-1	04/10/98	04/10/98	11	UG/L		5	1
Dibromochloromethane	124-48-1	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
1,1,2-Trichloroethane	79-00-5	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Benzene	71-43-2	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
trans-1,3-Dichloropropene	10061-02-6	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Bromoform	75-25-2	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
4-Methyl-2-Pentanone (MIBK)	108-10-1	QCBLK169673-1	04/10/98	04/10/98	20	UG/L	U	20	1
2-Hexanone	591-78-6	QCBLK169673-1	04/10/98	04/10/98	20	UG/L	U	20	1
Tetrachloroethene	127-18-4	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Toluene	108-88-3	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
1,1,2,2-Tetrachloroethane	79-34-5	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Chlorobenzene	108-90-7	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
EthylBenzene	100-41-4	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Styrene	100-42-5	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Xylene (total)	1330-20-7	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Bromofluorobenzene	460-00-4	QCBLK169673-1	04/10/98	04/10/98	86	%REC			1
Dibromofluoromethane	1868-53-7	QCBLK169673-1	04/10/98	04/10/98	108	%REC			1
Toluene-d8	2037-26-5	QCBLK169673-1	04/10/98	04/10/98	100	%REC			1

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Project: 550.230

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

Client ID: BONJP2

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/17/98

Quanterra ID : 17397-001MS

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
1,1-Dichloroethene	75-35-4	QCBLK169673-1	04/10/98	04/10/98	88	%REC			1
Trichloroethene	79-01-6	QCBLK169673-1	04/10/98	04/10/98	93	%REC			1
Benzene	71-43-2	QCBLK169673-1	04/10/98	04/10/98	95	%REC			1
Toluene	108-88-3	QCBLK169673-1	04/10/98	04/10/98	87	%REC			1
Chlorobenzene	108-90-7	QCBLK169673-1	04/10/98	04/10/98	91	%REC			1
Bromofluorobenzene	460-00-4	QCBLK169673-1	04/10/98	04/10/98	86	%REC			1
Dibromofluoromethane	1868-53-7	QCBLK169673-1	04/10/98	04/10/98	106	%REC			1
Toluene-d8	2037-26-5	QCBLK169673-1	04/10/98	04/10/98	98	%REC			1

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3350 George Washington Way
Richland, WA 99352

Project: 550.230

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

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/17/98

Client ID: BONJP3

Quanterra ID : 17397-002

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Chloromethane	74-87-3	QCBLK169673-1	04/10/98	04/10/98	10	UG/L	U	10	1
Bromomethane	74-83-9	QCBLK169673-1	04/10/98	04/10/98	10	UG/L	U	10	1
Vinyl Chloride	75-01-4	QCBLK169673-1	04/10/98	04/10/98	10	UG/L	U	10	1
Chloroethane	75-00-3	QCBLK169673-1	04/10/98	04/10/98	10	UG/L	U	10	1
Methylene Chloride	75-09-2	QCBLK169673-1	04/10/98	04/10/98	2	UG/L	BJ	5	1
Acetone	67-64-1	QCBLK169673-1	04/10/98	04/10/98	18	UG/L	BJ	20	1
Carbon Disulfide	75-15-0	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
1,1-Dichloroethene	75-35-4	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
1,1-Dichloroethane	75-34-3	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
1,2-Dichloroethene (total)	540-59-0	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Chloroform	67-66-3	QCBLK169673-1	04/10/98	04/10/98	54	UG/L		5	1
1,2-Dichloroethane	107-06-2	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
2-Butanone (MEK)	78-93-3	QCBLK169673-1	04/10/98	04/10/98	20	UG/L	U	20	1
1,1,1-Trichloroethane	71-55-6	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Carbon Tetrachloride	56-23-5	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Bromodichloromethane	75-27-4	QCBLK169673-1	04/10/98	04/10/98	2	UG/L	J	5	1
1,2-Dichloropropane	78-87-5	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
cis-1,3-Dichloropropene	10061-01-5	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Trichloroethene	79-01-6	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Dibromochloromethane	124-48-1	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
1,1,2-Trichloroethane	79-00-5	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Benzene	71-43-2	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
trans-1,3-Dichloropropene	10061-02-6	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Bromoform	75-25-2	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
4-Methyl-2-Pentanone (MIBK)	108-10-1	QCBLK169673-1	04/10/98	04/10/98	20	UG/L	U	20	1
2-Hexanone	591-78-6	QCBLK169673-1	04/10/98	04/10/98	20	UG/L	U	20	1
Tetrachloroethene	127-18-4	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Toluene	108-88-3	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
1,1,2,2-Tetrachloroethane	79-34-5	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Chlorobenzene	108-90-7	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
EthylBenzene	100-41-4	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Styrene	100-42-5	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Xylene (total)	1330-20-7	QCBLK169673-1	04/10/98	04/10/98	5	UG/L	U	5	1
Unknown-1	TIC-32	QCBLK169673-1	04/10/98	04/10/98	11	UG/L	J		1
Silanol, trimethyl-	1066-40-6	QCBLK169673-1	04/10/98	04/10/98	14	UG/L	JN		1
Unknown Alkane	TIC-40	QCBLK169673-1	04/10/98	04/10/98	9	UG/L	J		1
Bromofluorobenzene	460-00-4	QCBLK169673-1	04/10/98	04/10/98	83	%REC			1
Dibromofluoromethane	1868-53-7	QCBLK169673-1	04/10/98	04/10/98	106	%REC			1
Toluene-d8	2037-26-5	QCBLK169673-1	04/10/98	04/10/98	98	%REC			1

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BONJP2

Lab Name: QUANTERRA MO Contract: 550.230

Lab Code: ITMO Case No.: SAS No.: SDG No.: W02310

Matrix: (soil/water) WATER Lab Sample ID: 17397-001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: ESMP1619

Level: (low/med) LOW Date Received: 04/02/98

% Moisture: not dec. _____ Date Analyzed: 04/10/98

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	6	B
67-64-1	Acetone	7	JB
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	9	
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	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	11	
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.

BONJP2

Lab Name: QUANTERRA MO Contract: 550.230

Lab Code: ITMO Case No.: SAS No.: SDG No.: W02310

Matrix: (soil/water) WATER Lab Sample ID: 17397-001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: ESMP1619

Level: (low/med) LOW Date Received: 04/02/98

% Moisture: not dec. _____ Date Analyzed: 04/10/98

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.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BONJP3

Lab Name: QUANTERRA MO Contract: 550.230

Lab Code: ITMO Case No.: SAS No.: SDG No.: W02310

Matrix: (soil/water) WATER Lab Sample ID: 17397-002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: ESMP1622

Level: (low/med) LOW Date Received: 04/02/98

% Moisture: not dec. _____ Date Analyzed: 04/10/98

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	2	JB
67-64-1	Acetone	18	JB
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	54	
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.

BONJP3

Lab Name: QUANTERRA MO Contract: 550.230

Lab Code: ITMO Case No.: SAS No.: SDG No.: W02310

Matrix: (soil/water) WATER Lab Sample ID: 17397-002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: ESMP1622

Level: (low/med) LOW Date Received: 04/02/98

% Moisture: not dec. _____ Date Analyzed: 04/10/98

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

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	2.048	11	J
2. 1066-40-6	Silanol, trimethyl-	4.332	14	NJ
3.	Unknown Alkane	24.326	9	J
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Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: Acrylamide
Method: SW-846 8316
Matrix: LIQUID

Client ID: BONJP2

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/29/98

Quanterra ID : 17397-001

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Acrylamide	79-06-1	QCBLK169249-1	04/28/98	04/28/98	100	UG/L	U	100	1

Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: Acrylamide
Method: SW-846 8316
Matrix: LIQUID

Client ID: BONJP2

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/29/98

Quanterra ID : 17397-001MS

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Acrylamide	79-06-1	QCBLK169249-1	04/28/98	04/28/98	102	%REC			1

Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: Acrylamide
Method: SW-846 8316
Matrix: LIQUID

Client ID: BONJP2

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/29/98

Quanterra ID : 17397-001MSD

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Acrylamide	79-06-1	QCBLK169249-1	04/28/98	04/28/98	102	%REC			1

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1D
ACRYLAMIDE ANALYSIS DATA SHEET

EPA SAMPLE NO.
BONJP2

Lab Name: QUANTERRA MO Contract: 550.23

Lab Code: ITMO Case No.: _____ SAS No.: _____ SDG No.: W02310

Matrix : (soil/water) WATER Lab Sample ID: 17397-001

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

Level: (low/med) LOW Date Sampled: 04-02-98

% Moisture: not dec._____ dec._____ Date Extracted: _____

Extraction:(SepF/Cont/Sonc/Shak)_____ Date Analyzed: 04-28-98

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1

CAS NO.	Compound	CONCENTRATION UNITS: (mg/L or mg/Kg) UG/L	Q
79-06-1	ACRYLAMIDE	100	U

U: Concentration of analyte is less than the value given.

FORM I HBH

Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: ICP Metals-6010A (TAL)
Method: EPA 6010
Matrix: LIQUID

Client ID: BONJP2

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/21/98

Quanterra ID : 17397-001

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Aluminum	7429-90-5	QCBLK169960-1	04/14/98	04/15/98	542	UG/L		200	1
Antimony	7440-36-0	QCBLK169960-1	04/14/98	04/15/98	45.7	UG/L	U	60.0	1
Barium	7440-39-3	QCBLK169960-1	04/14/98	04/15/98	28.5	UG/L	B	200	1
Beryllium	7440-41-7	QCBLK169960-1	04/14/98	04/15/98	0.60	UG/L	U	5.0	1
Cadmium	7440-43-9	QCBLK169960-1	04/14/98	04/15/98	4.6	UG/L	U	5.0	1
Calcium	7440-70-2	QCBLK169960-1	04/14/98	04/15/98	24700	UG/L		5000	1
Chromium	7440-47-3	QCBLK169960-1	04/14/98	04/15/98	2.1	UG/L	U	10.0	1
Cobalt	7440-48-4	QCBLK169960-1	04/14/98	04/15/98	3.8	UG/L	U	50.0	1
Copper	7440-50-8	QCBLK169960-1	04/14/98	04/15/98	3.6	UG/L	U	25.0	1
Iron	7439-89-6	QCBLK169960-1	04/14/98	04/15/98	144	UG/L		100	1
Magnesium	7439-95-4	QCBLK169960-1	04/14/98	04/15/98	4980	UG/L	BE	5000	1
Manganese	7439-96-5	QCBLK169960-1	04/14/98	04/15/98	7.1	UG/L	B	15.0	1
Nickel	7440-02-0	QCBLK169960-1	04/14/98	04/15/98	14.2	UG/L	U	40.0	1
Potassium	7440-09-7	QCBLK169960-1	04/14/98	04/15/98	2150	UG/L	U	5000	1
Silver	7440-22-4	QCBLK169960-1	04/14/98	04/15/98	5.1	UG/L	UN	10.0	1
Sodium	7440-23-5	QCBLK169960-1	04/14/98	04/15/98	2990	UG/L	BE	5000	1
Vanadium	7440-62-2	QCBLK169960-1	04/14/98	04/15/98	5.1	UG/L	B	50.0	1
Zinc	7440-66-6	QCBLK169960-1	04/14/98	04/15/98	13.1	UG/L	B	20.0	1

Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: ICP Metals-6010A (TAL)
Method: EPA 6010
Matrix: LIQUID

Client ID: BONJP2

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/21/98

Quanterra ID : 17397-001MS

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Aluminum	7429-90-5	QCBLK169960-1	04/14/98	04/15/98	104	%REC			1
Antimony	7440-36-0	QCBLK169960-1	04/14/98	04/15/98	111	%REC			1
Barium	7440-39-3	QCBLK169960-1	04/14/98	04/15/98	97	%REC			1
Beryllium	7440-41-7	QCBLK169960-1	04/14/98	04/15/98	106	%REC			1
Cadmium	7440-43-9	QCBLK169960-1	04/14/98	04/15/98	97	%REC			1
Calcium	7440-70-2	QCBLK169960-1	04/14/98	04/15/98	103	%REC			1
Chromium	7440-47-3	QCBLK169960-1	04/14/98	04/15/98	96	%REC			1
Cobalt	7440-48-4	QCBLK169960-1	04/14/98	04/15/98	96	%REC			1
Copper	7440-50-8	QCBLK169960-1	04/14/98	04/15/98	100	%REC			1
Iron	7439-89-6	QCBLK169960-1	04/14/98	04/15/98	92	%REC			1
Magnesium	7439-95-4	QCBLK169960-1	04/14/98	04/15/98	106	%REC			1
Manganese	7439-96-5	QCBLK169960-1	04/14/98	04/15/98	96	%REC			1
Nickel	7440-02-0	QCBLK169960-1	04/14/98	04/15/98	94	%REC			1
Potassium	7440-09-7	QCBLK169960-1	04/14/98	04/15/98	100	%REC			1
Silver	7440-22-4	QCBLK169960-1	04/14/98	04/15/98	94	%REC			1
Sodium	7440-23-5	QCBLK169960-1	04/14/98	04/15/98	102	%REC			1
Vanadium	7440-62-2	QCBLK169960-1	04/14/98	04/15/98	99	%REC			1
Zinc	7440-66-6	QCBLK169960-1	04/14/98	04/15/98	98	%REC			1

Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: ICP Metals-6010A (TAL)
Method: EPA 6010
Matrix: LIQUID

Client ID: BONJP2

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/21/98

Quanterra ID : 17397-001MSD

Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dilution
Aluminum	7429-90-5	QCBLK169960-1	04/14/98	04/15/98	105	%REC			1
Antimony	7440-36-0	QCBLK169960-1	04/14/98	04/15/98	107	%REC			1
Barium	7440-39-3	QCBLK169960-1	04/14/98	04/15/98	98	%REC			1
Beryllium	7440-41-7	QCBLK169960-1	04/14/98	04/15/98	108	%REC			1
Cadmium	7440-43-9	QCBLK169960-1	04/14/98	04/15/98	97	%REC			1
Calcium	7440-70-2	QCBLK169960-1	04/14/98	04/15/98	105	%REC			1
Chromium	7440-47-3	QCBLK169960-1	04/14/98	04/15/98	97	%REC			1
Cobalt	7440-48-4	QCBLK169960-1	04/14/98	04/15/98	97	%REC			1
Copper	7440-50-8	QCBLK169960-1	04/14/98	04/15/98	101	%REC			1
Iron	7439-89-6	QCBLK169960-1	04/14/98	04/15/98	93	%REC			1
Magnesium	7439-95-4	QCBLK169960-1	04/14/98	04/15/98	107	%REC			1
Manganese	7439-96-5	QCBLK169960-1	04/14/98	04/15/98	98	%REC			1
Nickel	7440-02-0	QCBLK169960-1	04/14/98	04/15/98	95	%REC			1
Potassium	7440-09-7	QCBLK169960-1	04/14/98	04/15/98	103	%REC			1
Silver	7440-22-4	QCBLK169960-1	04/14/98	04/15/98	77	%REC	N		1
Sodium	7440-23-5	QCBLK169960-1	04/14/98	04/15/98	102	%REC			1
Vanadium	7440-62-2	QCBLK169960-1	04/14/98	04/15/98	100	%REC			1
Zinc	7440-66-6	QCBLK169960-1	04/14/98	04/15/98	98	%REC			1

Bechtel Hanford Incoporated
3350 George Washington Way
Richland, WA 99352

Project: 550.230

Category: Arsenic-7060-(GFAA)
Method: EPA 7000 Series
Matrix: LIQUID

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/21/98

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
BONJP2	17397-001	Arsenic	7440-38-2	QCBLK170102-1	04/16/98	04/16/98	0.60	UG/L	U	10.0	1
BONJP2	17397-001MS	Arsenic	7440-38-2	QCBLK170102-1	04/16/98	04/16/98	97	%REC			1
BONJP2	17397-001MSD	Arsenic	7440-38-2	QCBLK170102-1	04/16/98	04/16/98	94	%REC			1
NA	QCLCS170102-1	Arsenic	7440-38-2	QCBLK170102-1	04/16/98	04/16/98	94	%REC			1
NA	QCBLK170102-1	Arsenic	7440-38-2	QCBLK170102-1	04/16/98	04/16/98	0.60	UG/L	U	10.0	1

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: QUANTERRA_MO_____ Contract: 550.230___

Lab Code: ITMO__ Case No.: _____ SAS No.: _____ SDG No.: W02310_____

SOW No.: SW846

EPA Sample No.	Lab Sample ID
_B0NJP2_____	_17397-001____
_B0NJP2SD_____	_17397-001SD__
_B0NJP2S_____	_17397-001S___

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

B0NJP2

Lab Name: QUANTERRA_MO Contract: 550.230

Lab Code: ITMO Case No.: SAS No.: SDG No.: W02310

Matrix (soil/water): WATER Lab Sample ID: 17397-001

Level (low/med): LOW Date Received: 04/02/98

% 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	542			P
7440-36-0	Antimony	45.7	U		P
7440-38-2	Arsenic	0.60	U		F
7440-39-3	Barium	28.5	B		P
7440-41-7	Beryllium	0.60	U		P
7440-43-9	Cadmium	4.6	U		P
7440-70-2	Calcium	24700			P
7440-47-3	Chromium	2.1	U		P
7440-48-4	Cobalt	3.8	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	144			P
7439-95-4	Magnesium	4980	B	E	P
7439-96-5	Manganese	7.1	B		P
7440-02-0	Nickel	14.2	U		P
7440-09-7	Potassium	2150	U		P
7440-22-4	Silver	5.1	U	N	P
7440-23-5	Sodium	2990	B	E	P
7440-62-2	Vanadium	5.1	B		P
7440-66-6	Zinc	13.1	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

FORM I - IN

SW-846

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 : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/21/98

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
BONJP2	17397-001	pH	PH	QCBLK169353-1	04/07/98	04/07/98	7.25	PH			1
BONJP2	17397-001DUP	pH	PH	QCBLK169353-1	04/07/98	04/07/98	7.26	PH			1
NA	QCBLK169353-1	pH	PH	QCBLK169353-1	04/07/98	04/07/98	5.02	PH			1

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Richland, WA 99352

Project: 550.230

Category: Sulfate
Method: EPA 375.4
Matrix: LIQUID

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/22/98

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
BONJP2	17397-001	Sulfate	14808-79-8	QCBLK170689-1	04/21/98	04/21/98	26.6	MG/L		5.00	1
BONJP2	17397-001DUP	Sulfate	14808-79-8	QCBLK170689-1	04/21/98	04/21/98	27.6	MG/L		5.00	1
BONJP2	17397-001MS	Sulfate	14808-79-8	QCBLK170689-1	04/21/98	04/21/98	103	%REC			1
NA	QCBLK170689-1	Sulfate	14808-79-8	QCBLK170689-1	04/21/98	04/21/98	5.00	MG/L	U	5.00	1
NA	QCLCS170689-1	Sulfate	14808-79-8	QCBLK170689-1	04/21/98	04/21/98	94	%REC			1

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Project: 550.230

Category: TDS-160.1
Method: EPA 160.1
Matrix: LIQUID

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/22/98

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
BONJP2	17397-001	Total Dissolved	TDS	QCBLK169350-1	04/07/98	04/07/98	65.0	MG/L		5.00	1
BONJP2	17397-001DUP	Total Dissolved	TDS	QCBLK169350-1	04/07/98	04/07/98	62.0	MG/L		5.00	1
NA	QCBLK169350-1	Total Dissolved	TDS	QCBLK169350-1	04/07/98	04/07/98	5.00	MG/L	U	5.00	1
NA	QCLCS169350-1	Total Dissolved	TDS	QCBLK169350-1	04/07/98	04/07/98	96	%REC			1

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Project: 550.230

Category: Total Suspended Solids (160.2)
Method: EPA 160.2
Matrix: LIQUID

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/21/98

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
BONJP2	17397-001	Total Suspended	TSS	QCBLK169351-1	04/07/98	04/07/98	6.0	MG/L		1.00	1
BONJP2	17397-001DUP	Total Suspended	TSS	QCBLK169351-1	04/07/98	04/07/98	5.0	MG/L		1.00	1
NA	QCBLK169351-1	Total Suspended	TSS	QCBLK169351-1	04/07/98	04/07/98	1.00	MG/L	U	1.00	1
NA	QCLCS169351-1	Total Suspended	TSS	QCBLK169351-1	04/07/98	04/07/98	98	%REC			1

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Project: 550.230

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

Sample Date : 04/02/98
Receipt Date : 04/02/98
Report Date : 04/22/98

Client ID	Quanterra ID	Analyte	CAS Number	Blank Sample Name	Prep. Date	Analyses Date	Result	Unit	Qual.	Detection Limit	Dil.
BONJP2	17397-001	Residual Chlori	7782-50-5a	QCBLK170206-1	04/16/98	04/16/98	0.10	MG/L	U	0.10	1
BONJP2	17397-001DUP	Residual Chlori	7782-50-5a	QCBLK170206-1	04/16/98	04/16/98	0.10	MG/L	U	0.10	1
NA	QCBLK170206-1	Residual Chlori	7782-50-5a	QCBLK170206-1	04/16/98	04/16/98	0.10	MG/L	U	0.10	1
NA	QCLCS170206-1	Residual Chlori	7782-50-5a	QCBLK170206-1	04/16/98	04/16/98	110	%REC			1