December 3, 1999

ENTERED

Mr. Joe Mauser
Philips Semiconductors, Inc.
9201 Pan American Highway N.E.
Albuquerque, New Mexico 87113

Re: October 1999 Groundwater Monitoring Results
Philips Semiconductor Facility, Albuquerque, New Mexico

Dear Mr. Mauser:

On October 19-21, 1999, personnel from Daniel B. Stephens & Associates, Inc. (DBS&A) collected groundwater samples for Philips Semiconductors, Inc. (Philips). Three samples were collected from Philips wells installed to monitor groundwater conditions associated with the former Coronado Municipal Landfill located near the Philips facility in Albuquerque, New Mexico (Figures 1 and 2). Five samples were collected from City of Albuquerque (COA) wells, the locations of which are also depicted on Figure 2. This report documents the sampling event and presents the results of the laboratory analyses.

Mr. Joe Mauser and Mr. Dave Paulson of Philips provided access and direction for the sampling event. Mr. Jim Calvert and Ms. Betsy Hovda of DBS&A conducted the groundwater monitoring.

Methods

The depth to water in each well was measured and used with the total well depth to determine the required minimum purge volume. The depths to groundwater were measured from the top of each well casing. Measurements from three of the four Philips wells (MW-1, 209.24 feet; MW-2, 198.05 feet; and MW-4, 226.25 feet) ranged from 0.28 to 0.35 foot lower than those observed during the previous monitoring event in July 1999. The depth to groundwater in MW-3 was not measured. Depths to water in the five COA wells (NCLF-2, 200.31 feet; NCLF-3, 205.79 feet; NCLF-4, 244.88 feet; NCLF-5, 165.32 feet; and NCLF-6, 172.24 feet) were 0.26 to 0.50 foot lower than measurements taken three months earlier.

Water quality parameters (pH, electrical conductivity, and temperature) were monitored during purging, and all field measurements and calculations were recorded in a field notebook. Three of the eight wells (MW-1, MW-2, and MW-4) were purged and subsequently sampled using dedicated bladder pumps. Because the water level in the fourth Philips well, MW-3, was too low for adequate sampling, a sample was not collected. However, well MW-3 has historically been unaffected by contamination. The five COA wells (NCLF-2 through NCLF-6) were purged and

Daniel B. Stephens & Associates, Inc.
6020 Academy NE, Suite 100 505-822-9400
Albuquerque, NM 87109 FAX 505-822-8877

sampled using a Bennett submersible piston pump. For all wells, three casing volumes were purged, and water quality parameters were allowed to stabilize before groundwater samples were collected for analysis.

Containers provided by Hall Environmental Analysis Laboratory (HEAL) of Albuquerque, New Mexico, Severn Trent Laboratories (STL, formerly Core Laboratories, Inc.) of Aurora, Colorado, and ACZ Laboratories, Inc. (ACZ) of Steamboat Springs, Colorado, were filled, stored on ice or in a refrigerator until delivery, and submitted for analysis under chain-of-custody documentation. Samples were delivered to STL and ACZ by overnight express and to HEAL by hand.

Laboratory Analysis

The groundwater samples submitted to HEAL were analyzed for semivolatile organic compounds (SVOCs) by U.S. Environmental Protection Agency (EPA) method 8270, pesticides by EPA method 8081, polychlorinated biphenyls (PCBs) by EPA method 8082, ethylene dibromide (EDB) and dibromochloropropane (DBCP) by EPA method 504, and benzo(a)pyrene (BAP) by EPA method 8310. The laboratory reports and chain-of-custody sheets from HEAL are presented in Attachment 1. The groundwater samples submitted to STL were analyzed for volatile organic compounds (VOCs) by EPA method 524.2. Laboratory reports and chain-of-custody sheets from STL are presented in Attachment 2. The groundwater samples submitted to ACZ were analyzed for most metals by EPA methods 6010/6020, mercury by EPA method 7470, and selenium by standard method 3500 Se C. Laboratory reports and chain-of-custody sheets from ACZ are presented in Attachment 3.

Data Quality Assessment

DBS&A has reviewed the analytical reports for compliance with standard data quality objectives, including holding times, surrogate recoveries, matrix spike and matrix spike duplicate recoveries, and relative percent differences. All of the analyses were performed, as requested, within the established or accepted holding times for sample extraction and analysis. Methylene chloride was detected in both VOC method blanks, but was not observed in any of the samples. This does not significantly affect the acceptability of the data from this analysis. The results of the duplicate sample (labeled MW-10) are in agreement with those from well MW-4.

Laboratory Results

The analytes detected during the October 1999 groundwater monitoring event are listed in Table 1. Tetrachloroethene (PCE) was the only VOC consistently detected at concentrations that were near or slightly above the EPA maximum contaminant level (MCL) of 5 micrograms per liter (μg/L). Low concentrations of PCE were observed in samples from all monitor wells except NCLF-5.

One additional VOC was detected in a number of samples. Dichlorodifluoromethane (Freon-12) was detected at concentrations ranging from 0.6 to 2.0 μg/L. These concentrations are far below the EPA health advisory for drinking water, which is 1,000 μg/L.

No SVOCs, pesticides, or PCBs were observed in any of the groundwater samples. In addition, no EDB, DBCP, or BAP were detected in any of the groundwater samples.

The only metal consistently detected in all of the groundwater samples was barium (Table 1). However, all of the barium concentrations are far below the MCL of 1 milligram per liter (mg/L). The sample from monitor well NCLF-4 again contained a low concentration of selenium, well below its MCL.

It has been a pleasure completing this work for you. If you have any questions or comments, please contact me at (505) 822-9400.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

RMeixner

Richard Meixner
Project Manager

REM/mf
Attachments

Figures

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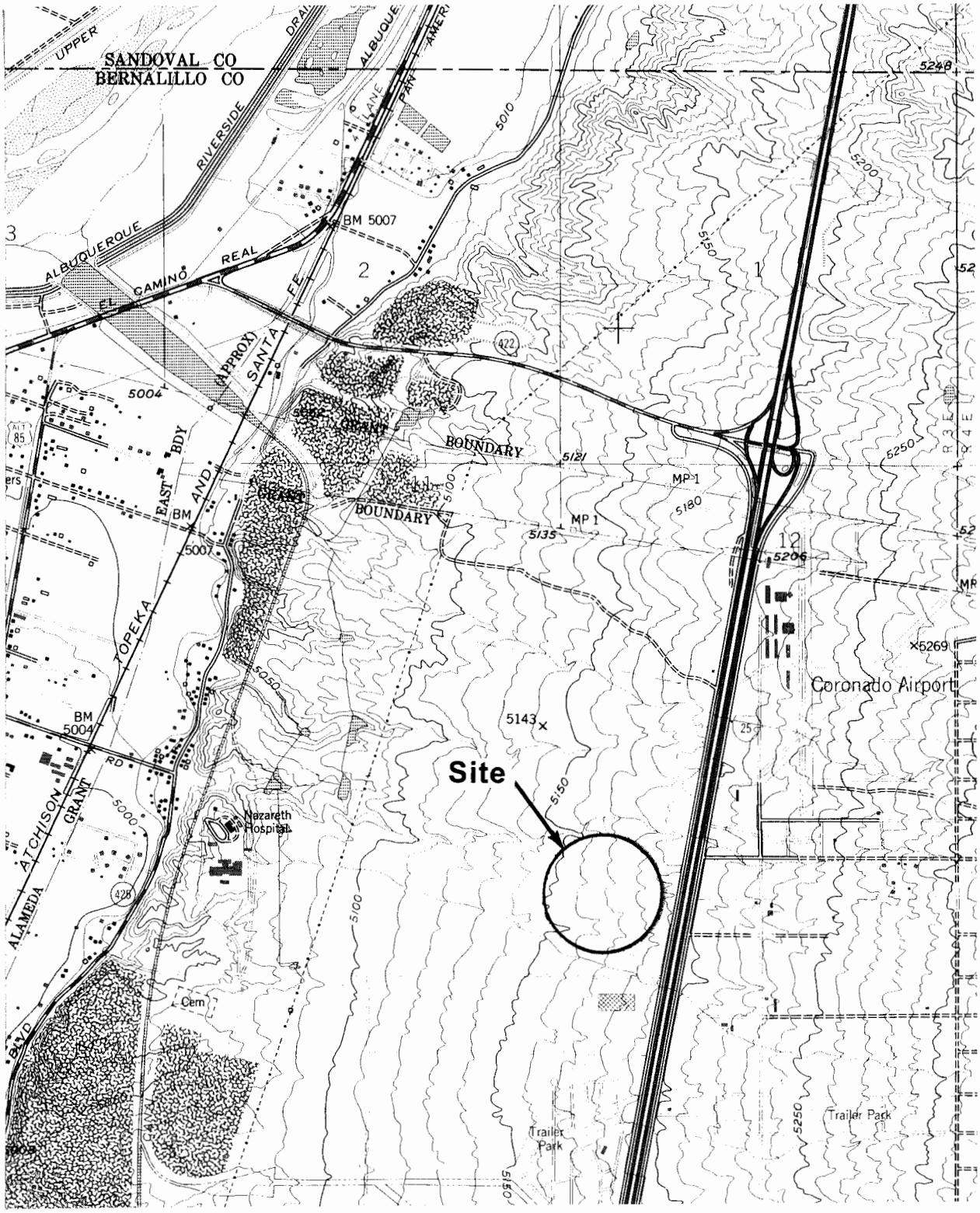

Source: Adapted from Alameda, NM, 7.5 minute USGS quadrangle map.

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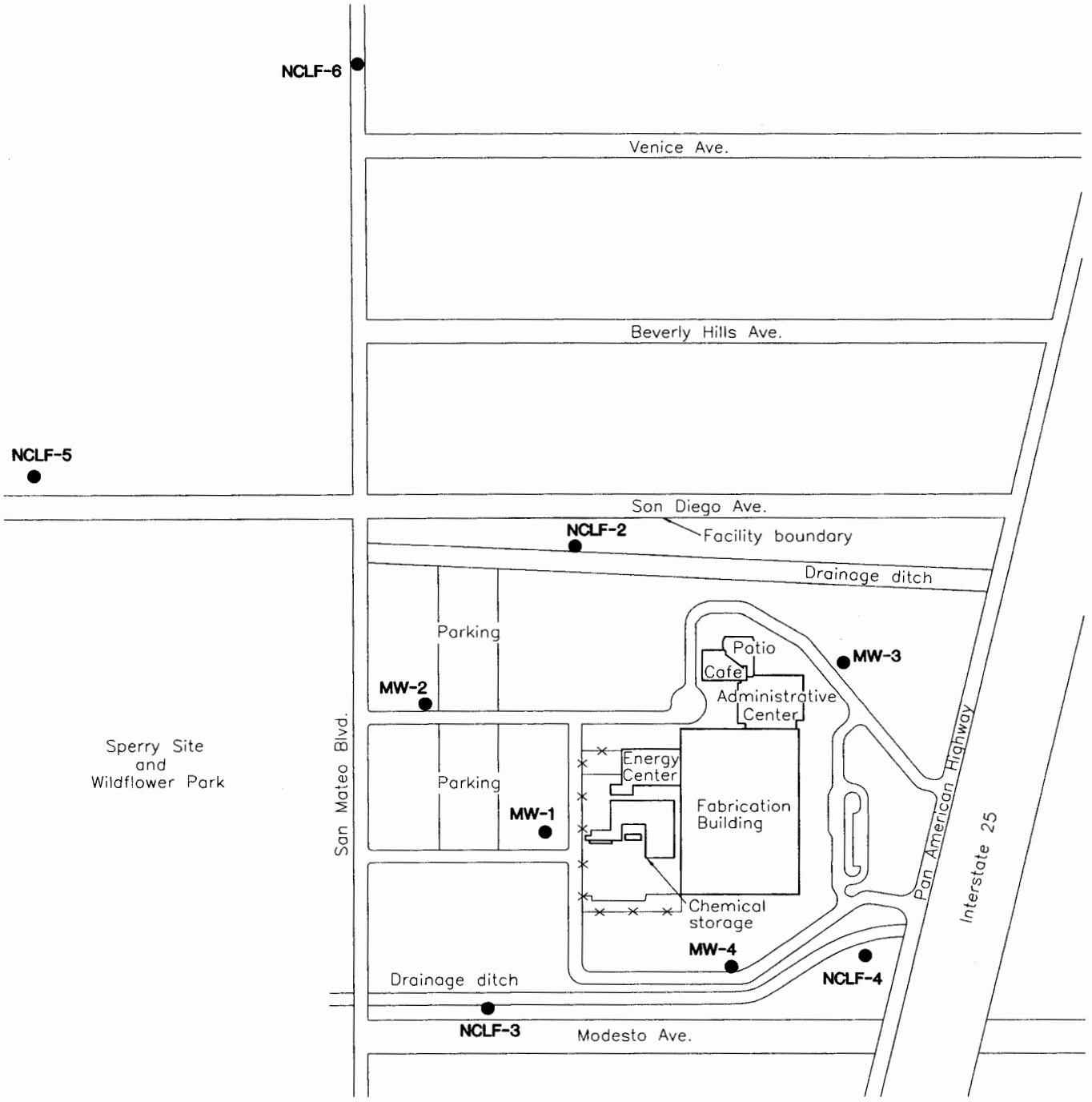
PHILIPS SEMICONDUCTORS, INC.

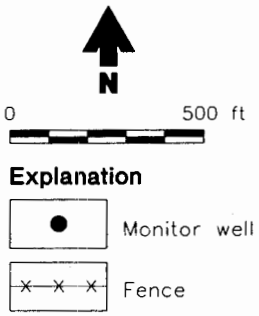
General Site Vicinity

Daniel B. Stephens & Associates, Inc.

12-4-98 JN 6023

Figure 1





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PHILIPS SEMICONDUCTORS, INC.

Site Plan

Daniel B. Stephens & Associates, Inc.

8-12-98

JN 8001

Figure 2

Table

Table 1. Analytes Detected in Philips Semiconductor Monitor Wells October 1999

Monitor Well	VOCs[a]		Metals[b]	
	PCE	Freon-12	Barium	Selenium
Standard[c]	*5*	*1,000*	*1.0*	*0.05*
MW-1	**7.4**	ND	0.14	ND
MW-2	**7.0**	ND	0.107	ND
MW-3	NS	NS	NS	NS
MW-4	4.7	2.0	0.160	ND
MW-10 (Dup of MW-4)	4.8	1.9	0.161	ND
NCLF-2	**7.8**	ND	0.094	ND
NCLF-3	**7.6**	0.6	0.148	ND
NCLF-4	2.7	1.4	0.041	0.013
NCLF-5	ND	ND	0.202	ND
NCLF-6	1.7	ND	0.093	ND

VOCs = Volatile organic compounds
PCE = Tetrachloroethene
Freon-12 = Dichlorodifluoromethane
ND = Not detected above practical quantitation limit
NS = Not sampled, water level below screen
[a] Reported in micrograms per liter
[b] Reported in milligrams per liter
[c] Lowest applicable federal or state drinking water standard (includes federal health advisory for Freon-12)

Note: Entries in boldface exceed applicable standard.

Attachment 1

Hall Environmental Analysis Laboratory, Inc. Analytical Report

RECEIVED NOV 1 9 1999

Hall Environmental Analysis Laboratory

November 18, 1999

Hall Environmental Analysis Laboratory
4901 Hawkins NE, Ste. A
Albuquerque, NM 87109

Daniel B. Stephens & Assoc.
6020 Academy NE Ste. 100
Albuquerque, NM 87109

Dear Mr. Meixner:

Enclosed are the results for the analyses that were requested. These were done according to EPA procedures or equivalent.

Detection limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

11/18/99

Scott Hallenbeck
Laboratory Manager

Project: 9910091/Philips Semiconductors

4901 Hawkins NE, Suite A, Albuquerque, NM 87109
Ph (505) 345-3975, Fax (505) 345-4107

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/19/99
Project:	Philips Semiconductors	**Date Received:**	10/19/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/20/99

EPA Method - 504.1

HEAL ID	Client ID	Dilution	EDB (ug/L)	DBCP (ug/L)	Analysis Date
9910091-1	MW-10	1	ND	ND	10/20/99
9910091-2	MW-4	1	ND	ND	10/20/99
9910091-3	NCLF-4	1	ND	ND	10/20/99
9910091-6	Equipment Blank	1	ND	ND	10/20/99

MRL	0.01	0.01

QA/QC MS/MSD

Sample ID:	Sample Amount		Spike	Recovery	% Recovery	Duplicate	% Recovery	RPD
9910091-4,5	EDC	<0.01	0.1	0.095	95	0.091	91	4
9910091-4,5	DBCP	<0.01	0.1	0.107	107	0.101	101	6

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/19/99
Project:	Philips Semiconductors	**Date Received:**	10/19/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/21/99

EPA Method - 8310

HEAL ID	Client ID	Dilution	Benzo(a)Pyrene (ug/L)	Surrogate %	Analysis Date
Extraction Blank	-	1	ND	85%	10/23/99
9910091-1	MW-10	1	ND	83%	10/23/99
9910091-2	MW-4	1	ND	93%	10/23/99
9910091-3	NCLF-4	1	ND	86%	10/23/99
9910091-6	Equipment Blank	1	ND	84%	10/23/99

MRL	0.02

QA/QC MS/MSD

Sample ID:	Sample Amount	Spike	Recovery	% Recovery	Duplicate	% Recovery	RPD
9910091-4,5	<0.02	0.253	0.196	77	0.210	83	7

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/19/99
Project:	Philips Semiconductors	**Date Received:**	10/19/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Date Extracted:**	10/20/99

EPA Method - 8082

Units: PPB (ug/L)

HEAL LAB ID	Sample ID	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	DCBP % Recovery	Dilution Factor	Date Analyzed
Ext. Blank	-	ND	ND	ND	ND	ND	ND	ND	112%	1	10/21/99
9910091-1	MW-10	ND	ND	ND	ND	ND	ND	ND	116%	1	10/21/99
9910091-2	MW-4	ND	ND	ND	ND	ND	ND	ND	120%	1	10/21/99
9910091-3	NCLF-4	ND	ND	ND	ND	ND	ND	ND	116%	1	10/21/99
9910091-4	Equipment Blank	ND	ND	ND	ND	ND	ND	ND	113%	1	10/21/99
MRL		1.0	5.0	1.0	1.0	1.0	1.0	1.0			

QC: 9910091-4,5 MS/MSD

Analyte	MDL	Spike	Recovery	% Rec.	Duplicate	% Dup.	RPD
Arochlor 1260	1.0	5.0	4.9	98	5.0	100	2

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/19/99
Project:	Philips Semiconductors	**Date Received:**	10/19/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/20/99

EPA Method - 8081

Units PPB (ug/L)

	Client ID:	-	**MW-10**	**MW-4**	**NCLF-4**
	HEAL#:	Extraction Blank	9910091-1	9910091-2	9910091-3
	Analysis Date:	10/25/99	10/25/99	10/25/99	10/25/99
Compound	MDL	Result	Result	Result	Result
Alpha - BHC	0.04	ND	ND	ND	ND
Beta - BHC	0.04	ND	ND	ND	ND
Gamma - BHC	0.04	ND	ND	ND	ND
Delta - BHC	0.04	ND	ND	ND	ND
Heptachlor	0.04	ND	ND	ND	ND
Aldrin	0.04	ND	ND	ND	ND
Heptachlor Epoxide	0.04	ND	ND	ND	ND
Endosulfan I	0.04	ND	ND	ND	ND
Dieldrin	0.04	ND	ND	ND	ND
4-4' DDE	0.04	ND	ND	ND	ND
Endrin	0.04	ND	ND	ND	ND
Endosulfan II	0.04	ND	ND	ND	ND
Endosulfan Sulfate	0.04	ND	ND	ND	ND
Endrin Aldehyde	0.04	ND	ND	ND	ND
4-4' DDT	0.04	ND	ND	ND	ND
4-4' DDD	0.04	ND	ND	ND	ND
Methoxychlor	0.04	ND	ND	ND	ND
Endrin Ketone	0.04	ND	ND	ND	ND
% TCMX		112%	105%	102%	88%
Dilution:		1	1	1	1

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/19/99
Project:	Philips Semiconductors	**Date Received:**	10/19/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/20/99

EPA Method - 8081

Units PPB (ug/L)

Client ID:	**Equipment Blk.**
HEAL#:	9910091-6
Analysis Date:	10/25/99

Compound	MDL	Result
Alpha - BHC	0.04	ND
Beta - BHC	0.04	ND
Gamma - BHC	0.04	ND
Delta - BHC	0.04	ND
Heptachlor	0.04	ND
Aldrin	0.04	ND
Heptachlor Epoxide	0.04	ND
Endosulfan I	0.04	ND
Dieldrin	0.04	ND
4-4' DDE	0.04	ND
Endrin	0.04	ND
Endosulfan II	0.04	ND
Endosulfan Sulfate	0.04	ND
Endrin Aldehyde	0.04	ND
4-4' DDT	0.04	ND
4-4' DDD	0.04	ND
Methoxychlor	0.04	ND
Endrin Ketone	0.04	ND
% TCMX		84%
Dilution:		1

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	NA
Project:	Philips Semiconductors	**Date Received:**	NA
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Date Extracted:**	10/20/99

8081 QC: 9910091-4,5 MS/MSD

Compound	Sample Amount (ug/L)	Spike	Recovery	% Rec	Dup	% Dup	RPD
A-BHC	<0.04	0.2	0.19	95	0.19	95	0
Methoxyclor	<0.04	0.2	0.18	90	0.17	85	6
Heptachlor	<0.04	0.2	0.15	75	0.14	70	7
Endrin	<0.04	0.2	0.17	85	0.17	85	0
4-4' - DDT	<0.04	0.2	0.18	90	0.17	85	6

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/19/99
Project:	Philips Semiconductors	**Date Received:**	10/19/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/24/99

EPA Method - 8270 (page 1)

Units: PPB (ug/L)

Client ID:	-	**MW-10**	**MW-4**
HEAL#:	Extraction Blank	9910091-1	9910091-2
Analysis Date:	10/29/99	10/29/99	10/29/99

Compound	MDL	Result	Result	Result
Acenaphthene	10	ND	ND	ND
Acenaphthylene	10	ND	ND	ND
Aniline	10	ND	ND	ND
Anthracene	10	ND	ND	ND
Benzidine	20	ND	ND	ND
Benzo(a)anthracene	10	ND	ND	ND
Benzo(b)fluoranthene	10	ND	ND	ND
Benzo(k)fluoranthene	10	ND	ND	ND
Benzoic acid	50	ND	ND	ND
Benzo(g,h,I)perlyene	10	ND	ND	ND
Benzo(a)pyrene	10	ND	ND	ND
Benzyl alcohol	20	ND	ND	ND
Bis(2-chloroethoxy)methane	10	ND	ND	ND
Bis(2-chloroethyl)ether	10	ND	ND	ND
Bis(2-chloroisopropyl)ether	10	ND	ND	ND
Bis(2-ethylhexyl)phthalate	10	ND	ND	ND
4-Bromophenyl phenyl ether	10	ND	ND	ND
Butylbenzyl phthalate	10	ND	ND	ND
4-Chloroaniline	20	ND	ND	ND
4-Chloro-3-methyl phenol	20	ND	ND	ND
2-Chloronaphthalene	10	ND	ND	ND
2-Chlorophenol	10	ND	ND	ND
4-Chlorophenyl phenyl ether	10	ND	ND	ND
Chrysene	10	ND	ND	ND
Dibenz(a,h)anthracene	10	ND	ND	ND
Dibenzofuran	10	ND	ND	ND
Di-n-butyl phthalate	10	ND	ND	ND
1,2-Dichlorobenzene	10	ND	ND	ND
1,3-Dichlorobenzene	10	ND	ND	ND
1,4-Dichlorobenzene	10	ND	ND	ND
2,4-Dichlorophenol	10	ND	ND	ND
2,6-Dichlorophenol	10	ND	ND	ND
Diethyl phthalate	10	ND	ND	ND
2,4-Dimethylphenol	10	ND	ND	ND
Dimethyl phthalate	10	ND	ND	ND

(Continued)

EPA Method - 8270 (page 2)

	Client ID:	-	**MW-10**	**MW-4**
	HEAL#:	Extraction Blank	9910091-1	9910091-2
	Analysis Date:	10/29/99	10/29/99	10/29/99
Compound	MDL	Result	Result	Result
4,6-Dinitro-2-methylphenol	50	ND	ND	ND
2,4-Dinitrophenol	50	ND	ND	ND
Di-n-octyl phthalate	10	ND	ND	ND
Fluoranthene	10	ND	ND	ND
Fluorene	10	ND	ND	ND
Hexachlorobenzene	10	ND	ND	ND
Hexachlorobutadiene	10	ND	ND	ND
Hexachlorocyclopentadiene	10	ND	ND	ND
Hexachloroethane	10	ND	ND	ND
Indeno(1,2,3-cd)pyrene	10	ND	ND	ND
Isophorone	10	ND	ND	ND
2-Methylnaphthalene	10	ND	ND	ND
2-Methylphenol	10	ND	ND	ND
4-Methylphenol	10	ND	ND	ND
Naphthalene	10	ND	ND	ND
2-Nitroaniline	50	ND	ND	ND
3-Nitroaniline	50	ND	ND	ND
4-Nitroaniline	20	ND	ND	ND
Nitrobenzene	10	ND	ND	ND
2-Nitrophenol	10	ND	ND	ND
4-Nitrophenol	50	ND	ND	ND
N-Nitrosodimethylamine	20	ND	ND	ND
N-Nitrosodiphenylamine	10	ND	ND	ND
N-Nitrosodi-n-propylamine	10	ND	ND	ND
Pentachlorophenol	50	ND	ND	ND
Phenanthrene	10	ND	ND	ND
Phenol	10	ND	ND	ND
Pyrene	10	ND	ND	ND
1,2,4-Trichlorobenzene	10	ND	ND	ND
2,4,5-Trichlorophenol	10	ND	ND	ND
2,4,6-Trichlorophenol	10	ND	ND	ND
Surrogates:				
2-Fluorophenol		59%	59%	60%
Phenol-d6		44%	45%	42%
Nitrobenzene-d5		72%	84%	83%
2-Fluorobiphenyl		75%	90%	86%
2,4,6-Tribromophenol		73%	74%	74%
Terphenyl-d14		60%	56%	58%
Dilution		1	1	1

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/19/99
Project:	Philips Semiconductors	**Date Received:**	10/19/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/24/99

EPA Method - 8270 (page 1)

Units: PPB (ug/L)

Client ID:	**NCLF-4**	**Equipment Blk.**
HEAL#:	9910091-3	9910091-6
Analysis Date:	10/29/99	10/29/99

Compound	MDL	Result	Result
Acenaphthene	10	ND	ND
Acenaphthylene	10	ND	ND
Aniline	10	ND	ND
Anthracene	10	ND	ND
Benzidine	20	ND	ND
Benzo(a)anthracene	10	ND	ND
Benzo(b)fluoranthene	10	ND	ND
Benzo(k)fluoranthene	10	ND	ND
Benzoic acid	50	ND	ND
Benzo(g,h,I)perlyene	10	ND	ND
Benzo(a)pyrene	10	ND	ND
Benzyl alcohol	20	ND	ND
Bis(2-chloroethoxy)methane	10	ND	ND
Bis(2-chloroethyl)ether	10	ND	ND
Bis(2-chloroisopropyl)ether	10	ND	ND
Bis(2-ethylhexyl)phthalate	10	ND	ND
4-Bromophenyl phenyl ether	10	ND	ND
Butylbenzyl phthalate	10	ND	ND
4-Chloroaniline	20	ND	ND
4-Chloro-3-methyl phenol	20	ND	ND
2-Chloronaphthalene	10	ND	ND
2-Chlorophenol	10	ND	ND
4-Chlorophenyl phenyl ether	10	ND	ND
Chrysene	10	ND	ND
Dibenz(a,h)anthracene	10	ND	ND
Dibenzofuran	10	ND	ND
Di-n-butyl phthalate	10	ND	ND
1,2-Dichlorobenzene	10	ND	ND
1,3-Dichlorobenzene	10	ND	ND
1,4-Dichlorobenzene	10	ND	ND
2,4-Dichlorophenol	10	ND	ND
2,6-Dichlorophenol	10	ND	ND
Diethyl phthalate	10	ND	ND
2,4-Dimethylphenol	10	ND	ND
Dimethyl phthalate	10	ND	ND

(Continued)

EPA Method - 8270 (page 2)

Client ID:	**NCLF-4**	**Equipment Blk.**
HEAL#:	9910091-3	9910091-6
Analysis Date:	10/29/99	10/29/99

Compound	MDL	Result	Result
4,6-Dinitro-2-methylphenol	50	ND	ND
2,4-Dinitrophenol	50	ND	ND
Di-n-octyl phthalate	10	ND	ND
Fluoranthene	10	ND	ND
Fluorene	10	ND	ND
Hexachlorobenzene	10	ND	ND
Hexachlorobutadiene	10	ND	ND
Hexachlorocyclopentadiene	10	ND	ND
Hexachloroethane	10	ND	ND
Indeno(1,2,3-cd)pyrene	10	ND	ND
Isophorone	10	ND	ND
2-Methylnaphthalene	10	ND	ND
2-Methylphenol	10	ND	ND
4-Methylphenol	10	ND	ND
Naphthalene	10	ND	ND
2-Nitroaniline	50	ND	ND
3-Nitroaniline	50	ND	ND
4-Nitroaniline	20	ND	ND
Nitrobenzene	10	ND	ND
2-Nitrophenol	10	ND	ND
4-Nitrophenol	50	ND	ND
N-Nitrosodimethylamine	20	ND	ND
N-Nitrosodiphenylamine	10	ND	ND
N-Nitrosodi-n-propylamine	10	ND	ND
Pentachlorophenol	50	ND	ND
Phenanthrene	10	ND	ND
Phenol	10	ND	ND
Pyrene	10	ND	ND
1,2,4-Trichlorobenzene	10	ND	ND
2,4,5-Trichlorophenol	10	ND	ND
2,4,6-Trichlorophenol	10	ND	ND
Surrogates:			
2-Fluorophenol		58%	54%
Phenol-d6		41%	42%
Nitrobenzene-d5		74%	68%
2-Fluorobiphenyl		85%	74%
2,4,6-Tribromophenol		72%	65%
Terphenyl-d14		54%	52%
Dilution		1	1

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	NA
Project:	Philips Semiconductors	**Date Received:**	NA
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Date Extracted:**	10/24/99

8270 QC: 9910091-4/5 MS/MSD

Compound	Sample Amount (ug/L)	Spike	Recovery	% Rec	Dup	% Dup	RPD
Phenol	<10	200	91	46	80	40	13
2-Chlorophenol	<10	200	136	68	131	66	4
1,4-Dichloro-benzene	<10	100	62	62	55	55	12
n-Niroso-di-n-propylamine	<10	100	73	73	70	70	4
1,2,4-Trichloro-benzene	<10	100	75	75	69	69	8
4-Chloro-3-methylphenol	<20	200	150	75	135	68	11
Acenaphthene	<10	100	77	77	72	72	7
4-Nitrophenol	<50	200	100	50	120	60	18
2,4-Dinitrotoluene	<10	100	70	70	66	66	6
Pentachlorophenol	<50	200	142	71	136	68	4
Pyrene	<10	100	80	80	75	75	6

CHAIN-OF-CUSTODY RECORD

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite A
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Daniel B. Stephens + Assoc., Inc.

Address: 6020 Academy NE. Suite 100 Alb. NM 87109

Phone #: 822-9400

Fax #: 822-8877

Project Name: Philips

Project #: 9001.4

Project Manager: Rich Meixner

Sampler: J. Calvert + B. Hovda

Samples Cold?: ☐ Yes ☐ No

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HCl		HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B MOD (Gas/Diesel)	TPH (Method 418.1)	Volatiles Full List (8021)	EDB (Method 504.1) + DBCP	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Cations (Na, K, Ca, Mg)	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260 (VOA)	8270 (Semi-VOA)			Air Bubbles or Headspace (Y or N)
10-19-99	1112	H_2O	MW-10	2-40ml VOAs 3-1L Ambers	X			9910091-1						X		X				X		X			
10-19-99	1335	H_2O	MW-4	2-40ml VOAs 3-1L Ambers	X			-2						X		X				X		X			
10-19-99	1525	H_2O	NCLF-4	2-40ml VOAs 3-1L Ambers	X			-3						X		X				X		X			
10-19-99	1525	H_2O	NCLF-4-MS	2-40ml VOAs 3-1L Ambers	X			-4						X		X				X		X			
10-19-99	1525	H_2O	NCLF-4-MSD	2-40ml VOAs 3-1L Ambers	X			-5						X		X				X		X			
10-19-99	1700	H_2O	Equipment Blank	2-40ml VOAs 3-1L Ambers	X			-6						X		X				X		X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
10-19-99	1730	Betsy Hovda	10/19/99 @ 1730
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

RECEIVED NOV 1 9 1999

Hall Environmental Analysis Laboratory

November 18, 1999

Hall Environmental Analysis Laboratory
4901 Hawkins NE, Ste. A
Albuquerque, NM 87109

Daniel B. Stephens & Assoc.
6020 Academy NE Ste. 100
Albuquerque, NM 87109

Dear Mr. Meixner:

Enclosed are the results for the analyses that were requested. These were done according to EPA procedures or equivalent.

Detection limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

11/18/99

Scott Hallenbeck
Laboratory Manager

Project: 9910097/Philips Semiconductors

4901 Hawkins NE, Suite A, Albuquerque, NM 87109
Ph (505) 345-3975, Fax (505) 345-4107

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/20/99
Project:	Philips Semiconductors	**Date Received:**	10/21/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/28/99

EPA Method - 504.1

HEAL ID	Client ID	Dilution	EDB (ug/L)	DBCP (ug/L)	Analysis Date
9910097-1	MW-1	1	ND	ND	10/28/99
9910097-2	NCLF-3	1	ND	ND	10/28/99
9910097-3	MW-2	1	ND	ND	10/28/99
9910097-4	NCLF-2	1	ND	ND	10/28/99
9910097-5	NCLF-5	1	ND	ND	10/28/99
Extraction Blank	-	1	ND	ND	10/28/99

MRL	0.01	0.01

QA/QC

Sample ID:	Sample Amount		Spike	Recovery	% Recovery	Duplicate	% Recovery	RPD
BS/BSD 10/28	EDC	<0.01	0.10	0.097	97	0.097	97	0
BS/BSD 10/28	DBCP	<0.01	0.10	0.089	89	0.095	95	7

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/20/99
Project:	Philips Semiconductors	**Date Received:**	10/21/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/22/99

EPA Method - 8310

HEAL ID	Client ID	Dilution	Benzo(a)Pyrene (ug/L)	Surrogate %	Analysis Date
Extraction Blank	-	1	ND	96%	10/25/99
9910097-1	MW-1	1	ND	93%	10/26/99
9910097-2	NCLF-3	1	ND	92%	10/26/99
9910097-3	MW-2	1	ND	93%	10/26/99
9910097-4	NCLF-2	1	ND	94%	10/26/99
9910097-5	NCLF-5	1	ND	95%	10/26/99

MRL	0.02

QA/QC

Sample ID:	Sample Amount	Spike	Recovery	% Recovery	Duplicate	% Recovery	RPD
BS/BSD 10/22	<0.02	0.253	0.193	76	0.202	80	5

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/20/99
Project:	Philips Semiconductors	**Date Received:**	10/21/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Date Extracted:**	10/26/99

EPA Method - 8082

Units: PPB (ug/L)

HEAL LAB ID	Sample ID	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	DCBP % Recovery	Dilution Factor	Date Analyzed
Ext. Blank	-	ND	ND	ND	ND	ND	ND	ND	95%	1	10/28/99
9910097-1	MW-1	ND	ND	ND	ND	ND	ND	ND	101%	1	10/28/99
9910097-2	NCLF-3	ND	ND	ND	ND	ND	ND	ND	101%	1	10/28/99
9910097-3	MW-2	ND	ND	ND	ND	ND	ND	ND	101%	1	10/28/99
9910097-4	NCLF-2	ND	ND	ND	ND	ND	ND	ND	101%	1	10/28/99
9910097-5	NCLF-5	ND	ND	ND	ND	ND	ND	ND	102%	1	10/28/99
MRL		1.0	5.0	1.0	1.0	1.0	1.0	1.0			

QC: BS/BSD 10/26

Analyte	MDL	Spike	Recovery	% Rec.	Duplicate	% Dup.	RPD
Arochlor 1260	1.0	5.0	5.6	112	5.6	112	0

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/20/99
Project:	Philips Semiconductors	**Date Received:**	10/21/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/26/99

EPA Method - 8081

Units PPB (ug/L)

	Client ID:	-	**MW-1**	**NCLF-3**	**MW-2**
	HEAL#:	Extraction Blank	9910097-1	9910097-2	9910097-3
	Analysis Date:	10/27/99	10/27/99	10/27/99	10/27/99
Compound	MDL	Result	Result	Result	Result
Alpha - BHC	0.04	ND	ND	ND	ND
Beta - BHC	0.04	ND	ND	ND	ND
Gamma - BHC	0.04	ND	ND	ND	ND
Delta - BHC	0.04	ND	ND	ND	ND
Heptachlor	0.04	ND	ND	ND	ND
Aldrin	0.04	ND	ND	ND	ND
Heptachlor Epoxide	0.04	ND	ND	ND	ND
Endosulfan I	0.04	ND	ND	ND	ND
Dieldrin	0.04	ND	ND	ND	ND
4-4' DDE	0.04	ND	ND	ND	ND
Endrin	0.04	ND	ND	ND	ND
Endosulfan II	0.04	ND	ND	ND	ND
Endosulfan Sulfate	0.04	ND	ND	ND	ND
Endrin Aldehyde	0.04	ND	ND	ND	ND
4-4' DDT	0.04	ND	ND	ND	ND
4-4' DDD	0.04	ND	ND	ND	ND
Methoxychlor	0.04	ND	ND	ND	ND
Endrin Ketone	0.04	ND	ND	ND	ND
% TCMX		102%	101%	101%	101%
Dilution:		1	1	1	1

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/20/99
Project:	Philips Semiconductors	**Date Received:**	10/21/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/26/99

EPA Method - 8081

Units PPB (ug/L)

	Client ID:	**NCLF-2**	**NCLF-5**
	HEAL#:	9910097-4	9910097-5
	Analysis Date:	10/27/99	10/27/99
Compound	MDL	Result	Result
Alpha - BHC	0.04	ND	ND
Beta - BHC	0.04	ND	ND
Gamma - BHC	0.04	ND	ND
Delta - BHC	0.04	ND	ND
Heptachlor	0.04	ND	ND
Aldrin	0.04	ND	ND
Heptachlor Epoxide	0.04	ND	ND
Endosulfan I	0.04	ND	ND
Dieldrin	0.04	ND	ND
4-4' DDE	0.04	ND	ND
Endrin	0.04	ND	ND
Endosulfan II	0.04	ND	ND
Endosulfan Sulfate	0.04	ND	ND
Endrin Aldehyde	0.04	ND	ND
4-4' DDT	0.04	ND	ND
4-4' DDD	0.04	ND	ND
Methoxychlor	0.04	ND	ND
Endrin Ketone	0.04	ND	ND
% TCMX		101%	102%
Dilution:		1	1

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	NA
Project:	Philips Semiconductors	**Date Received:**	NA
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Date Extracted:**	10/26/99

8081 QC: BS/BSD 10/26

Compound	Sample Amount (ug/L)	Spike	Recovery	% Rec	Dup	% Dup	RPD
Lindane	<0.04	0.2	0.17	85	0.16	80	6
Methoxyclor	<0.04	0.2	0.19	95	0.19	95	0
Heptachlor Epoxide	<0.04	0.2	0.17	85	0.17	85	0
Endrin	<0.04	0.2	0.20	100	0.20	100	0
4-4' - DDT	<0.04	0.2	0.19	95	0.22	110	15

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/20/99
Project:	Philips Semiconductors	**Date Received:**	10/21/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/24/99

EPA Method - 8270 (page 1)

Units: PPB (ug/L)

Client ID:	-	MW-1	NCLF-3
HEAL#:	Extraction Blank	9910097-1	9910097-2
Analysis Date:	10/29/99	10/29/99	10/29/99

Compound	MDL	Result	Result	Result
Acenaphthene	10	ND	ND	ND
Acenaphthylene	10	ND	ND	ND
Aniline	10	ND	ND	ND
Anthracene	10	ND	ND	ND
Benzidine	20	ND	ND	ND
Benzo(a)anthracene	10	ND	ND	ND
Benzo(b)fluoranthene	10	ND	ND	ND
Benzo(k)fluoranthene	10	ND	ND	ND
Benzoic acid	50	ND	ND	ND
Benzo(g,h,I)perlyene	10	ND	ND	ND
Benzo(a)pyrene	10	ND	ND	ND
Benzyl alcohol	20	ND	ND	ND
Bis(2-chloroethoxy)methane	10	ND	ND	ND
Bis(2-chloroethyl)ether	10	ND	ND	ND
Bis(2-chloroisopropyl)ether	10	ND	ND	ND
Bis(2-ethylhexyl)phthalate	10	ND	ND	ND
4-Bromophenyl phenyl ether	10	ND	ND	ND
Butylbenzyl phthalate	10	ND	ND	ND
4-Chloroaniline	20	ND	ND	ND
4-Chloro-3-methyl phenol	20	ND	ND	ND
2-Chloronaphthalene	10	ND	ND	ND
2-Chlorophenol	10	ND	ND	ND
4-Chlorophenyl phenyl ether	10	ND	ND	ND
Chrysene	10	ND	ND	ND
Dibenz(a,h)anthracene	10	ND	ND	ND
Dibenzofuran	10	ND	ND	ND
Di-n-butyl phthalate	10	ND	ND	ND
1,2-Dichlorobenzene	10	ND	ND	ND
1,3-Dichlorobenzene	10	ND	ND	ND
1,4-Dichlorobenzene	10	ND	ND	ND
2,4-Dichlorophenol	10	ND	ND	ND
2,6-Dichlorophenol	10	ND	ND	ND
Diethyl phthalate	10	ND	ND	ND
2,4-Dimethylphenol	10	ND	ND	ND
Dimethyl phthalate	10	ND	ND	ND

(Continued)

EPA Method - 8270 (page 2)

	Client ID:	-	**MW-1**	**NCLF-3**
	HEAL#:	Extraction Blank	9910097-1	9910097-2
	Analysis Date:	10/29/99	10/29/99	10/29/99
Compound	MDL	Result	Result	Result
4,6-Dinitro-2-methylphenol	50	ND	ND	ND
2,4-Dinitrophenol	50	ND	ND	ND
Di-n-octyl phthalate	10	ND	ND	ND
Fluoranthene	10	ND	ND	ND
Fluorene	10	ND	ND	ND
Hexachlorobenzene	10	ND	ND	ND
Hexachlorobutadiene	10	ND	ND	ND
Hexachlorocyclopentadiene	10	ND	ND	ND
Hexachloroethane	10	ND	ND	ND
Indeno(1,2,3-cd)pyrene	10	ND	ND	ND
Isophorone	10	ND	ND	ND
2-Methylnaphthalene	10	ND	ND	ND
2-Methylphenol	10	ND	ND	ND
4-Methylphenol	10	ND	ND	ND
Naphthalene	10	ND	ND	ND
2-Nitroaniline	50	ND	ND	ND
3-Nitroaniline	50	ND	ND	ND
4-Nitroaniline	20	ND	ND	ND
Nitrobenzene	10	ND	ND	ND
2-Nitrophenol	10	ND	ND	ND
4-Nitrophenol	50	ND	ND	ND
N-Nitrosodimethylamine	20	ND	ND	ND
N-Nitrosodiphenylamine	10	ND	ND	ND
N-Nitrosodi-n-propylamine	10	ND	ND	ND
Pentachlorophenol	50	ND	ND	ND
Phenanthrene	10	ND	ND	ND
Phenol	10	ND	ND	ND
Pyrene	10	ND	ND	ND
1,2,4-Trichlorobenzene	10	ND	ND	ND
2,4,5-Trichlorophenol	10	ND	ND	ND
2,4,6-Trichlorophenol	10	ND	ND	ND
Surrogates:				
2-Fluorophenol		59%	59%	56%
Phenol-d6		44%	44%	38%
Nitrobenzene-d5		72%	85%	79%
2-Fluorobiphenyl		75%	88%	82%
2,4,6-Tribromophenol		73%	71%	66%
Terphenyl-d14		60%	54%	53%
Dilution		1	1	1

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/20/99
Project:	Philips Semiconductors	**Date Received:**	10/21/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/24/99

EPA Method - 8270 (page 1)

Units: PPB (ug/L)

Client ID:		**MW-2**	**NCLF-2**	**NCLF-5**
HEAL#:		9910097-3	9910097-4	9910097-5
Analysis Date:		10/30/99	10/30/99	10/30/99
Compound	MDL	Result	Result	Result
Acenaphthene	10	ND	ND	ND
Acenaphthylene	10	ND	ND	ND
Aniline	10	ND	ND	ND
Anthracene	10	ND	ND	ND
Benzidine	20	ND	ND	ND
Benzo(a)anthracene	10	ND	ND	ND
Benzo(b)fluoranthene	10	ND	ND	ND
Benzo(k)fluoranthene	10	ND	ND	ND
Benzoic acid	50	ND	ND	ND
Benzo(g,h,I)perlyene	10	ND	ND	ND
Benzo(a)pyrene	10	ND	ND	ND
Benzyl alcohol	20	ND	ND	ND
Bis(2-chloroethoxy)methane	10	ND	ND	ND
Bis(2-chloroethyl)ether	10	ND	ND	ND
Bis(2-chloroisopropyl)ether	10	ND	ND	ND
Bis(2-ethylhexyl)phthalate	10	ND	ND	ND
4-Bromophenyl phenyl ether	10	ND	ND	ND
Butylbenzyl phthalate	10	ND	ND	ND
4-Chloroaniline	20	ND	ND	ND
4-Chloro-3-methyl phenol	20	ND	ND	ND
2-Chloronaphthalene	10	ND	ND	ND
2-Chlorophenol	10	ND	ND	ND
4-Chlorophenyl phenyl ether	10	ND	ND	ND
Chrysene	10	ND	ND	ND
Dibenz(a,h)anthracene	10	ND	ND	ND
Dibenzofuran	10	ND	ND	ND
Di-n-butyl phthalate	10	ND	ND	ND
1,2-Dichlorobenzene	10	ND	ND	ND
1,3-Dichlorobenzene	10	ND	ND	ND
1,4-Dichlorobenzene	10	ND	ND	ND
2,4-Dichlorophenol	10	ND	ND	ND
2,6-Dichlorophenol	10	ND	ND	ND
Diethyl phthalate	10	ND	ND	ND
2,4-Dimethylphenol	10	ND	ND	ND
Dimethyl phthalate	10	ND	ND	ND

(Continued)

EPA Method - 8270 (page 2)

	Client ID:	**MW-2**	**NCLF-2**	**NCLF-5**
	HEAL#:	9910097-3	9910097-4	9910097-5
	Analysis Date:	10/30/99	10/30/99	10/30/99
Compound	MDL	Result	Result	Result
4,6-Dinitro-2-methylphenol	50	ND	ND	ND
2,4-Dinitrophenol	50	ND	ND	ND
Di-n-octyl phthalate	10	ND	ND	ND
Fluoranthene	10	ND	ND	ND
Fluorene	10	ND	ND	ND
Hexachlorobenzene	10	ND	ND	ND
Hexachlorobutadiene	10	ND	ND	ND
Hexachlorocyclopentadiene	10	ND	ND	ND
Hexachloroethane	10	ND	ND	ND
Indeno(1,2,3-cd)pyrene	10	ND	ND	ND
Isophorone	10	ND	ND	ND
2-Methylnaphthalene	10	ND	ND	ND
2-Methylphenol	10	ND	ND	ND
4-Methylphenol	10	ND	ND	ND
Naphthalene	10	ND	ND	ND
2-Nitroaniline	50	ND	ND	ND
3-Nitroaniline	50	ND	ND	ND
4-Nitroaniline	20	ND	ND	ND
Nitrobenzene	10	ND	ND	ND
2-Nitrophenol	10	ND	ND	ND
4-Nitrophenol	50	ND	ND	ND
N-Nitrosodimethylamine	20	ND	ND	ND
N-Nitrosodiphenylamine	10	ND	ND	ND
N-Nitrosodi-n-propylamine	10	ND	ND	ND
Pentachlorophenol	50	ND	ND	ND
Phenanthrene	10	ND	ND	ND
Phenol	10	ND	ND	ND
Pyrene	10	ND	ND	ND
1,2,4-Trichlorobenzene	10	ND	ND	ND
2,4,5-Trichlorophenol	10	ND	ND	ND
2,4,6-Trichlorophenol	10	ND	ND	ND
Surrogates:				
2-Fluorophenol		55%	58%	58%
Phenol-d6		40%	42%	39%
Nitrobenzene-d5		75%	75%	70%
2-Fluorobiphenyl		75%	77%	76%
2,4,6-Tribromophenol		70%	68%	69%
Terphenyl-d14		75%	58%	68%
Dilution		1	1	1

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	NA
Project:	Philips Semiconductors	**Date Received:**	NA
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Date Extracted:**	10/24/99

8270 QC: 9910091-4/5 MS/MSD

Compound	Sample Amount (ug/L)	Spike	Recovery	% Rec	Dup	% Dup	RPD
Phenol	<10	200	91	46	80	40	13
2-Chlorophenol	<10	200	136	68	131	66	4
1,4-Dichloro-benzene	<10	100	62	62	55	55	12
n-Niroso-di-n-propylamine	<10	100	73	73	70	70	4
1,2,4-Trichloro-benzene	<10	100	75	75	69	69	8
4-Chloro-3-methylphenol	<20	200	150	75	135	68	11
Acenaphthene	<10	100	77	77	72	72	7
4-Nitrophenol	<50	200	100	50	120	60	18
2,4-Dinitrotoluene	<10	100	70	70	65	65	7
Pentachlorophenol	<50	200	142	71	136	68	4
Pyrene	<10	100	80	80	75	75	6

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/21/99
Project:	Philips Semiconductors	**Date Received:**	10/21/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/28/99

EPA Method - 504.1

HEAL ID	Client ID	Dilution	EDB (ug/L)	DBCP (ug/L)	Analysis Date
9910100-1	NCLF-6	1	ND	ND	10/28/99
9910100-2	Trip Blank	1	ND	ND	10/28/99
Extraction Blank	-	1	ND	ND	10/28/99

MRL	0.01	0.01

QA/QC

Sample ID:	Sample Amount		Spike	Recovery	% Recovery	Duplicate	% Recovery	RPD
BS/BSD 10/28	EDC	<0.01	0.10	0.097	97	0.097	97	0
BS/BSD 10/28	DBCP	<0.01	0.10	0.089	89	0.095	95	7

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/21/99
Project:	Philips Semiconductors	**Date Received:**	10/21/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/22/99

EPA Method - 8310

HEAL ID	Client ID	Dilution	Benzo(a)Pyrene (ug/L)	Surrogate %	Analysis Date
Extraction Blank	-	1	ND	96%	10/25/99
9910100-1	NCLF-6	1	ND	96%	10/26/99

MRL	0.02

QA/QC

Sample ID:	Sample Amount	Spike	Recovery	% Recovery	Duplicate	% Recovery	RPD
BS/BSD 10/22	<0.02	0.253	0.193	76	0.202	80	5

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/21/99
Project:	Philips Semiconductors	**Date Received:**	10/21/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Date Extracted:**	10/26/99

EPA Method - 8082

Units: PPB (ug/L)

HEAL LAB ID	Sample ID	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	DCBP % Recovery	Dilution Factor	Date Analyzed
Ext. Blank	-	ND	ND	ND	ND	ND	ND	ND	95%	1	10/28/99
9910100-1	NCLF-6	ND	ND	ND	ND	ND	ND	ND	102%	1	10/28/99
MRL		1.0	5.0	1.0	1.0	1.0	1.0	1.0			

QC: BS/BSD 10/26

Analyte	MDL	Spike	Recovery	% Rec.	Duplicate	% Dup.	RPD
Arochlor 1260	1.0	5.0	5.6	112	5.6	112	0

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/21/99
Project:	Philips Semiconductors	**Date Received:**	10/21/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/26/99

EPA Method - 8081

Units PPB (ug/L)

	Client ID:	-	**NCLF-6**
	HEAL#:	Extraction Blank	9910100-1
	Analysis Date:	10/27/99	10/27/99
Compound	MDL	Result	Result
Alpha - BHC	0.04	ND	ND
Beta - BHC	0.04	ND	ND
Gamma - BHC	0.04	ND	ND
Delta - BHC	0.04	ND	ND
Heptachlor	0.04	ND	ND
Aldrin	0.04	ND	ND
Heptachlor Epoxide	0.04	ND	ND
Endosulfan I	0.04	ND	ND
Dieldrin	0.04	ND	ND
4-4' DDE	0.04	ND	ND
Endrin	0.04	ND	ND
Endosulfan II	0.04	ND	ND
Endosulfan Sulfate	0.04	ND	ND
Endrin Aldehyde	0.04	ND	ND
4-4' DDT	0.04	ND	ND
4-4' DDD	0.04	ND	ND
Methoxychlor	0.04	ND	ND
Endrin Ketone	0.04	ND	ND
% TCMX		102%	102%
Dilution:		1	1

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	NA
Project:	Philips Semiconductors	**Date Received:**	NA
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Date Extracted:**	10/26/99

8081 QC: BS/BSD 10/26

Compound	Sample Amount (ug/L)	Spike	Recovery	% Rec	Dup	% Dup	RPD
Lindane	<0.04	0.2	0.17	85	0.16	80	6
Methoxyclor	<0.04	0.2	0.19	95	0.19	95	0
Heptachlor Epoxide	<0.04	0.2	0.17	85	0.17	85	0
Endrin	<0.04	0.2	0.20	100	0.20	100	0
4-4' - DDT	<0.04	0.2	0.19	95	0.22	110	15

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	10/21/99
Project:	Philips Semiconductors	**Date Received:**	10/21/99
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Extraction Date:**	10/29/99

EPA Method - 8270 (page 1)

Units: PPB (ug/L)

Client ID:		-	**NCLF-6**
HEAL#:		Extraction Blank	9910100-1
Analysis Date:		10/29/99	10/29/99

Compound	MDL	Result	Result
Acenaphthene	10	ND	ND
Acenaphthylene	10	ND	ND
Aniline	10	ND	ND
Anthracene	10	ND	ND
Benzidine	20	ND	ND
Benzo(a)anthracene	10	ND	ND
Benzo(b)fluoranthene	10	ND	ND
Benzo(k)fluoranthene	10	ND	ND
Benzoic acid	50	ND	ND
Benzo(g,h,I)perlyene	10	ND	ND
Benzo(a)pyrene	10	ND	ND
Benzyl alcohol	20	ND	ND
Bis(2-chloroethoxy)methane	10	ND	ND
Bis(2-chloroethyl)ether	10	ND	ND
Bis(2-chloroisopropyl)ether	10	ND	ND
Bis(2-ethylhexyl)phthalate	10	ND	ND
4-Bromophenyl phenyl ether	10	ND	ND
Butylbenzyl phthalate	10	ND	ND
4-Chloroaniline	20	ND	ND
4-Chloro-3-methyl phenol	20	ND	ND
2-Chloronaphthalene	10	ND	ND
2-Chlorophenol	10	ND	ND
4-Chlorophenyl phenyl ether	10	ND	ND
Chrysene	10	ND	ND
Dibenz(a,h)anthracene	10	ND	ND
Dibenzofuran	10	ND	ND
Di-n-butyl phthalate	10	ND	ND
1,2-Dichlorobenzene	10	ND	ND
1,3-Dichlorobenzene	10	ND	ND
1,4-Dichlorobenzene	10	ND	ND
2,4-Dichlorophenol	10	ND	ND
2,6-Dichlorophenol	10	ND	ND
Diethyl phthalate	10	ND	ND
2,4-Dimethylphenol	10	ND	ND
Dimethyl phthalate	10	ND	ND

(Continued)

EPA Method - 8270 (page 2)

Client ID:	-	**NCLF-6**
HEAL#:	Extraction Blank	9910100-1
Analysis Date:	10/29/99	10/29/99

Compound	MDL	Result	Result
4,6-Dinitro-2-methylphenol	50	ND	ND
2,4-Dinitrophenol	50	ND	ND
Di-n-octyl phthalate	10	ND	ND
Fluoranthene	10	ND	ND
Fluorene	10	ND	ND
Hexachlorobenzene	10	ND	ND
Hexachlorobutadiene	10	ND	ND
Hexachlorocyclopentadiene	10	ND	ND
Hexachloroethane	10	ND	ND
Indeno(1,2,3-cd)pyrene	10	ND	ND
Isophorone	10	ND	ND
2-Methylnaphthalene	10	ND	ND
2-Methylphenol	10	ND	ND
4-Methylphenol	10	ND	ND
Naphthalene	10	ND	ND
2-Nitroaniline	50	ND	ND
3-Nitroaniline	50	ND	ND
4-Nitroaniline	20	ND	ND
Nitrobenzene	10	ND	ND
2-Nitrophenol	10	ND	ND
4-Nitrophenol	50	ND	ND
N-Nitrosodimethylamine	20	ND	ND
N-Nitrosodiphenylamine	10	ND	ND
N-Nitrosodi-n-propylamine	10	ND	ND
Pentachlorophenol	50	ND	ND
Phenanthrene	10	ND	ND
Phenol	10	ND	ND
Pyrene	10	ND	ND
1,2,4-Trichlorobenzene	10	ND	ND
2,4,5-Trichlorophenol	10	ND	ND
2,4,6-Trichlorophenol	10	ND	ND
Surrogates:			
2-Fluorophenol		59%	60%
Phenol-d6		44%	38%
Nitrobenzene-d5		72%	72%
2-Fluorobiphenyl		75%	79%
2,4,6-Tribromophenol		73%	68%
Terphenyl-d14		60%	51%
Dilution		1	1

Hall Environmental Analysis Laboratory

Client:	Daniel B. Stephens & Assoc.	**Date Collected:**	NA
Project:	Philips Semiconductors	**Date Received:**	NA
Project Manager:	Rich Meixner	**Sample Matrix:**	Aqueous
Project Number:	9001.4	**Date Extracted:**	10/24/99

8270 QC: 9910091-4/5 MS/MSD

Compound	Sample Amount (ug/L)	Spike	Recovery	% Rec	Dup	% Dup	RPD
Phenol	<10	200	91	46	80	40	13
2-Chlorophenol	<10	200	136	68	131	66	4
1,4-Dichloro-benzene	<10	100	62	62	55	55	12
n-Niroso-di-n-propylamine	<10	100	73	73	70	70	4
1,2,4-Trichloro-benzene	<10	100	75	75	69	69	8
4-Chloro-3-methylphenol	<20	200	150	75	135	68	11
Acenaphthene	<10	100	77	77	72	72	7
4-Nitrophenol	<50	200	100	50	120	60	18
2,4-Dinitrotoluene	<10	100	70	70	65	65	7
Pentachlorophenol	<50	200	142	71	136	68	4
Pyrene	<10	100	80	80	75	75	6

CHAIN-OF-CUSTODY RECORD

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite A
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Daniel B. Stephens + Assoc.

Address: 6020 Academy N.E. Alb. NM ~~87~~ 87109

Phone #: (505) 822-9400

Fax #: (505) 822-8877

Project Name: Philips

Project #: 9001.4

Project Manager: Rich Meixner

Sampler: B. Hovda / J. Calvert

Samples Cold?: ☐ Yes ☐ No

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HCl	Preservative	HEAL No.
10.21.99	1230	Aq	NCLF-6	2-40 ml VOAs 3-1L Amber	X			9910100-1
10/13/99	14:01	Aq	Trip Blank	2/40 ml				-2

ANALYSIS REQUEST

Sample I.D. No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B MOD (Gas/Diesel)	TPH (Method 418.1)	Volatiles Full List (8021)	EDB (Method 504.1) + DBCP	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Cations (Na, K, Ca, Mg)	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260 (VOA)	8270 (Semi-VOA)			Air Bubbles or Headspace (Y or N)
NCLF-6						X		X				X		X			
Trip Blank																	

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
10.21.99	1520	Betsy Hovda	Anne Thone 10/21/99 1520
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

Attachment 2

Severn Trent Laboratories Analytical Report

RECEIVED NOV 0 4 1999

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ANALYTICAL REPORT

JOB NUMBER: 992921

Prepared For:

Daniel B. Stephens & Associates
6020 Academy NE, # 100
Albuquerque, NM 87109

Attention: Rich Meixner

Date: 11/02/1999

Signature

Date 11/2/99

Name: Timothy L. Kellogg

Title: Project Coordinator

Severn Trent Laboratories
10703 East Bethany Drive
Aurora, CO 80014

PHONE: (303) 751-1780
FAX..: (303) 751-1784

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Sample Delivery Group Narrative

November 2, 1999

Customer: Daniel B. Stevens & Associates
Project: 9001.4
Core Laboratory Project Number: 992921

EPA Method 524.2 Volatile Analysis

The method blanks (MB) analyzed on 11/01/99 were outside acceptance criteria for methylene chloride. This compound was not detected in the samples.

All other quality control analyses were acceptable.

Linda L. Benkers
QA/QC Coordinator

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SAMPLE INFORMATION

Date: 11/02/1999

Job Number.: 992921
Customer...: Daniel B. Stephens & Associates
Attn.....: Rich Meixner

Project Number.....: 99000278
Customer Project ID....: 9001.4
Project Description....: Phillips Groundwater Monitoring

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
992921-1	MW-1	Water	10/20/1999	11:15	10/22/1999	10:15
992921-2	MW-2	Water	10/20/1999	15:55	10/22/1999	10:15
992921-3	MW-4	Water	10/20/1999	13:35	10/22/1999	10:15
992921-4	MW-10	Water	10/20/1999	11:12	10/22/1999	10:15
992921-5	NCLF-2	Water	10/20/1999	14:20	10/22/1999	10:15
992921-6	NCLF-3	Water	10/20/1999	11:10	10/22/1999	10:15
992921-7	NCLF-4 MS/MSD	Water	10/20/1999	15:25	10/22/1999	10:15
992921-8	NCLF-5	Water	10/20/1999	15:25	10/22/1999	10:15
992921-9	EQUIPMENT	Water	10/20/1999	15:25	10/22/1999	10:15
992921-10	NCLRF-6	Water	10/20/1999	17:40	10/22/1999	10:15
992921-11	TRIP BLANK	Water	10/20/1999	17:00	10/22/1999	10:15

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates

PROJECT: 9001.4

ATTN: Rich Meixner

Customer Sample ID: MW-1
Date Sampled.....: 10/20/1999
Time Sampled.....: 11:15
Sample Matrix.....: Water

Laboratory Sample ID: 992921-1
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 524.2	Volatile Organics					
	Benzene	ND	0.5	ug/L	11/01/99	mla
	Bromobenzene	ND	0.5	ug/L	11/01/99	mla
	Bromochloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromodichloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromoform	ND	0.5	ug/L	11/01/99	mla
	Bromomethane	ND	0.5	ug/L	11/01/99	mla
	n-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	sec-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butyl methyl ether (MTBE)	ND	0.5	ug/L	11/01/99	mla
	Carbon tetrachloride	ND	0.5	ug/L	11/01/99	mla
	Chlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Chloroethane	ND	0.5	ug/L	11/01/99	mla
	Chloroform	ND	0.5	ug/L	11/01/99	mla
	Chloromethane	ND	0.5	ug/L	11/01/99	mla
	2-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	4-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	Dibromochloromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/01/99	mla
	Dibromomethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,4-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Dichlorodifluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	cis-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	trans-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	2,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	cis-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	trans-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromoethane (EDB)	ND	0.5	ug/L	11/01/99	mla
	Ethylbenzene	ND	0.5	ug/L	11/01/99	mla
	Hexachlorobutadiene	ND	0.5	ug/L	11/01/99	mla
	Isopropylbenzene	ND	0.5	ug/L	11/01/99	mla
	p-Isopropyltoluene	ND	0.5	ug/L	11/01/99	mla
	Methylene chloride	ND	0.5	ug/L	11/01/99	mla
	Naphthalene	ND	0.5	ug/L	11/01/99	mla
	n-Propylbenzene	ND	0.5	ug/L	11/01/99	mla
	Styrene	ND	0.5	ug/L	11/01/99	mla
	1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	Tetrachloroethene	7.4	0.5	ug/L	11/01/99	mla
	Toluene	ND	0.5	ug/L	11/01/99	mla

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L A B O R A T O R Y T E S T R E S U L T S

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates

PROJECT: 9001.4

ATTN: Rich Meixner

Customer Sample ID: MW-1
Date Sampled.....: 10/20/1999
Time Sampled.....: 11:15
Sample Matrix.....: Water

Laboratory Sample ID: 992921-1
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	1,2,3-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,1,1-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	Trichloroethene	ND	0.5	ug/L	11/01/99	mla
	Trichlorofluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,3,5-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,3-Trichloropropane	ND	0.5	ug/L	11/01/99	mla
	Vinyl chloride	ND	0.5	ug/L	11/01/99	mla
	Xylenes (total)	ND	0.5	ug/L	11/01/99	mla

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L A B O R A T O R Y T E S T R E S U L T S

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: MW-2
Date Sampled.....: 10/20/1999
Time Sampled.....: 15:55
Sample Matrix.....: Water

Laboratory Sample ID: 992921-2
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 524.2	Volatile Organics					
	Benzene	ND	0.5	ug/L	11/01/99	mla
	Bromobenzene	ND	0.5	ug/L	11/01/99	mla
	Bromochloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromodichloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromoform	ND	0.5	ug/L	11/01/99	mla
	Bromomethane	ND	0.5	ug/L	11/01/99	mla
	n-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	sec-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butyl methyl ether (MTBE)	ND	0.5	ug/L	11/01/99	mla
	Carbon tetrachloride	ND	0.5	ug/L	11/01/99	mla
	Chlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Chloroethane	ND	0.5	ug/L	11/01/99	mla
	Chloroform	ND	0.5	ug/L	11/01/99	mla
	Chloromethane	ND	0.5	ug/L	11/01/99	mla
	2-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	4-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	Dibromochloromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/01/99	mla
	Dibromomethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,4-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Dichlorodifluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	cis-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	trans-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	2,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	cis-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	trans-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromoethane (EDB)	ND	0.5	ug/L	11/01/99	mla
	Ethylbenzene	ND	0.5	ug/L	11/01/99	mla
	Hexachlorobutadiene	ND	0.5	ug/L	11/01/99	mla
	Isopropylbenzene	ND	0.5	ug/L	11/01/99	mla
	p-Isopropyltoluene	ND	0.5	ug/L	11/01/99	mla
	Methylene chloride	ND	0.5	ug/L	11/01/99	mla
	Naphthalene	ND	0.5	ug/L	11/01/99	mla
	n-Propylbenzene	ND	0.5	ug/L	11/01/99	mla
	Styrene	ND	0.5	ug/L	11/01/99	mla
	1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	Tetrachloroethene	7.0	0.5	ug/L	11/01/99	mla
	Toluene	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates

PROJECT: 9001.4

ATTN: Rich Meixner

Customer Sample ID: MW-2
Date Sampled.....: 10/20/1999
Time Sampled.....: 15:55
Sample Matrix.....: Water

Laboratory Sample ID: 992921-2
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	1,2,3-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,1,1-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	Trichloroethene	ND	0.5	ug/L	11/01/99	mla
	Trichlorofluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,3,5-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,3-Trichloropropane	ND	0.5	ug/L	11/01/99	mla
	Vinyl chloride	ND	0.5	ug/L	11/01/99	mla
	Xylenes (total)	ND	0.5	ug/L	11/01/99	mla

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L A B O R A T O R Y T E S T R E S U L T S

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: MW-4
Date Sampled.....: 10/20/1999
Time Sampled.....: 13:35
Sample Matrix.....: Water

Laboratory Sample ID: 992921-3
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 524.2	Volatile Organics					
	Benzene	ND	0.5	ug/L	11/01/99	mla
	Bromobenzene	ND	0.5	ug/L	11/01/99	mla
	Bromochloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromodichloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromoform	ND	0.5	ug/L	11/01/99	mla
	Bromomethane	ND	0.5	ug/L	11/01/99	mla
	n-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	sec-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butyl methyl ether (MTBE)	ND	0.5	ug/L	11/01/99	mla
	Carbon tetrachloride	ND	0.5	ug/L	11/01/99	mla
	Chlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Chloroethane	ND	0.5	ug/L	11/01/99	mla
	Chloroform	ND	0.5	ug/L	11/01/99	mla
	Chloromethane	ND	0.5	ug/L	11/01/99	mla
	2-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	4-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	Dibromochloromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/01/99	mla
	Dibromomethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,4-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Dichlorodifluoromethane	2.0	0.5	ug/L	11/01/99	mla
	1,2-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	cis-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	trans-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	2,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	cis-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	trans-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromoethane (EDB)	ND	0.5	ug/L	11/01/99	mla
	Ethylbenzene	ND	0.5	ug/L	11/01/99	mla
	Hexachlorobutadiene	ND	0.5	ug/L	11/01/99	mla
	Isopropylbenzene	ND	0.5	ug/L	11/01/99	mla
	p-Isopropyltoluene	ND	0.5	ug/L	11/01/99	mla
	Methylene chloride	ND	0.5	ug/L	11/01/99	mla
	Naphthalene	ND	0.5	ug/L	11/01/99	mla
	n-Propylbenzene	ND	0.5	ug/L	11/01/99	mla
	Styrene	ND	0.5	ug/L	11/01/99	mla
	1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	Tetrachloroethene	4.7	0.5	ug/L	11/01/99	mla
	Toluene	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: MW-4
Date Sampled.....: 10/20/1999
Time Sampled.....: 13:35
Sample Matrix.....: Water

Laboratory Sample ID: 992921-3
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	1,2,3-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,1,1-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	Trichloroethene	ND	0.5	ug/L	11/01/99	mla
	Trichlorofluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,3,5-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,3-Trichloropropane	ND	0.5	ug/L	11/01/99	mla
	Vinyl chloride	ND	0.5	ug/L	11/01/99	mla
	Xylenes (total)	ND	0.5	ug/L	11/01/99	mla

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L A B O R A T O R Y T E S T R E S U L T S

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: MW-10
Date Sampled.....: 10/20/1999
Time Sampled.....: 11:12
Sample Matrix.....: Water

Laboratory Sample ID: 992921-4
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 524.2	Volatile Organics					
	Benzene	ND	0.5	ug/L	11/01/99	mla
	Bromobenzene	ND	0.5	ug/L	11/01/99	mla
	Bromochloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromodichloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromoform	ND	0.5	ug/L	11/01/99	mla
	Bromomethane	ND	0.5	ug/L	11/01/99	mla
	n-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	sec-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butyl methyl ether (MTBE)	ND	0.5	ug/L	11/01/99	mla
	Carbon tetrachloride	ND	0.5	ug/L	11/01/99	mla
	Chlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Chloroethane	ND	0.5	ug/L	11/01/99	mla
	Chloroform	ND	0.5	ug/L	11/01/99	mla
	Chloromethane	ND	0.5	ug/L	11/01/99	mla
	2-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	4-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	Dibromochloromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/01/99	mla
	Dibromomethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,4-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Dichlorodifluoromethane	1.9	0.5	ug/L	11/01/99	mla
	1,2-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	cis-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	trans-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	2,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	cis-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	trans-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromoethane (EDB)	ND	0.5	ug/L	11/01/99	mla
	Ethylbenzene	ND	0.5	ug/L	11/01/99	mla
	Hexachlorobutadiene	ND	0.5	ug/L	11/01/99	mla
	Isopropylbenzene	ND	0.5	ug/L	11/01/99	mla
	p-Isopropyltoluene	ND	0.5	ug/L	11/01/99	mla
	Methylene chloride	ND	0.5	ug/L	11/01/99	mla
	Naphthalene	ND	0.5	ug/L	11/01/99	mla
	n-Propylbenzene	ND	0.5	ug/L	11/01/99	mla
	Styrene	ND	0.5	ug/L	11/01/99	mla
	1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	Tetrachloroethene	4.8	0.5	ug/L	11/01/99	mla
	Toluene	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: MW-10
Date Sampled.....: 10/20/1999
Time Sampled.....: 11:12
Sample Matrix.....: Water

Laboratory Sample ID: 992921-4
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	1,2,3-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,1,1-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	Trichloroethene	ND	0.5	ug/L	11/01/99	mla
	Trichlorofluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,3,5-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,3-Trichloropropane	ND	0.5	ug/L	11/01/99	mla
	Vinyl chloride	ND	0.5	ug/L	11/01/99	mla
	Xylenes (total)	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921 Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: NCLF-2
Date Sampled.....: 10/20/1999
Time Sampled.....: 14:20
Sample Matrix.....: Water

Laboratory Sample ID: 992921-5
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 524.2	Volatile Organics					
	Benzene	ND	0.5	ug/L	11/01/99	mla
	Bromobenzene	ND	0.5	ug/L	11/01/99	mla
	Bromochloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromodichloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromoform	ND	0.5	ug/L	11/01/99	mla
	Bromomethane	ND	0.5	ug/L	11/01/99	mla
	n-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	sec-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butyl methyl ether (MTBE)	ND	0.5	ug/L	11/01/99	mla
	Carbon tetrachloride	ND	0.5	ug/L	11/01/99	mla
	Chlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Chloroethane	ND	0.5	ug/L	11/01/99	mla
	Chloroform	ND	0.5	ug/L	11/01/99	mla
	Chloromethane	ND	0.5	ug/L	11/01/99	mla
	2-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	4-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	Dibromochloromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/01/99	mla
	Dibromomethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,4-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Dichlorodifluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	cis-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	trans-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	2,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	cis-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	trans-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromoethane (EDB)	ND	0.5	ug/L	11/01/99	mla
	Ethylbenzene	ND	0.5	ug/L	11/01/99	mla
	Hexachlorobutadiene	ND	0.5	ug/L	11/01/99	mla
	Isopropylbenzene	ND	0.5	ug/L	11/01/99	mla
	p-Isopropyltoluene	ND	0.5	ug/L	11/01/99	mla
	Methylene chloride	ND	0.5	ug/L	11/01/99	mla
	Naphthalene	ND	0.5	ug/L	11/01/99	mla
	n-Propylbenzene	ND	0.5	ug/L	11/01/99	mla
	Styrene	ND	0.5	ug/L	11/01/99	mla
	1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	Tetrachloroethene	7.8	0.5	ug/L	11/01/99	mla
	Toluene	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: NCLF-2
Date Sampled.....: 10/20/1999
Time Sampled.....: 14:20
Sample Matrix.....: Water

Laboratory Sample ID: 992921-5
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	1,2,3-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,1,1-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	Trichloroethene	ND	0.5	ug/L	11/01/99	mla
	Trichlorofluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,3,5-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,3-Trichloropropane	ND	0.5	ug/L	11/01/99	mla
	Vinyl chloride	ND	0.5	ug/L	11/01/99	mla
	Xylenes (total)	ND	0.5	ug/L	11/01/99	mla

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L A B O R A T O R Y T E S T R E S U L T S

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: NCLF-3
Date Sampled.....: 10/20/1999
Time Sampled.....: 11:10
Sample Matrix.....: Water

Laboratory Sample ID: 992921-6
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 524.2	Volatile Organics					
	Benzene	ND	0.5	ug/L	11/01/99	mla
	Bromobenzene	ND	0.5	ug/L	11/01/99	mla
	Bromochloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromodichloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromoform	ND	0.5	ug/L	11/01/99	mla
	Bromomethane	ND	0.5	ug/L	11/01/99	mla
	n-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	sec-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butyl methyl ether (MTBE)	ND	0.5	ug/L	11/01/99	mla
	Carbon tetrachloride	ND	0.5	ug/L	11/01/99	mla
	Chlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Chloroethane	ND	0.5	ug/L	11/01/99	mla
	Chloroform	ND	0.5	ug/L	11/01/99	mla
	Chloromethane	ND	0.5	ug/L	11/01/99	mla
	2-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	4-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	Dibromochloromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/01/99	mla
	Dibromomethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,4-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Dichlorodifluoromethane	0.6	0.5	ug/L	11/01/99	mla
	1,2-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	cis-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	trans-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	2,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	cis-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	trans-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromoethane (EDB)	ND	0.5	ug/L	11/01/99	mla
	Ethylbenzene	ND	0.5	ug/L	11/01/99	mla
	Hexachlorobutadiene	ND	0.5	ug/L	11/01/99	mla
	Isopropylbenzene	ND	0.5	ug/L	11/01/99	mla
	p-Isopropyltoluene	ND	0.5	ug/L	11/01/99	mla
	Methylene chloride	ND	0.5	ug/L	11/01/99	mla
	Naphthalene	ND	0.5	ug/L	11/01/99	mla
	n-Propylbenzene	ND	0.5	ug/L	11/01/99	mla
	Styrene	ND	0.5	ug/L	11/01/99	mla
	1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	Tetrachloroethene	7.6	0.5	ug/L	11/01/99	mla
	Toluene	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates

PROJECT: 9001.4

ATTN: Rich Meixner

Customer Sample ID: NCLF-3
Date Sampled.....: 10/20/1999
Time Sampled.....: 11:10
Sample Matrix.....: Water

Laboratory Sample ID: 992921-6
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	1,2,3-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,1,1-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	Trichloroethene	ND	0.5	ug/L	11/01/99	mla
	Trichlorofluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,3,5-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,3-Trichloropropane	ND	0.5	ug/L	11/01/99	mla
	Vinyl chloride	ND	0.5	ug/L	11/01/99	mla
	Xylenes (total)	ND	0.5	ug/L	11/01/99	mla

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L A B O R A T O R Y T E S T R E S U L T S

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: NCLF-4 MS/MSD
Date Sampled.....: 10/20/1999
Time Sampled.....: 15:25
Sample Matrix.....: Water

Laboratory Sample ID: 992921-7
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 524.2	Volatile Organics					
	Benzene	ND	0.5	ug/L	11/01/99	mla
	Bromobenzene	ND	0.5	ug/L	11/01/99	mla
	Bromochloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromodichloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromoform	ND	0.5	ug/L	11/01/99	mla
	Bromomethane	ND	0.5	ug/L	11/01/99	mla
	n-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	sec-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butyl methyl ether (MTBE)	ND	0.5	ug/L	11/01/99	mla
	Carbon tetrachloride	ND	0.5	ug/L	11/01/99	mla
	Chlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Chloroethane	ND	0.5	ug/L	11/01/99	mla
	Chloroform	ND	0.5	ug/L	11/01/99	mla
	Chloromethane	ND	0.5	ug/L	11/01/99	mla
	2-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	4-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	Dibromochloromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/01/99	mla
	Dibromomethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,4-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Dichlorodifluoromethane	1.4	0.5	ug/L	11/01/99	mla
	1,2-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	cis-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	trans-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	2,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	cis-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	trans-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromoethane (EDB)	ND	0.5	ug/L	11/01/99	mla
	Ethylbenzene	ND	0.5	ug/L	11/01/99	mla
	Hexachlorobutadiene	ND	0.5	ug/L	11/01/99	mla
	Isopropylbenzene	ND	0.5	ug/L	11/01/99	mla
	p-Isopropyltoluene	ND	0.5	ug/L	11/01/99	mla
	Methylene chloride	ND	0.5	ug/L	11/01/99	mla
	Naphthalene	ND	0.5	ug/L	11/01/99	mla
	n-Propylbenzene	ND	0.5	ug/L	11/01/99	mla
	Styrene	ND	0.5	ug/L	11/01/99	mla
	1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	Tetrachloroethene	2.7	0.5	ug/L	11/01/99	mla
	Toluene	2.0	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates

PROJECT: 9001.4

ATTN: Rich Meixner

Customer Sample ID: NCLF-4 MS/MSD
Date Sampled.....: 10/20/1999
Time Sampled.....: 15:25
Sample Matrix.....: Water

Laboratory Sample ID: 992921-7
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	1,2,3-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,1,1-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	Trichloroethene	ND	0.5	ug/L	11/01/99	mla
	Trichlorofluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,3,5-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,3-Trichloropropane	ND	0.5	ug/L	11/01/99	mla
	Vinyl chloride	ND	0.5	ug/L	11/01/99	mla
	Xylenes (total)	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921 Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: NCLF-5
Date Sampled.....: 10/20/1999
Time Sampled.....: 15:25
Sample Matrix.....: Water

Laboratory Sample ID: 992921-8
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 524.2	Volatile Organics					
	Benzene	ND	0.5	ug/L	11/01/99	mla
	Bromobenzene	ND	0.5	ug/L	11/01/99	mla
	Bromochloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromodichloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromoform	ND	0.5	ug/L	11/01/99	mla
	Bromomethane	ND	0.5	ug/L	11/01/99	mla
	n-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	sec-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butyl methyl ether (MTBE)	ND	0.5	ug/L	11/01/99	mla
	Carbon tetrachloride	ND	0.5	ug/L	11/01/99	mla
	Chlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Chloroethane	ND	0.5	ug/L	11/01/99	mla
	Chloroform	ND	0.5	ug/L	11/01/99	mla
	Chloromethane	ND	0.5	ug/L	11/01/99	mla
	2-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	4-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	Dibromochloromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/01/99	mla
	Dibromomethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,4-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Dichlorodifluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	cis-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	trans-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	2,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	cis-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	trans-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromoethane (EDB)	ND	0.5	ug/L	11/01/99	mla
	Ethylbenzene	ND	0.5	ug/L	11/01/99	mla
	Hexachlorobutadiene	ND	0.5	ug/L	11/01/99	mla
	Isopropylbenzene	ND	0.5	ug/L	11/01/99	mla
	p-Isopropyltoluene	ND	0.5	ug/L	11/01/99	mla
	Methylene chloride	ND	0.5	ug/L	11/01/99	mla
	Naphthalene	ND	0.5	ug/L	11/01/99	mla
	n-Propylbenzene	ND	0.5	ug/L	11/01/99	mla
	Styrene	ND	0.5	ug/L	11/01/99	mla
	1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	Tetrachloroethene	ND	0.5	ug/L	11/01/99	mla
	Toluene	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates

PROJECT: 9001.4

ATTN: Rich Meixner

Customer Sample ID: NCLF-5
Date Sampled.....: 10/20/1999
Time Sampled.....: 15:25
Sample Matrix.....: Water

Laboratory Sample ID: 992921-8
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	1,2,3-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,1,1-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	Trichloroethene	ND	0.5	ug/L	11/01/99	mla
	Trichlorofluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,3,5-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,3-Trichloropropane	ND	0.5	ug/L	11/01/99	mla
	Vinyl chloride	ND	0.5	ug/L	11/01/99	mla
	Xylenes (total)	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: EQUIPMENT
Date Sampled.....: 10/20/1999
Time Sampled.....: 15:25
Sample Matrix.....: Water

Laboratory Sample ID: 992921-9
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 524.2	Volatile Organics					
	Benzene	ND	0.5	ug/L	11/01/99	mla
	Bromobenzene	ND	0.5	ug/L	11/01/99	mla
	Bromochloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromodichloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromoform	1	0.5	ug/L	11/01/99	mla
	Bromomethane	ND	0.5	ug/L	11/01/99	mla
	n-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	sec-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butyl methyl ether (MTBE)	ND	0.5	ug/L	11/01/99	mla
	Carbon tetrachloride	ND	0.5	ug/L	11/01/99	mla
	Chlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Chloroethane	ND	0.5	ug/L	11/01/99	mla
	Chloroform	0.8	0.5	ug/L	11/01/99	mla
	Chloromethane	ND	0.5	ug/L	11/01/99	mla
	2-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	4-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	Dibromochloromethane	0.6	0.5	ug/L	11/01/99	mla
	1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/01/99	mla
	Dibromomethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,4-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Dichlorodifluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	cis-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	trans-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	2,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	cis-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	trans-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromoethane (EDB)	ND	0.5	ug/L	11/01/99	mla
	Ethylbenzene	ND	0.5	ug/L	11/01/99	mla
	Hexachlorobutadiene	ND	0.5	ug/L	11/01/99	mla
	Isopropylbenzene	ND	0.5	ug/L	11/01/99	mla
	p-Isopropyltoluene	ND	0.5	ug/L	11/01/99	mla
	Methylene chloride	ND	0.5	ug/L	11/01/99	mla
	Naphthalene	ND	0.5	ug/L	11/01/99	mla
	n-Propylbenzene	ND	0.5	ug/L	11/01/99	mla
	Styrene	ND	0.5	ug/L	11/01/99	mla
	1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	Tetrachloroethene	ND	0.5	ug/L	11/01/99	mla
	Toluene	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: EQUIPMENT
Date Sampled.....: 10/20/1999
Time Sampled.....: 15:25
Sample Matrix.....: Water

Laboratory Sample ID: 992921-9
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	1,2,3-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,1,1-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	Trichloroethene	ND	0.5	ug/L	11/01/99	mla
	Trichlorofluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,3,5-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,3-Trichloropropane	ND	0.5	ug/L	11/01/99	mla
	Vinyl chloride	ND	0.5	ug/L	11/01/99	mla
	Xylenes (total)	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates

PROJECT: 9001.4

ATTN: Rich Meixner

Customer Sample ID: NCLRF-6
Date Sampled.....: 10/20/1999
Time Sampled.....: 17:40
Sample Matrix.....: Water

Laboratory Sample ID: 992921-10
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 524.2	Volatile Organics					
	Benzene	ND	0.5	ug/L	11/01/99	mla
	Bromobenzene	ND	0.5	ug/L	11/01/99	mla
	Bromochloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromodichloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromoform	ND	0.5	ug/L	11/01/99	mla
	Bromomethane	ND	0.5	ug/L	11/01/99	mla
	n-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	sec-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butyl methyl ether (MTBE)	ND	0.5	ug/L	11/01/99	mla
	Carbon tetrachloride	ND	0.5	ug/L	11/01/99	mla
	Chlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Chloroethane	ND	0.5	ug/L	11/01/99	mla
	Chloroform	ND	0.5	ug/L	11/01/99	mla
	Chloromethane	ND	0.5	ug/L	11/01/99	mla
	2-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	4-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	Dibromochloromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/01/99	mla
	Dibromomethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,4-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Dichlorodifluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	cis-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	trans-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	2,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	cis-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	trans-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromoethane (EDB)	ND	0.5	ug/L	11/01/99	mla
	Ethylbenzene	ND	0.5	ug/L	11/01/99	mla
	Hexachlorobutadiene	ND	0.5	ug/L	11/01/99	mla
	Isopropylbenzene	ND	0.5	ug/L	11/01/99	mla
	p-Isopropyltoluene	ND	0.5	ug/L	11/01/99	mla
	Methylene chloride	ND	0.5	ug/L	11/01/99	mla
	Naphthalene	ND	0.5	ug/L	11/01/99	mla
	n-Propylbenzene	ND	0.5	ug/L	11/01/99	mla
	Styrene	ND	0.5	ug/L	11/01/99	mla
	1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	Tetrachloroethene	1.7	0.5	ug/L	11/01/99	mla
	Toluene	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: NCLRF-6
Date Sampled.....: 10/20/1999
Time Sampled.....: 17:40
Sample Matrix.....: Water

Laboratory Sample ID: 992921-10
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	1,2,3-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,1,1-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	Trichloroethene	ND	0.5	ug/L	11/01/99	mla
	Trichlorofluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,3,5-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,3-Trichloropropane	ND	0.5	ug/L	11/01/99	mla
	Vinyl chloride	ND	0.5	ug/L	11/01/99	mla
	Xylenes (total)	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: TRIP BLANK
Date Sampled.....: 10/20/1999
Time Sampled.....: 17:00
Sample Matrix.....: Water

Laboratory Sample ID: 992921-11
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 524.2	Volatile Organics					
	Benzene	ND	0.5	ug/L	11/01/99	mla
	Bromobenzene	ND	0.5	ug/L	11/01/99	mla
	Bromochloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromodichloromethane	ND	0.5	ug/L	11/01/99	mla
	Bromoform	ND	0.5	ug/L	11/01/99	mla
	Bromomethane	ND	0.5	ug/L	11/01/99	mla
	n-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	sec-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butylbenzene	ND	0.5	ug/L	11/01/99	mla
	tert-Butyl methyl ether (MTBE)	ND	0.5	ug/L	11/01/99	mla
	Carbon tetrachloride	ND	0.5	ug/L	11/01/99	mla
	Chlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Chloroethane	ND	0.5	ug/L	11/01/99	mla
	Chloroform	ND	0.5	ug/L	11/01/99	mla
	Chloromethane	ND	0.5	ug/L	11/01/99	mla
	2-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	4-Chlorotoluene	ND	0.5	ug/L	11/01/99	mla
	Dibromochloromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	11/01/99	mla
	Dibromomethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,4-Dichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	Dichlorodifluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	cis-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	trans-1,2-Dichloroethene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,3-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	2,2-Dichloropropane	ND	0.5	ug/L	11/01/99	mla
	1,1-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	cis-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	trans-1,3-Dichloropropene	ND	0.5	ug/L	11/01/99	mla
	1,2-Dibromoethane (EDB)	ND	0.5	ug/L	11/01/99	mla
	Ethylbenzene	ND	0.5	ug/L	11/01/99	mla
	Hexachlorobutadiene	ND	0.5	ug/L	11/01/99	mla
	Isopropylbenzene	ND	0.5	ug/L	11/01/99	mla
	p-Isopropyltoluene	ND	0.5	ug/L	11/01/99	mla
	Methylene chloride	ND	0.5	ug/L	11/01/99	mla
	Naphthalene	ND	0.5	ug/L	11/01/99	mla
	n-Propylbenzene	ND	0.5	ug/L	11/01/99	mla
	Styrene	ND	0.5	ug/L	11/01/99	mla
	1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	11/01/99	mla
	Tetrachloroethene	ND	0.5	ug/L	11/01/99	mla
	Toluene	ND	0.5	ug/L	11/01/99	mla

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LABORATORY TEST RESULTS

Job Number: 992921

Date: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: 9001.4 ATTN: Rich Meixner

Customer Sample ID: TRIP BLANK
Date Sampled.....: 10/20/1999
Time Sampled.....: 17:00
Sample Matrix.....: Water

Laboratory Sample ID: 992921-11
Date Received.....: 10/22/1999
Time Received.....: 10:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	1,2,3-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trichlorobenzene	ND	0.5	ug/L	11/01/99	mla
	1,1,1-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	1,1,2-Trichloroethane	ND	0.5	ug/L	11/01/99	mla
	Trichloroethene	ND	0.5	ug/L	11/01/99	mla
	Trichlorofluoromethane	ND	0.5	ug/L	11/01/99	mla
	1,2,4-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,3,5-Trimethylbenzene	ND	0.5	ug/L	11/01/99	mla
	1,2,3-Trichloropropane	ND	0.5	ug/L	11/01/99	mla
	Vinyl chloride	ND	0.5	ug/L	11/01/99	mla
	Xylenes (total)	ND	0.5	ug/L	11/01/99	mla

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QUALITY CONTROL RESULTS

Job Number.: 992921

Report Date.: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: Phillips Groundwater Monitorin ATTN: Rich Meixner

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: EPA 524.2
Method Description.: Volatile Organics

Batch.....: 53275
Units.....: ug/L

Analyst...: mla

RS	Reference Standard	V991031D			10/31/1999	2225

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Benzene	9.34		10.0		93.4	%	70-130
Bromodichloromethane	9.78		10.0		97.8	%	70-130
Bromoform	10.30		10.0		103.0	%	70-130
Carbon tetrachloride	9.28		10.0		92.8	%	70-130
Chlorobenzene	10.12		10.0		101.2	%	70-130
Chloroform	9.26		10.0		92.6	%	70-130
Dibromochloromethane	10.10		10.0		101.0	%	70-130
1,2-Dichlorobenzene	10.69		10.0		106.9	%	70-130
1,3-Dichlorobenzene	10.67		10.0		106.7	%	70-130
1,4-Dichlorobenzene	10.28		10.0		102.8	%	70-130
1,2-Dichloroethane	9.46		10.0		94.6	%	70-130
1,1-Dichloroethane	9.54		10.0		95.4	%	70-130
1,1-Dichloroethene	9.47		10.0		94.7	%	70-130
trans-1,2-Dichloroethene	9.06		10.0		90.6	%	70-130
1,2-Dichloropropane	8.96		10.0		89.6	%	70-130
Ethylbenzene	9.87		10.0		98.7	%	70-130
Methylene chloride	10.44		10.0		104.4	%	70-130
1,1,2,2-Tetrachloroethane	10.11		10.0		101.1	%	70-130
Tetrachloroethene	9.71		10.0		97.1	%	70-130
Toluene	9.48		10.0		94.8	%	70-130
1,1,1-Trichloroethane	9.37		10.0		93.7	%	70-130
1,1,2-Trichloroethane	10.12		10.0		101.2	%	70-130
Trichloroethene	9.91		10.0		99.1	%	70-130

MB	Method Blank	AJU14			11/01/1999	0017

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Benzene	ND						0.5
Bromobenzene	ND						0.5
Bromochloromethane	ND						0.5
Bromodichloromethane	ND						0.5
Bromoform	ND						0.5
Bromomethane	ND						0.5
n-Butylbenzene	ND						0.5
sec-Butylbenzene	ND						0.5
tert-Butylbenzene	ND						0.5
tert-Butyl methyl ether (MTBE)	ND						0.5
Carbon tetrachloride	ND						0.5
Chlorobenzene	ND						0.5
Chloroethane	ND						0.5
Chloroform	ND						0.5
Chloromethane	ND						0.5
2-Chlorotoluene	ND						0.5
4-Chlorotoluene	ND						0.5
Dibromochloromethane	ND						0.5
1,2-Dibromo-3-chloropropane	ND						1.0
Dibromomethane	ND						0.5
1,2-Dichlorobenzene	ND						0.5

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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QUALITY CONTROL RESULTS

Job Number.: 992921 Report Date.: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: Phillips Groundwater Monitorin ATTN: Rich Meixner

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank	AJU14			11/01/1999	0017

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
1,3-Dichlorobenzene	ND						0.5
1,4-Dichlorobenzene	ND						0.5
Dichlorodifluoromethane	ND						0.5
1,2-Dichloroethane	ND						0.5
1,1-Dichloroethane	ND						0.5
1,1-Dichloroethene	ND						0.5
cis-1,2-Dichloroethene	ND						0.5
trans-1,2-Dichloroethene	ND						0.5
1,2-Dichloropropane	ND						0.5
1,3-Dichloropropane	ND						0.5
2,2-Dichloropropane	ND						0.5
1,1-Dichloropropene	ND						0.5
cis-1,3-Dichloropropene	ND						0.5
trans-1,3-Dichloropropene	ND						0.5
1,2-Dibromoethane (EDB)	ND						0.5
Ethylbenzene	ND						0.5
Hexachlorobutadiene	ND						0.5
Isopropylbenzene	ND						0.5
p-Isopropyltoluene	ND						0.5
Methylene chloride	0.92						0.5
Naphthalene	ND						0.5
n-Propylbenzene	ND						0.5
Styrene	ND						0.5
1,1,1,2-Tetrachloroethane	ND						0.5
1,1,2,2-Tetrachloroethane	ND						0.5
Tetrachloroethene	ND						0.5
Toluene	ND						0.5
1,2,3-Trichlorobenzene	ND						0.5
1,2,4-Trichlorobenzene	ND						0.5
1,1,1-Trichloroethane	ND						0.5
1,1,2-Trichloroethane	ND						0.5
Trichloroethene	ND						0.5
Trichlorofluoromethane	ND						0.5
1,2,4-Trimethylbenzene	ND						0.5
1,3,5-Trimethylbenzene	ND						0.5
1,2,3-Trichloropropane	ND						0.5
Vinyl chloride	ND						0.5
Xylenes (total)	ND						0.5

Test Method.....: EPA 524.2 Batch.....: 53301 Analyst...: mla
Method Description.: Volatile Organics Units.....: ug/L

RS	Reference Standard	V991101B			11/01/1999	1238

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Benzene	9.51		10.0		95.1	%	70-130
Bromodichloromethane	9.58		10.0		95.8	%	70-130
Bromoform	9.84		10.0		98.4	%	70-130
Carbon tetrachloride	9.30		10.0		93.0	%	70-130
Chlorobenzene	9.89		10.0		98.9	%	70-130
Chloroform	9.25		10.0		92.5	%	70-130

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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QUALITY CONTROL RESULTS

Job Number.: 992921 Report Date.: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: Phillips Groundwater Monitorin ATTN: Rich Meixner

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
RS	Reference Standard	V991101B			11/01/1999	1238

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Dibromochloromethane	9.63		10.0		96.3	%	70-130
1,2-Dichlorobenzene	9.78		10.0		97.8	%	70-130
1,3-Dichlorobenzene	9.98		10.0		99.8	%	70-130
1,4-Dichlorobenzene	9.61		10.0		96.1	%	70-130
1,2-Dichloroethane	9.55		10.0		95.5	%	70-130
1,1-Dichloroethane	9.78		10.0		97.8	%	70-130
1,1-Dichloroethene	9.22		10.0		92.2	%	70-130
trans-1,2-Dichloroethene	9.10		10.0		91.0	%	70-130
1,2-Dichloropropane	9.19		10.0		91.9	%	70-130
Ethylbenzene	9.78		10.0		97.8	%	70-130
Methylene chloride	11.40		10.0		114.0	%	70-130
1,1,2,2-Tetrachloroethane	9.93		10.0		99.3	%	70-130
Tetrachloroethene	9.02		10.0		90.2	%	70-130
Toluene	9.52		10.0		95.2	%	70-130
1,1,1-Trichloroethane	9.51		10.0		95.1	%	70-130
1,1,2-Trichloroethane	9.46		10.0		94.6	%	70-130
Trichloroethene	9.24		10.0		92.4	%	70-130

MB	Method Blank	AK107			11/01/1999 1353

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Benzene	ND						0.5
Bromobenzene	ND						0.5
Bromochloromethane	ND						0.5
Bromodichloromethane	ND						0.5
Bromoform	ND						0.5
Bromomethane	ND						0.5
n-Butylbenzene	ND						0.5
sec-Butylbenzene	ND						0.5
tert-Butylbenzene	ND						0.5
tert-Butyl methyl ether (MTBE)	ND						0.5
Carbon tetrachloride	ND						0.5
Chlorobenzene	ND						0.5
Chloroethane	ND						0.5
Chloroform	ND						0.5
Chloromethane	ND						0.5
2-Chlorotoluene	ND						0.5
4-Chlorotoluene	ND						0.5
Dibromochloromethane	ND						0.5
1,2-Dibromo-3-chloropropane	ND						1.0
Dibromomethane	ND						0.5
1,2-Dichlorobenzene	ND						0.5
1,3-Dichlorobenzene	ND						0.5
1,4-Dichlorobenzene	ND						0.5
Dichlorodifluoromethane	ND						0.5
1,2-Dichloroethane	ND						0.5
1,1-Dichloroethane	ND						0.5
1,1-Dichloroethene	ND						0.5
cis-1,2-Dichloroethene	ND						0.5
trans-1,2-Dichloroethene	ND						0.5
1,2-Dichloropropane	ND						0.5
1,3-Dichloropropane	ND						0.5

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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QUALITY CONTROL RESULTS

Job Number.: 992921 Report Date.: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: Phillips Groundwater Monitorin ATTN: Rich Meixner

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank	AK107			11/01/1999	1353

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
,2-Dichloropropane	ND						0.5
,1-Dichloropropene	ND						0.5
cis-1,3-Dichloropropene	ND						0.5
trans-1,3-Dichloropropene	ND						0.5
,2-Dibromoethane (EDB)	ND						0.5
thylbenzene	ND						0.5
Hexachlorobutadiene	ND						0.5
Isopropylbenzene	ND						0.5
-Isopropyltoluene	ND						0.5
ethylene chloride	0.87						0.5
aphthalene	ND						0.5
n-Propylbenzene	ND						0.5
Styrene	ND						0.5
,1,1,2-Tetrachloroethane	ND						0.5
,1,2,2-Tetrachloroethane	ND						0.5
Tetrachloroethene	ND						0.5
Toluene	ND						0.5
,2,3-Trichlorobenzene	ND						0.5
,2,4-Trichlorobenzene	ND						0.5
,1,1-Trichloroethane	ND						0.5
1,1,2-Trichloroethane	ND						0.5
Trichloroethene	ND						0.5
richlorofluoromethane	ND						0.5
,2,4-Trimethylbenzene	ND						0.5
1,3,5-Trimethylbenzene	ND						0.5
1,2,3-Trichloropropane	ND						0.5
inyl chloride	ND						0.5
ylenes (total)	ND						0.5

MS	Matrix Spike	V991101C	992921-7		11/01/1999 1940

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Benzene	8.98		9.940	ND	90.3	%	70-130
hlorobenzene	10.19		9.900	ND	102.9	%	70-130
,1-Dichloroethene	7.78		9.780	ND	79.6	%	70-130
oluene	10.92		9.920	2.05	89.4	%	70-130
Trichloroethene	8.31		9.940	ND	83.6	%	70-130

MSD	Matrix Spike Duplicate	V991101C	992921-7		11/01/1999 2017

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
enzene	9.04	8.98	9.940	ND	90.9	%	70-130
					0.7	R	20
Chlorobenzene	10.18	10.19	9.900	ND	102.8	%	70-130
					0.1	R	20
,1-Dichloroethene	7.78	7.78	9.780	ND	79.6	%	70-130
					0.0	R	20
Toluene	10.99	10.92	9.920	2.05	90.1	%	70-130
					0.6	R	20
richloroethene	8.47	8.31	9.940	ND	85.2	%	70-130
					1.9	R	20

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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S U R R O G A T E R E C O V E R I E S R E P O R T

Job Number.: 992921

Report Date.: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: Phillips Groundwater Monitorin ATTN: Rich Meixner

Method.....: Volatile Organics
Method Code.....: 524.2

Batch.....: 53275
Analyst.....: mla

Surrogate	Units
1,4-Dichlorobenzene-d4	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		RS	1.00	10.26	10.000	103	80-120		10/31/1999	2225
		MB	1.00	10.30	10.000	103	80-120		11/01/1999	0017
992901-1			1.00	10.27	10.000	103	80-120		11/01/1999	0055
992914-1			1.00	10.21	10.000	102	80-120		11/01/1999	0133
992914-2			1.00	10.10	10.000	101	80-120		11/01/1999	0210
992914-3			1.00	10.01	10.000	100	80-120		11/01/1999	0248
992914-4			1.00	9.90	10.000	99	80-120		11/01/1999	0325
992921-11			1.00	10.11	10.000	101	80-120		11/01/1999	0403
992921-9			1.00	10.02	10.000	100	80-120		11/01/1999	0441

Surrogate	Units
4-Bromofluorobenzene	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		RS	1.00	10.40	10.00	104.0	80-120		10/31/1999	2225
		MB	1.00	10.22	10.00	102.2	80-120		11/01/1999	0017
992901-1			1.00	10.32	10.00	103.2	80-120		11/01/1999	0055
992914-1			1.00	10.28	10.00	102.8	80-120		11/01/1999	0133
992914-2			1.00	10.32	10.00	103.2	80-120		11/01/1999	0210
992914-3			1.00	10.32	10.00	103.2	80-120		11/01/1999	0248
992914-4			1.00	10.12	10.00	101.2	80-120		11/01/1999	0325
992921-11			1.00	10.19	10.00	101.9	80-120		11/01/1999	0403
992921-9			1.00	10.03	10.00	100.3	80-120		11/01/1999	0441

Method.....: Volatile Organics
Method Code.....: 524.2

Batch.....: 53301
Analyst.....: mla

Surrogate	Units
1,4-Dichlorobenzene-d4	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		RS	1.00	9.94	10.000	99	80-120		11/01/1999	1238
		MB	1.00	9.72	10.000	97	80-120		11/01/1999	1353
992914-1			10.0	9.68	10.000	96.8	80-120		11/01/1999	1431
992921-1			1.00	9.54	10.000	95	80-120		11/01/1999	1508
992921-2			1.00	10.88	10.000	109	80-120		11/01/1999	1546
992921-3			1.00	9.92	10.000	99	80-120		11/01/1999	1623
992921-4			1.00	9.76	10.000	98	80-120		11/01/1999	1700
992921-5			1.00	10.31	10.000	103	80-120		11/01/1999	1747

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Severn Trent Services Inc.

Committed To *Your* Success

S U R R O G A T E R E C O V E R I E S R E P O R T

Job Number.: 992921

Report Date.: 11/02/1999

CUSTOMER: Daniel B. Stephens & Associates PROJECT: Phillips Groundwater Monitorin ATTN: Rich Meixner

Surrogate	Units
1,4-Dichlorobenzene-d4	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
992921-6			1.00	9.82	10.000	98	80-120		11/01/1999	1824
992921-7			1.00	9.97	10.000	100	80-120		11/01/1999	1902
992921-7		MS		10.22	10.000	102	80-120		11/01/1999	1940
992921-7		MSD		10.13	10.000	101	80-120		11/01/1999	2017
992921-8			1.00	10.16	10.000	102	80-120		11/01/1999	2055
992921-10			1.00	10.10	10.000	101	80-120		11/01/1999	2132
992927-1			1.00	9.92	10.000	99	80-120		11/01/1999	2210

Surrogate	Units
4-Bromofluorobenzene	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		RS	1.00	10.32	10.00	103.2	80-120		11/01/1999	1238
		MB	1.00	10.19	10.00	101.9	80-120		11/01/1999	1353
992914-1			10.0	10.16	10.00	101.6	80-120		11/01/1999	1431
992921-1			1.00	10.06	10.00	100.6	80-120		11/01/1999	1508
992921-2			1.00	11.52	10.00	115.2	80-120		11/01/1999	1546
992921-3			1.00	10.31	10.00	103.1	80-120		11/01/1999	1623
992921-4			1.00	10.44	10.00	104.4	80-120		11/01/1999	1700
992921-5			1.00	10.55	10.00	105.5	80-120		11/01/1999	1747
992921-6			1.00	10.57	10.00	105.7	80-120		11/01/1999	1824
992921-7			1.00	10.16	10.00	101.6	80-120		11/01/1999	1902
992921-7		MS		10.50	10.00	105.0	80-120		11/01/1999	1940
992921-7		MSD		10.52	10.00	105.2	80-120		11/01/1999	2017
992921-8			1.00	10.35	10.00	103.5	80-120		11/01/1999	2055
992921-10			1.00	10.84	10.00	108.4	80-120		11/01/1999	2132
992927-1			1.00	10.35	10.00	103.5	80-120		11/01/1999	2210

a part of
Severn Trent Services Inc.

CORE LAB

CORE LABORATORIES, INC.

No. 188045

CHAIN OF CUSTODY RECORD

pg. 1 of 2

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Daniel B. Stephens + Assoc, Inc.	PROJECT NAME/NUMBER: 9001.4
SEND REPORT TO: Rich Meixner	BILLING INFORMATION
ADDRESS: 6020 Academy Blvd. N.E.	BILL TO: DBS+A
Suite 100	ADDRESS: same as customer info
Albuquerque, NM 87109	
PHONE: (505) 822-9400	PHONE:
FAX: (505) 822-8877	FAX: PO NO.:

LAB JOB NO. 992921

SAMPLE NO.	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER	PRESERV.	NUMBER OF CONTAINERS	VOCs 524.2	REMARKS / PRECAUTIONS
~~MW-1~~	MW-1	10-20-99	1115	H_2O	40ml VOAs	HCl	3	X	
~~MW-2~~	MW-2	10-20-99	1455	H_2O	40ml VOA	HCl	3	X	
~~MW-4~~	MW-4	10-19-99	1335	H_2O	40ml VOA	HCl	3	X	
~~MW-10~~	MW-10	10-19-99	1112	H_2O	40ml VOA	HCl	3	X	
~~NCLF-2~~	NCLF-2	10-20-99	1420	H_2O	40ml VOA	HCl	3	X	
~~NCLF-3~~	NCLF-3	10-20-99	1110	H_2O	40ml VOA	HCl	3	X	
~~NCLF-4~~	NCLF-4	10-19-99	1525	H_2O	40ml VOA	HCl	3	X	
~~NCLF-5~~	NCLF-4-MS	10-19-99	1525	H_2O	40ml VOA	HCl	3	X	
~~NCLF-6~~	NCLF-4-MSD	10-19-99	1525	H_2O	40ml VOA	HCl	3	X	
~~Equipment~~	NCLF-5	10-20-99	1740	H_2O	40ml VOA	HCl	3	X	

Temp Blank = 1.3°C DG

SAMPLER: SHIPMENT METHOD: FED EX AIRBILL NO.: 7907 8120 1080

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☐ 5 DAYS ☐ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Betsy Hovda to Fed Ex	10.21.99	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: BETSY HOVDA	TIME 1530	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE: Michelle Weatherford	10/22/99	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: CORE	TIME 1 of 5	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ Anaheim, CA
1250 E. Gene Autry Way
Anaheim, CA 92805
(714) 937-1094 Fax (714) 937-1170

☐ Aurora, CO
10703 E. Bethany Drive
Aurora, CO 80014
(303) 751-1780 Fax (303) 751-1784

☐ Casper, WY
420 W. First Street
Casper, WY 82601
(307) 235-5741 Fax (307) 266-1676

☐ Corpus Christi, TX
1733 N. Padre Island Drive
Corpus Christi, TX 78408
(361) 289-2673 Fax (361) 289-2471

☐ Houston, TX (Env)
6310 Rothway Drive
Houston, TX 77040
(713) 690-4444 Fax (713) 690-5646

☐ Houston, TX (Pet)
8210 Mosley Road
Houston, TX 77075
(713) 943-9776 Fax (713) 943-2846

☐ Lake Charles, LA
3645 Beglis Parkway
Sulphur, LA 70663
(318) 583-4996 Fax (318) 583-4999

☐ Valparaiso, IN
2400 Cumberland Drive
Valparaiso, IN 46383
(219) 464-2389 Fax (219) 462-2953

CORE LAB

CORE LABORATORIES, INC.

No. 108850

CHAIN OF CUSTODY RECORD

Pg 2 of 2

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Daniel B. Stephens & Assoc., Inc.	PROJECT NAME/NUMBER: 9001.4
SEND REPORT TO: Rich Meixner	BILLING INFORMATION
ADDRESS: 6020 Academy N.E. Suite 100, Albuquerque, NM 87109	BILL TO: Same as Customer Info
	ADDRESS:
PHONE: (505) 822-9400	PHONE:
FAX: (505) 822-9400	FAX: PO NO.:

LAB JOB NO. 992921

SAMPLE NO.	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER	PRESERV.	NUMBER OF CONTAINERS	ANALYSIS / METHOD REQUEST: VOCs 524.2	REMARKS / PRECAUTIONS
~~NCLF-7~~	Equipment	10-19-99	1700	H_2O	40ml VOA	HCl	3	X	
	NCLF-6	10-21-99	1230	H_2O	40ml VOA	HCl	3	X	
	Trip Blank								

Temp Blank = 1.3°C
DG

SAMPLER:

SHIPMENT METHOD: FED EX

AIRBILL NO.: 7907812 01080

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☐ 5 DAYS ☐ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Betsy Hovda to Fed Ex	10-21-99	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: BETSY HOVDA	TIME 1530	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE: Michelle Weatherford	10/22/99	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY:	TIME 1015	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ **Anaheim, CA**
1250 E. Gene Autry Way
Anaheim, CA 92805
(714) 937-1094 Fax (714) 937-1170

☐ **Houston, TX (Env)**
6310 Rothway Drive
Houston, TX 77040
(713) 690-4444 Fax (713) 690-5646

☐ **Aurora, CO**
10703 E. Bethany Drive
Aurora, CO 80014
(303) 751-1780 Fax (303) 751-1784

☐ **Houston, TX (Pet)**
8210 Mosley Road
Houston, TX 77075
(713) 943-9776 Fax (713) 943-3846

☐ **Casper, WY**
420 W. First Street
Casper, WY 82601
(307) 235-5741 Fax (307) 266-1676

☐ **Lake Charles, LA**
3645 Beglis Parkway
Sulphur, LA 70663
(318) 583-4926 Fax (318) 583-4929

☐ **Corpus Christi, TX**
1733 N. Padre Island Drive
Corpus Christi, TX 78408
(361) 289-2673 Fax (361) 289-2471

☐ **Valparaiso, IN**
2400 Cumberland Drive
Valparaiso, IN 46383
(219) 464-2389 Fax (219) 462-2953

Attachment 3

ACZ Laboratories, Inc.
Analytical Report

RECEIVED DEC 0 3 1999

ACZ Laboratories, Inc.

CASE NARRATIVE
December 2, 1999

Client:	Daniel B. Stephens & Associates
Project:	Philips Semiconductor 9001.2
Matrix:	Aqueous
Date Received:	10/22/99
Laboratory Nos.:	L25265-01 through L25265-12

Sample Receipt:

ACZ Laboratories Inc. (ACZ) received ten (10) aqueous samples from the Philips Semiconductor location on October 22, 1999. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels. No anomalies were noted regarding the samples receipt.

Analytical methods:

The samples were analyzed by the methods specified on the chain of custody. They included a list of total metals by SW846 6000/7000.

Holding Times:

All analytes were performed within EPA recommended holding times.

Quality Control:

1. The Cadmium values on L25265-01 and –02 have been qualified as estimated due to matrix interferences. The raw data quantitated at levels slightly below the negative detection limit, i.e -0.005 mg/L.
2. The Silver on samples L25265-10 through L25265-12 are associated with a failed final contiuing calibration blank caused by carryover from the sample's matrix. The samples were re-analyzed several times with similar results obtained.

S. Scott Habermehl

Scott Habermehl, Project Management

2773 Downhill Drive
Steamboat Springs, CO 80487

Phone (800) 334-5493
FAX No. (970) 879-2216

ACZ

Analytical Results

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: ***L25265-01***
Client Sample ID: *MW-1*
Client Project ID: *9001.4*
ACZ Report ID: *RG107026*

Daniel B. Stephens & Associates
6020 Academy NE Suite 100
Albuquerque, NM 87109
Richard Meixner

Date Sampled: *10/20/1999 11:15:00 AM*
Date Received: *10/22/1999*
Date Reported: *11/29/1999*

Sample Matrix: *Ground Water*

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Antimony, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Arsenic, total	M6020 ICP-MS	0.002	B	mg/L	0.001	0.006	11/17/1999	fep
Barium, total	M6010B ICP	0.14		mg/L	0.03	0.1	11/19/1999	jb
Beryllium, total	M6010B ICP		U	mg/L	0.0025	0.012	11/13/1999	krist
Cadmium, total	M6010B ICP		U	mg/L	0.03	0.2	11/19/1999	jb
Chromium, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Cobalt, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Copper, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Lead, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Mercury, total	M7470 CVAA		U	mg/L	0.0002	0.001	11/16/1999	ms
Nickel, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Selenium, total	SM 3500-Se C, AA-Hydride		U	mg/L	0.001	0.005	11/16/1999	ms
Silver, total	M6010B ICP		U	mg/L	0.06	0.3	11/19/1999	jb
Thallium, total	M6020 ICP-MS		U	mg/L	0.0001	0.0006	11/17/1999	fep
Tin, total	M6010B ICP		U	mg/L	0.12	0.62	11/13/1999	krist
Vanadium, total	M6010B ICP		U	mg/L	0.0062	0.031	11/13/1999	krist
Zinc, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist

Metals Prep

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Total Digestion	M3015 ICP						11/10/1999	tdr
Total Digestion	M3015 ICP-MS						11/10/1999	tdr

Note: The Cadmium value is estimated due to matrix interferences.

Inorganic Qualifiers (based on EPA CLP 3/90)
U = Analyte was analyzed for but not detected at the indicated MDL
B = Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

S. Haarmehl for

Vice President of Operations: Ralph Poulsen

ACZ

Analytical Results

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: ***L25265-02***
Client Sample ID: *MW-2*
Client Project ID: *9001.4*
ACZ Report ID: *RG107027*

Daniel B. Stephens & Associates
6020 Academy NE Suite 100
Albuquerque, NM 87109
Richard Meixner

Date Sampled: *10/20/1999 2:55:00 PM*
Date Received: *10/22/1999*
Date Reported: *11/29/1999*

Sample Matrix: *Ground Water*

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Antimony, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Arsenic, total	M6020 ICP-MS	0.002	B	mg/L	0.001	0.006	11/17/1999	fep
Barium, total	M6010B ICP	0.1070		mg/L	0.0037	0.012	11/13/1999	krist
Beryllium, total	M6010B ICP		U	mg/L	0.0025	0.012	11/13/1999	krist
Cadmium, total	M6010B ICP		U	mg/L	0.03	0.2	11/19/1999	jb
Chromium, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Cobalt, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Copper, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Lead, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Mercury, total	M7470 CVAA		U	mg/L	0.0002	0.001	11/16/1999	ms
Nickel, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Selenium, total	SM 3500-Se C, AA-Hydride		U	mg/L	0.001	0.005	11/16/1999	ms
Silver, total	M6010B ICP		U	mg/L	0.06	0.3	11/19/1999	jb
Thallium, total	M6020 ICP-MS		U	mg/L	0.0001	0.0006	11/17/1999	fep
Tin, total	M6010B ICP		U	mg/L	0.12	0.62	11/13/1999	krist
Vanadium, total	M6010B ICP		U	mg/L	0.0062	0.031	11/13/1999	krist
Zinc, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist

Metals Prep

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Total Digestion	M3015 ICP						11/10/1999	tdr
Total Digestion	M3015 ICP-MS						11/10/1999	tdr

Note: The Cadmium value is estimated due to matrix interferences.

Inorganic Qualifiers (based on EPA CLP 3/90)
U = Analyte was analyzed for but not detected at the indicated MDL
B = Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

S.H.

Vice President of Operations: Ralph Poulsen

ACZ

Analytical Results

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: ***L25265-03***
Client Sample ID: *MW-4*
Client Project ID: *9001.4*
ACZ Report ID: *RG107028*

Daniel B. Stephens & Associates
6020 Academy NE Suite 100
Albuquerque, NM 87109
Richard Meixner

Date Sampled: *10/19/1999 1:35:00 PM*
Date Received: *10/22/1999*
Date Reported: *11/29/1999*

Sample Matrix: *Ground Water*

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Antimony, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Arsenic, total	M6020 ICP-MS	0.002	B	mg/L	0.001	0.006	11/17/1999	fep
Barium, total	M6010B ICP	0.1600		mg/L	0.0037	0.012	11/13/1999	krist
Beryllium, total	M6010B ICP		U	mg/L	0.0025	0.012	11/13/1999	krist
Cadmium, total	M6010B ICP		U	mg/L	0.007	0.03	11/19/1999	jb
Chromium, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Cobalt, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Copper, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Lead, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Mercury, total	M7470 CVAA		U	mg/L	0.0002	0.001	11/16/1999	ms
Nickel, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Selenium, total	SM 3500-Se C, AA-Hydride		U	mg/L	0.001	0.005	11/16/1999	ms
Silver, total	M6010B ICP		U	mg/L	0.01	0.06	11/19/1999	jb
Thallium, total	M6020 ICP-MS		U	mg/L	0.0001	0.0006	11/17/1999	fep
Tin, total	M6010B ICP		U	mg/L	0.12	0.62	11/13/1999	krist
Vanadium, total	M6010B ICP		U	mg/L	0.0062	0.031	11/13/1999	krist
Zinc, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist

Metals Prep

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Total Digestion	M3015 ICP						11/10/1999	tdr
Total Digestion	M3015 ICP-MS						11/10/1999	tdr

Inorganic Qualifiers (based on EPA CLP 3/90)

U = Analyte was analyzed for but not detected at the indicated MDL

B = Analyte concentration detected at a value between MDL and PQL

PQL = Practical Quantitation Limit

S.H.

Vice President of Operations: Ralph Poulsen

ACZ

Analytical Results

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: ***L25265-04***
Client Sample ID: *MW-10*
Client Project ID: *9001.4*
ACZ Report ID: *RG107029*

Daniel B. Stephens & Associates
6020 Academy NE Suite 100
Albuquerque, NM 87109
Richard Meixner

Date Sampled: *10/19/1999 11:12:00 AM*
Date Received: *10/22/1999*
Date Reported: *11/29/1999*

Sample Matrix: *Ground Water*

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Antimony, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Arsenic, total	M6020 ICP-MS	0.001	B	mg/L	0.001	0.006	11/17/1999	fep
Barium, total	M6010B ICP	0.1610		mg/L	0.0037	0.012	11/13/1999	krist
Beryllium, total	M6010B ICP		U	mg/L	0.0025	0.012	11/13/1999	krist
Cadmium, total	M6010B ICP		U	mg/L	0.007	0.03	11/19/1999	jb
Chromium, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Cobalt, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Copper, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Lead, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Mercury, total	M7470 CVAA		U	mg/L	0.0002	0.001	11/16/1999	ms
Nickel, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Selenium, total	SM 3500-Se C, AA-Hydride		U	mg/L	0.001	0.005	11/16/1999	ms
Silver, total	M6010B ICP		U	mg/L	0.01	0.06	11/19/1999	jb
Thallium, total	M6020 ICP-MS		U	mg/L	0.0001	0.0006	11/17/1999	fep
Tin, total	M6010B ICP		U	mg/L	0.12	0.62	11/13/1999	krist
Vanadium, total	M6010B ICP		U	mg/L	0.0062	0.031	11/13/1999	krist
Zinc, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist

Metals Prep

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Total Digestion	M3015 ICP						11/10/1999	tdr
Total Digestion	M3015 ICP-MS						11/10/1999	tdr

Inorganic Qualifiers (based on EPA CLP 3/90)
U = Analyte was analyzed for but not detected at the indicated MDL
B = Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

S.H.

Vice President of Operations: Ralph Poulsen

ACZ

Analytical Results

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: ***L25265-05***
Client Sample ID: *NCLF-2*
Client Project ID: *9001.4*
ACZ Report ID: *RG107030*

Daniel B. Stephens & Associates
6020 Academy NE Suite 100
Albuquerque, NM 87109
Richard Meixner

Date Sampled: *10/20/1999 2:20:00 PM*
Date Received: *10/22/1999*
Date Reported: *11/29/1999*

Sample Matrix: *Ground Water*

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Antimony, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Arsenic, total	M6020 ICP-MS	0.003	B	mg/L	0.001	0.006	11/17/1999	fep
Barium, total	M6010B ICP	0.0941		mg/L	0.0037	0.012	11/13/1999	krist
Beryllium, total	M6010B ICP		U	mg/L	0.0025	0.012	11/13/1999	krist
Cadmium, total	M6010B ICP		U	mg/L	0.007	0.03	11/19/1999	jb
Chromium, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Cobalt, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Copper, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Lead, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Mercury, total	M7470 CVAA		U	mg/L	0.0002	0.001	11/16/1999	ms
Nickel, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist
Selenium, total	SM 3500-Se C, AA-Hydride		U	mg/L	0.001	0.005	11/16/1999	ms
Silver, total	M6010B ICP		U	mg/L	0.01	0.06	11/19/1999	jb
Thallium, total	M6020 ICP-MS		U	mg/L	0.0001	0.0006	11/17/1999	fep
Tin, total	M6010B ICP		U	mg/L	0.12	0.62	11/13/1999	krist
Vanadium, total	M6010B ICP		U	mg/L	0.0062	0.031	11/13/1999	krist
Zinc, total	M6010B ICP		U	mg/L	0.012	0.062	11/13/1999	krist

Metals Prep

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Total Digestion	M3015 ICP						11/10/1999	tdr
Total Digestion	M3015 ICP-MS						11/10/1999	tdr

Inorganic Qualifiers (based on EPA CLP 3/90)

U = Analyte was analyzed for but not detected at the indicated MDL

B = Analyte concentration detected at a value between MDL and PQL

PQL = Practical Quantitation Limit

S.H.

Vice President of Operations: Ralph Poulsen

ACZ

Analytical Results

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: ***L25265-06***
Client Sample ID: *NCLF-3*
Client Project ID: *9001.4*
ACZ Report ID: *RG107031*

Daniel B. Stephens & Associates
6020 Academy NE Suite 100
Albuquerque, NM 87109
Richard Meixner

Date Sampled: *10/20/1999 11:10:00 AM*
Date Received: *10/22/1999*
Date Reported: *11/29/1999*

Sample Matrix: *Ground Water*

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Antimony, total	M6020 ICP-MS		U	mg/L	0.0006	0.003	11/18/1999	fep
Arsenic, total	M6020 ICP-MS		U	mg/L	0.003	0.01	11/18/1999	fep
Barium, total	M6010B ICP	0.1480		mg/L	0.0037	0.012	11/12/1999	jb
Beryllium, total	M6010B ICP		U	mg/L	0.0025	0.012	11/12/1999	jb
Cadmium, total	M6010B ICP		U	mg/L	0.0037	0.018	11/12/1999	jb
Chromium, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Cobalt, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Copper, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Lead, total	M6020 ICP-MS	0.0002	B	mg/L	0.0002	0.001	11/17/1999	fep
Mercury, total	M7470 CVAA		U	mg/L	0.0002	0.001	11/16/1999	ms
Nickel, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Selenium, total	SM 3500-Se C, AA-Hydride	0.001	B	mg/L	0.001	0.005	11/16/1999	ms
Silver, total	M6010B ICP		U	mg/L	0.006	0.03	11/19/1999	kr
Thallium, total	M6020 ICP-MS		U	mg/L	0.0001	0.0006	11/17/1999	fep
Tin, total	M6010B ICP		U	mg/L	0.1	0.6	11/19/1999	kr
Vanadium, total	M6010B ICP		U	mg/L	0.0062	0.031	11/12/1999	jb
Zinc, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb

Metals Prep

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Total Digestion	M3015 ICP						11/12/1999	ct
Total Digestion	M3015 ICP-MS						11/12/1999	ct

Inorganic Qualifiers (based on EPA CLP 3/90)

U = Analyte was analyzed for but not detected at the indicated MDL

B = Analyte concentration detected at a value between MDL and PQL

PQL = Practical Quantitation Limit

S.H.

Vice President of Operations: Ralph Poulsen

ACZ

Analytical Results

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: ***L25265-07***
Client Sample ID: *NCLF-4*
Client Project ID: *9001.4*
ACZ Report ID: *RG107032*

Daniel B. Stephens & Associates
6020 Academy NE Suite 100
Albuquerque, NM 87109
Richard Meixner

Date Sampled: *10/19/1999 3:25:00 PM*
Date Received: *10/22/1999*
Date Reported: *11/29/1999*

Sample Matrix: *Ground Water*

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Antimony, total	M6020 ICP-MS		U	mg/L	0.0006	0.003	11/18/1999	fep
Arsenic, total	M6020 ICP-MS		U	mg/L	0.003	0.01	11/18/1999	fep
Barium, total	M6010B ICP	0.0413		mg/L	0.0067	0.022	11/12/1999	jb
Beryllium, total	M6010B ICP		U	mg/L	0.0044	0.022	11/12/1999	jb
Cadmium, total	M6010B ICP		U	mg/L	0.0067	0.033	11/12/1999	jb
Chromium, total	M6010B ICP		U	mg/L	0.022	0.11	11/12/1999	jb
Cobalt, total	M6010B ICP		U	mg/L	0.022	0.11	11/12/1999	jb
Copper, total	M6010B ICP		U	mg/L	0.022	0.11	11/12/1999	jb
Lead, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Mercury, total	M7470 CVAA		U	mg/L	0.0002	0.001	11/16/1999	ms
Nickel, total	M6010B ICP		U	mg/L	0.022	0.11	11/12/1999	jb
Selenium, total	SM 3500-Se C, AA-Hydride	0.013		mg/L	0.001	0.005	11/16/1999	ms
Silver, total	M6010B ICP		U	mg/L	0.006	0.03	11/19/1999	kr
Thallium, total	M6020 ICP-MS		U	mg/L	0.0001	0.0006	11/17/1999	fep
Tin, total	M6010B ICP		U	mg/L	0.1	0.6	11/19/1999	kr
Vanadium, total	M6010B ICP		U	mg/L	0.011	0.056	11/12/1999	jb
Zinc, total	M6010B ICP		U	mg/L	0.022	0.11	11/12/1999	jb

Metals Prep

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Total Digestion	M3015 ICP						11/12/1999	ct
Total Digestion	M3015 ICP-MS						11/12/1999	ct

Inorganic Qualifiers (based on EPA CLP 3/90)
U = Analyte was analyzed for but not detected at the indicated MDL
B = Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

S.H.

Vice President of Operations: Ralph Poulsen

ACZ

Analytical Results

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: ***L25265-10***
Client Sample ID: *NCLF-5*
Client Project ID: *9001.4*
ACZ Report ID: *RG107035*

Daniel B. Stephens & Associates
6020 Academy NE Suite 100
Albuquerque, NM 87109
Richard Meixner

Date Sampled: *10/20/1999 5:40:00 PM*
Date Received: *10/22/1999*
Date Reported: *11/29/1999*

Sample Matrix: *Ground Water*

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Antimony, total	M6020 ICP-MS		U	mg/L	0.0006	0.003	11/18/1999	fep
Arsenic, total	M6020 ICP-MS		U	mg/L	0.003	0.01	11/18/1999	fep
Barium, total	M6010B ICP	0.2020		mg/L	0.0037	0.012	11/12/1999	jb
Beryllium, total	M6010B ICP		U	mg/L	0.0025	0.012	11/12/1999	jb
Cadmium, total	M6010B ICP		U	mg/L	0.0037	0.018	11/12/1999	jb
Chromium, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Cobalt, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Copper, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Lead, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Mercury, total	M7470 CVAA		U	mg/L	0.0002	0.001	11/16/1999	ms
Nickel, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Selenium, total	SM 3500-Se C, AA-Hydride	0.001	B	mg/L	0.001	0.005	11/17/1999	ms
Silver, total	M6010B ICP		U	mg/L	0.006	0.03	11/29/1999	gg
Thallium, total	M6020 ICP-MS		U	mg/L	0.0001	0.0006	11/17/1999	fep
Tin, total	M6010B ICP		U	mg/L	0.1	0.6	11/19/1999	kr
Vanadium, total	M6010B ICP		U	mg/L	0.0062	0.031	11/12/1999	jb
Zinc, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb

Metals Prep

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Total Digestion	M3015 ICP						11/12/1999	ct
Total Digestion	M3015 ICP-MS						11/12/1999	ct

Note: The sample matrix caused the Calibration Blank to fail. See case narrative.

Inorganic Qualifiers (based on EPA CLP 3/90)
U = Analyte was analyzed for but not detected at the indicated MDL
B = Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

S.H.

Vice President of Operations: Ralph Poulsen

ACZ

Analytical Results

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: ***L25265-11***
Client Sample ID: *NCLF-6*
Client Project ID: *9001.4*
ACZ Report ID: *RG107036*

Daniel B. Stephens & Associates
6020 Academy NE Suite 100
Albuquerque, NM 87109
Richard Meixner

Date Sampled: *10/21/1999 12:30:00 PM*
Date Received: *10/22/1999*
Date Reported: *11/29/1999*

Sample Matrix: *Ground Water*

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Antimony, total	M6020 ICP-MS		U	mg/L	0.0006	0.003	11/18/1999	fep
Arsenic, total	M6020 ICP-MS	0.005	B	mg/L	0.003	0.01	11/18/1999	fep
Barium, total	M6010B ICP	0.0928		mg/L	0.0037	0.012	11/12/1999	jb
Beryllium, total	M6010B ICP		U	mg/L	0.0025	0.012	11/12/1999	jb
Cadmium, total	M6010B ICP		U	mg/L	0.0037	0.018	11/12/1999	jb
Chromium, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Cobalt, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Copper, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Lead, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Mercury, total	M7470 CVAA		U	mg/L	0.0002	0.001	11/16/1999	ms
Nickel, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Selenium, total	SM 3500-Se C, AA-Hydride		U	mg/L	0.001	0.005	11/17/1999	ms
Silver, total	M6010B ICP		U	mg/L	0.006	0.03	11/29/1999	gg
Thallium, total	M6020 ICP-MS		U	mg/L	0.0001	0.0006	11/17/1999	fep
Tin, total	M6010B ICP		U	mg/L	0.1	0.6	11/19/1999	kr
Vanadium, total	M6010B ICP		U	mg/L	0.0062	0.031	11/12/1999	jb
Zinc, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb

Metals Prep

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Total Digestion	M3015 ICP						11/12/1999	ct
Total Digestion	M3015 ICP-MS						11/12/1999	ct

Note: The sample matrix caused the Calibration Blank to fail. See case narrative.

Inorganic Qualifiers (based on EPA CLP 3/90)
U = Analyte was analyzed for but not detected at the indicated MDL
B = Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

S.H.

Vice President of Operations: Ralph Poulsen

ACZ

Analytical Results

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Lab Sample ID: ***L25265-12***
Client Sample ID: *Equipment*
Client Project ID: *9001.4*
ACZ Report ID: *RG107037*

Daniel B. Stephens & Associates
6020 Academy NE Suite 100
Albuquerque, NM 87109
Richard Meixner

Date Sampled: *10/19/1999 5:00:00 PM*
Date Received: *10/22/1999*
Date Reported: *11/29/1999*

Sample Matrix: *Ground Water*

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Antimony, total	M6020 ICP-MS		U	mg/L	0.0006	0.003	11/18/1999	fep
Arsenic, total	M6020 ICP-MS		U	mg/L	0.003	0.01	11/18/1999	fep
Barium, total	M6010B ICP		U	mg/L	0.0037	0.012	11/12/1999	jb
Beryllium, total	M6010B ICP		U	mg/L	0.0025	0.012	11/12/1999	jb
Cadmium, total	M6010B ICP		U	mg/L	0.0037	0.018	11/12/1999	jb
Chromium, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Cobalt, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Copper, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Lead, total	M6020 ICP-MS		U	mg/L	0.0002	0.001	11/17/1999	fep
Mercury, total	M7470 CVAA		U	mg/L	0.0002	0.001	11/16/1999	ms
Nickel, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb
Selenium, total	SM 3500-Se C, AA-Hydride		U	mg/L	0.001	0.005	11/17/1999	ms
Silver, total	M6010B ICP		U	mg/L	0.006	0.03	11/29/1999	gg
Thallium, total	M6020 ICP-MS		U	mg/L	0.0001	0.0006	11/17/1999	fep
Tin, total	M6010B ICP		U	mg/L	0.1	0.6	11/19/1999	kr
Vanadium, total	M6010B ICP		U	mg/L	0.0062	0.031	11/12/1999	jb
Zinc, total	M6010B ICP		U	mg/L	0.012	0.062	11/12/1999	jb

Metals Prep

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Total Digestion	M3015 ICP						11/12/1999	ct
Total Digestion	M3015 ICP-MS						11/12/1999	ct

Note: The sample matrix caused the Calibration Blank to fail. See case narrative.

Inorganic Qualifiers (based on EPA CLP 3/90)
U = Analyte was analyzed for but not detected at the indicated MDL
B = Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

S.H.

Vice President of Operations: Ralph Poulsen

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

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ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Sample Identification

ACZ Project #	*L25265*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

ACZ Lab ID	Client Sample ID	Sample Matrix	Date Sampled	Date Received
L25265-01	MW-1	Ground Water	10/20/1999 11:15:00 AM	10/22/1999
L25265-02	MW-2	No matrix	10/20/1999 2:55:00 PM	10/22/1999
L25265-02	MW-2	Ground Water	10/20/1999 2:55:00 PM	10/22/1999
L25265-03	MW-4	Ground Water	10/19/1999 1:35:00 PM	10/22/1999
L25265-04	MW-10	Ground Water	10/19/1999 11:12:00 AM	10/22/1999
L25265-05	NCLF-2	Ground Water	10/20/1999 2:20:00 PM	10/22/1999
L25265-06	NCLF-3	Ground Water	10/20/1999 11:10:00 AM	10/22/1999
L25265-07	NCLF-4	Ground Water	10/19/1999 3:25:00 PM	10/22/1999
L25265-08	L25265-07 MS	Ground Water	10/19/1999 3:25:00 PM	10/22/1999
L25265-09	L25265-07 MSD	Ground Water	10/19/1999 3:25:00 PM	10/22/1999
L25265-10	NCLF-5	Ground Water	10/20/1999 5:40:00 PM	10/22/1999
L25265-11	NCLF-6	Ground Water	10/21/1999 12:30:00 PM	10/22/1999
L25265-12	Equipment	Ground Water	10/19/1999 5:00:00 PM	10/22/1999

Comments:

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Project Summary

ACZ Project #	L25265
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

ACZ Lab ID: L25265-

Product Description	Method	11	12
Antimony, total	M6020 ICP-MS	X	X
Arsenic, total	M6020 ICP-MS	X	X
Barium, total	M6010B ICP	X	X
Beryllium, total	M6010B ICP	X	X
Cadmium, total	M6010B ICP	X	X
Chromium, total	M6010B ICP	X	X
Cobalt, total	M6010B ICP	X	X
Copper, total	M6010B ICP	X	X
Lead, total	M6020 ICP-MS	X	X
Mercury, total	M7470 CVAA	X	X
Nickel, total	M6010B ICP	X	X
Selenium, total	SM 3500-Se C, AA-Hydride	X	X
Silver, total	M6010B ICP	X	X
Thallium, total	M6020 ICP-MS	X	X
Tin, total	M6010B ICP	X	X
Vanadium, total	M6010B ICP	X	X
Zinc, total	M6010B ICP	X	X

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Calibration Verification - Control Samples

Cover Page

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

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Total Metals	

Additional analytical runs may have been required as a result of matrix effects and/or instrumental problems.
Re-analysis data immediately follows initial QC data as outlined in above sequence.

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - Cold Vapor
QC Report ***Calibration Verification-Control Samples***

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Mercury, total

Method M7470 CVAA

ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration (mg/L)				Control Limits, %		Q
				True	Found	Q	Rec (%)	Lower	Upper	
WG91854ICV	ICV	II990903-5	11/16/1999 5:57:34 PM	0.01	0.00998		99.8	90	110	
WG91854CCV1	CCV	II990903-5	11/16/1999 6:13:56 PM	0.01	0.00995		99.5	90	110	
WG91854CCV2	CCV	II990903-5	11/16/1999 6:29:14 PM	0.01	0.00987		98.7	90	110	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - Hydride
QC Report **Calibration Verification-Control Samples**

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Selenium, total

Method SM 3500-Se C, AA-Hydride

ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration (mg/L)			Control Limits, %		Q
				True	Found	Q Rec (%)	Lower	Upper	
WG91744ICV	ICV	II990315-4	11/16/1999 6:20:00 PM	0.02	0.0206	103	90	110	
WG91744CCV1	CCV	II990315-4	11/16/1999 6:37:00 PM	0.02	0.0202	101	90	110	
WG91744CCV2	CCV	II990315-4	11/16/1999 6:55:00 PM	0.02	0.0214	107	90	110	
WG91744CCV3	CCV	II990315-4	11/16/1999 7:08:00 PM	0.02	0.0215	107.5	90	110	
WG91997ICV	ICV	II991118-5	11/17/1999 8:44:00 PM	0.02	0.0209	104.5	90	110	
WG91997CCV1	CCV	II991118-5	11/17/1999 9:01:00 PM	0.02	0.0208	104	90	110	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - ICP
QC Report Calibration Verification-Control Samples

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration (mg/L) True	Found	Q	Rec (%)	Control Limits,% Lower	Upper	Q
Barium	WG91806ICV	ICV	II991111-2	11/13/1999 12:16:00 AM	1	0.989		98.9	90	110	
Barium	WG91806CCV4	CCV	II991111-2	11/13/1999 1:03:00 AM	1	0.984		98.4	90	110	
Barium	WG91806CCV5	CCV	II991111-2	11/13/1999 1:50:00 AM	1	0.975		97.5	90	110	
Barium	WG91846ICV	ICV	II991111-2	11/12/1999 2:43:00 PM	1	1.03		103	90	110	
Barium	WG91846CCV1	CCV	II991111-2	11/12/1999 3:30:00 PM	1	1.04		103.8	90	110	
Barium	WG91846CCV2	CCV	II991111-2	11/12/1999 3:50:00 PM	1	1.07		106.7	90	110	
Barium	WG92179ICV	ICV	II991111-2	11/19/1999 11:47:00 AM	1	0.980		98	90	110	S
Barium	WG92222CCV1	CCV	II991111-2	11/19/1999 1:03:00 PM	1	0.995		99.4	90	110	
Barium	WG92222CCV2	CCV	II991111-2	11/19/1999 1:51:00 PM	1	1.00		100.5	90	110	
Beryllium	WG91806ICV	ICV	II991111-2	11/13/1999 12:16:00 AM	1	0.965		96.5	90	110	
Beryllium	WG91806CCV4	CCV	II991111-2	11/13/1999 1:03:00 AM	1	0.954		95.4	90	110	
Beryllium	WG91806CCV5	CCV	II991111-2	11/13/1999 1:50:00 AM	1	0.965		96.5	90	110	
Beryllium	WG91846ICV	ICV	II991111-2	11/12/1999 2:43:00 PM	1	1.00		100.4	90	110	
Beryllium	WG91846CCV1	CCV	II991111-2	11/12/1999 3:30:00 PM	1	1.02		101.9	90	110	
Beryllium	WG91846CCV2	CCV	II991111-2	11/12/1999 3:50:00 PM	1	1.05		105	90	110	
Cadmium	WG91846ICV	ICV	II991111-2	11/12/1999 2:43:00 PM	1	1.01		100.9	90	110	
Cadmium	WG91846CCV1	CCV	II991111-2	11/12/1999 3:30:00 PM	1	1.04		103.7	90	110	
Cadmium	WG91846CCV2	CCV	II991111-2	11/12/1999 3:50:00 PM	1	1.05		105.4	90	110	
Cadmium	WG92179ICV	ICV	II991111-2	11/19/1999 11:47:00 AM	1	0.976		97.6	90	110	S
Cadmium	WG92222CCV1	CCV	II991111-2	11/19/1999 1:03:00 PM	1	0.974		97.4	90	110	
Cadmium	WG92222CCV2	CCV	II991111-2	11/19/1999 1:51:00 PM	1	0.982		98.2	90	110	
Cadmium	WG92222CCV3	CCV	II991111-2	11/19/1999 2:38:00 PM	1	0.963		96.3	90	110	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - ICP
QC Report **Calibration Verification-Control Samples**

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration (mg/L) True	Found	Q	Rec (%)	Control Limits,% Lower	Upper	Q
Chromium	WG91806ICV	ICV	II991111-2	11/13/1999 12:16:00 AM	1	0.974		97.4	90	110	
Chromium	WG91806CCV4	CCV	II991111-2	11/13/1999 1:03:00 AM	1	0.964		96.4	90	110	
Chromium	WG91806CCV5	CCV	II991111-2	11/13/1999 1:50:00 AM	1	0.972		97.2	90	110	
Chromium	WG91846ICV	ICV	II991111-2	11/12/1999 2:43:00 PM	1	1.02		101.9	90	110	
Chromium	WG91846CCV1	CCV	II991111-2	11/12/1999 3:30:00 PM	1	1.02		102.5	90	110	
Chromium	WG91846CCV2	CCV	II991111-2	11/12/1999 3:50:00 PM	1	1.05		104.6	90	110	
Cobalt	WG91806ICV	ICV	II991111-2	11/13/1999 12:16:00 AM	1	0.988		98.8	90	110	
Cobalt	WG91806CCV4	CCV	II991111-2	11/13/1999 1:03:00 AM	1	0.979		97.9	90	110	
Cobalt	WG91806CCV5	CCV	II991111-2	11/13/1999 1:50:00 AM	1	0.993		99.3	90	110	
Cobalt	WG91846ICV	ICV	II991111-2	11/12/1999 2:43:00 PM	1	1.01		101.4	90	110	
Cobalt	WG91846CCV1	CCV	II991111-2	11/12/1999 3:30:00 PM	1	1.04		104.1	90	110	
Cobalt	WG91846CCV2	CCV	II991111-2	11/12/1999 3:50:00 PM	1	1.06		106.1	90	110	
Copper	WG91806ICV	ICV	II991111-2	11/13/1999 12:16:00 AM	1	0.976		97.6	90	110	
Copper	WG91806CCV4	CCV	II991111-2	11/13/1999 1:03:00 AM	1	0.971		97.1	90	110	
Copper	WG91806CCV5	CCV	II991111-2	11/13/1999 1:50:00 AM	1	0.960		96	90	110	
Copper	WG91846ICV	ICV	II991111-2	11/12/1999 2:43:00 PM	1	1.02		102	90	110	
Copper	WG91846CCV1	CCV	II991111-2	11/12/1999 3:30:00 PM	1	1.03		103	90	110	
Copper	WG91846CCV2	CCV	II991111-2	11/12/1999 3:50:00 PM	1	1.06		105.6	90	110	
Nickel	WG91806ICV	ICV	II991111-2	11/13/1999 12:16:00 AM	1	0.980		98	90	110	
Nickel	WG91806CCV4	CCV	II991111-2	11/13/1999 1:03:00 AM	1	0.966		96.6	90	110	
Nickel	WG91806CCV5	CCV	II991111-2	11/13/1999 1:50:00 AM	1	0.985		98.5	90	110	
Nickel	WG91846ICV	ICV	II991111-2	11/12/1999 2:43:00 PM	1	1.01		101.2	90	110	
Nickel	WG91846CCV1	CCV	II991111-2	11/12/1999 3:30:00 PM	1	1.03		102.8	90	110	
Nickel	WG91846CCV2	CCV	II991111-2	11/12/1999 3:50:00 PM	1	1.05		105.4	90	110	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - ICP
QC Report Calibration Verification-Control Samples

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration (mg/L) True	Found	Q	Rec (%)	Control Limits,% Lower	Upper	Q
Silver	WG91846ICV	ICV	II991111-2	11/12/1999 2:43:00 PM	1	1.02		102.2	90	110	
Silver	WG91846CCV1	CCV	II991111-2	11/12/1999 3:30:00 PM	1	1.02		102.5	90	110	
Silver	WG91846CCV2	CCV	II991111-2	11/12/1999 3:50:00 PM	1	1.04		104.3	90	110	
Silver	WG92213ICV	ICV	II991111-2	11/19/1999 5:11:00 PM	1	0.984		98.4	90	110	
Silver	WG92213CCV1	CCV	II991111-2	11/19/1999 5:54:00 PM	1	0.982		98.2	90	110	
Silver	WG92213CCV2	CCV	II991111-2	11/19/1999 6:32:00 PM	1	0.979		97.9	90	110	
Silver	WG92179ICV	ICV	II991111-2	11/19/1999 11:47:00 AM	1	0.987		98.7	90	110	S
Silver	WG92222CCV1	CCV	II991111-2	11/19/1999 1:03:00 PM	1	0.998		99.8	90	110	
Silver	WG92222CCV2	CCV	II991111-2	11/19/1999 1:51:00 PM	1	0.995		99.5	90	110	
Silver	WG92222CCV3	CCV	II991111-2	11/19/1999 2:38:00 PM	1	0.982		98.2	90	110	
Silver	WG92623ICV	ICV	II991111-2	11/29/1999 1:07:00 PM	1	0.967		96.7	90	110	
Silver	WG92623CCV1	CCV	II991111-2	11/29/1999 1:52:00 PM	1	0.971		97	90	110	
Tin	WG91806ICV	ICV	II991111-2	11/13/1999 12:16:00 AM	4	3.95		98.8	90	110	
Tin	WG91806CCV4	CCV	II991111-2	11/13/1999 1:03:00 AM	4	3.89		97.3	90	110	
Tin	WG91806CCV5	CCV	II991111-2	11/13/1999 1:50:00 AM	4	3.98		99.6	90	110	
Tin	WG92213ICV	ICV	II991111-2	11/19/1999 5:11:00 PM	4	3.96		99	90	110	
Tin	WG92213CCV1	CCV	II991111-2	11/19/1999 5:54:00 PM	4	3.97		99.4	90	110	
Tin	WG92213CCV2	CCV	II991111-2	11/19/1999 6:32:00 PM	4	3.98		99.4	90	110	
Vanadium	WG91806ICV	ICV	II991111-2	11/13/1999 12:16:00 AM	1	0.988		98.8	90	110	
Vanadium	WG91806CCV4	CCV	II991111-2	11/13/1999 1:03:00 AM	1	0.980		98	90	110	
Vanadium	WG91806CCV5	CCV	II991111-2	11/13/1999 1:50:00 AM	1	0.997		99.7	90	110	
Vanadium	WG91846ICV	ICV	II991111-2	11/12/1999 2:43:00 PM	1	1.03		102.8	90	110	
Vanadium	WG91846CCV1	CCV	II991111-2	11/12/1999 3:30:00 PM	1	1.04		104.2	90	110	
Vanadium	WG91846CCV2	CCV	II991111-2	11/12/1999 3:50:00 PM	1	1.06		106.4	90	110	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - ICP
QC Report ***Calibration Verification-Control Samples***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration (mg/L)				Control Limits,%		Q
					True	Found	Q	Rec (%)	Lower	Upper	
Zinc	WG91806ICV	ICV	II991111-2	11/13/1999 12:16:00 AM	1	0.976		97.6	90	110	
Zinc	WG91806CCV4	CCV	II991111-2	11/13/1999 1:03:00 AM	1	0.966		96.6	90	110	
Zinc	WG91806CCV5	CCV	II991111-2	11/13/1999 1:50:00 AM	1	0.990		99	90	110	
Zinc	WG91846ICV	ICV	II991111-2	11/12/1999 2:43:00 PM	1	0.997		99.7	90	110	
Zinc	WG91846CCV1	CCV	II991111-2	11/12/1999 3:30:00 PM	1	1.01		100.9	90	110	
Zinc	WG91846CCV2	CCV	II991111-2	11/12/1999 3:50:00 PM	1	1.02		102.4	90	110	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - ICPMS
QC Report ***Calibration Verification-Control Samples***

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Total Metals

Method M6020 ICP-MS

Element	ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration (mg/L) True	Found	Q	Rec (%)	Control Limits,% Lower	Upper	Q
Antimony	WG91951ICV	ICV	MS991019-8	11/17/1999 5:16:00 PM	0.05	0.0522		104.5	90	110	
Antimony	WG91951CCV2	CCV	MS991019-8	11/17/1999 6:49:00 PM	0.05	0.0494		98.8	90	110	
Antimony	WG91951CCV1	CCV	MS991019-8	11/17/1999 8:21:00 PM	0.05	0.0508		101.7	90	110	
Antimony	WG92118ICV	ICV	MS991118-10	11/18/1999 6:49:00 PM	0.05	0.0514		102.8	90	110	
Antimony	WG92118CCV2	CCV	MS991118-10	11/18/1999 8:23:00 PM	0.05	0.0516		103.2	90	110	
Antimony	WG92118CCV1	CCV	MS991118-10	11/18/1999 9:54:00 PM	0.05	0.0516		103.2	90	110	
Arsenic	WG91951ICV	ICV	MS991019-8	11/17/1999 5:16:00 PM	0.05	0.0498		99.6	90	110	
Arsenic	WG91951CCV2	CCV	MS991019-8	11/17/1999 6:49:00 PM	0.05	0.0509		101.8	90	110	
Arsenic	WG91951CCV1	CCV	MS991019-8	11/17/1999 8:21:00 PM	0.05	0.0493		98.6	90	110	
Arsenic	WG92118ICV	ICV	MS991118-10	11/18/1999 6:49:00 PM	0.05	0.0503		100.6	90	110	
Arsenic	WG92118CCV2	CCV	MS991118-10	11/18/1999 8:23:00 PM	0.05	0.0457		91.4	90	110	
Arsenic	WG92118CCV1	CCV	MS991118-10	11/18/1999 9:54:00 PM	0.05	0.0492		98.5	90	110	
Lead	WG91951ICV	ICV	MS991019-8	11/17/1999 5:16:00 PM	0.05	0.0493		98.7	90	110	
Lead	WG91951CCV2	CCV	MS991019-8	11/17/1999 6:49:00 PM	0.05	0.0489		97.9	90	110	
Lead	WG91951CCV1	CCV	MS991019-8	11/17/1999 8:21:00 PM	0.05	0.0490		97.9	90	110	
Thallium	WG91951ICV	ICV	MS991019-8	11/17/1999 5:16:00 PM	0.05	0.0508		101.6	90	110	
Thallium	WG91951CCV2	CCV	MS991019-8	11/17/1999 6:49:00 PM	0.05	0.0525		105	90	110	
Thallium	WG91951CCV1	CCV	MS991019-8	11/17/1999 8:21:00 PM	0.05	0.0521		104.1	90	110	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Calibration Verification - Blanks

Cover Page

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

	Page
Metal Analysis	15
Metals - Cold Vapor	
Total Metals	
Metals - Hydride	
Total Metals	
Metals - ICP	
Total Metals	
Metals - ICPMS	
Total Metals	

Additional analytical runs may have been required as a result of matrix effects and/or instrumental problems.
Re-analysis data immediately follows initial QC data as outlined in above sequence.

REPQC001.07.97.03

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix *Aqueous*
Analysis Group *Metals - Cold Vapor*
QC Report ***Calibration Verification-Blanks***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Mercury, total

Method M7470 CVAA

ACZ ID	QC Type	Analysis Date	Concentration			Control Limits		Units	Q
			MDL	Found	Q	Lower	Upper		
WG91854ICB	ICB	11/16/1999 5:58:54 PM	0.0002		U	-0.0002	0.0002	mg/L	
WG91854CCB1	CCB	11/16/1999 6:15:16 PM	0.0002		U	-0.0002	0.0002	mg/L	
WG91854CCB2	CCB	11/16/1999 6:31:54 PM	0.0002		U	-0.0002	0.0002	mg/L	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix | *Aqueous*
Analysis Group | *Metals - Hydride*
QC Report | ***Calibration Verification-Blanks***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Selenium, total

Method SM 3500-Se C, AA-Hydride

ACZ ID	QC Type	Analysis Date	Concentration			Control Limits		Units	Q
			MDL	Found	Q	Lower	Upper		
WG91744ICB	ICB	11/16/1999 6:21:00 PM	0.001		U	-0.001	0.001	mg/L	
WG91744CCB1	CCB	11/16/1999 6:39:00 PM	0.001		U	-0.001	0.001	mg/L	
WG91744CCB2	CCB	11/16/1999 6:56:00 PM	0.001		U	-0.001	0.001	mg/L	
WG91744CCB3	CCB	11/16/1999 7:10:00 PM	0.001		U	-0.001	0.001	mg/L	
WG91997ICB	ICB	11/17/1999 8:45:00 PM	0.001		U	-0.001	0.001	mg/L	
WG91997CCB1	CCB	11/17/1999 9:03:00 PM	0.001		U	-0.001	0.001	mg/L	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - ICP
QC Report **Calibration Verification-Blanks**

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	Analysis Date	Concentration MDL	Found	Q	Control Limits Lower	Upper	Units	Q
Barium	WG91806ICB	ICB	11/13/1999 12:20:00 A	0.003		U	-0.003	0.003	mg/L	
Barium	WG91806CCB4	CCB	11/13/1999 1:07:00 A	0.003		U	-0.003	0.003	mg/L	
Barium	WG91806CCB5	CCB	11/13/1999 1:54:00 A	0.003		U	-0.003	0.003	mg/L	
Barium	WG91846ICB	ICB	11/12/1999 2:47:00 P	0.003		U	-0.003	0.003	mg/L	
Barium	WG91846CCB1	CCB	11/12/1999 3:34:00 P	0.003		U	-0.003	0.003	mg/L	
Barium	WG91846CCB2	CCB	11/12/1999 3:54:00 P	0.003		U	-0.003	0.003	mg/L	
Barium	WG92179ICB	ICB	11/19/1999 11:50:00 A	0.003		U	-0.003	0.003	mg/L	S
Barium	WG92222CCB1	CCB	11/19/1999 1:07:00 P	0.003		U	-0.003	0.003	mg/L	
Barium	WG92222CCB2	CCB	11/19/1999 1:55:00 P	0.003		U	-0.003	0.003	mg/L	
Beryllium	WG91806ICB	ICB	11/13/1999 12:20:00 A	0.002		U	-0.002	0.002	mg/L	
Beryllium	WG91806CCB4	CCB	11/13/1999 1:07:00 A	0.002		U	-0.002	0.002	mg/L	
Beryllium	WG91806CCB5	CCB	11/13/1999 1:54:00 A	0.002		U	-0.002	0.002	mg/L	
Beryllium	WG91846ICB	ICB	11/12/1999 2:47:00 P	0.002		U	-0.002	0.002	mg/L	
Beryllium	WG91846CCB1	CCB	11/12/1999 3:34:00 P	0.002		U	-0.002	0.002	mg/L	
Beryllium	WG91846CCB2	CCB	11/12/1999 3:54:00 P	0.002		U	-0.002	0.002	mg/L	
Cadmium	WG91846ICB	ICB	11/12/1999 2:47:00 P	0.003		U	-0.003	0.003	mg/L	
Cadmium	WG91846CCB1	CCB	11/12/1999 3:34:00 P	0.003		U	-0.003	0.003	mg/L	
Cadmium	WG91846CCB2	CCB	11/12/1999 3:54:00 P	0.003		U	-0.003	0.003	mg/L	
Cadmium	WG92179ICB	ICB	11/19/1999 11:50:00 A	0.003		U	-0.003	0.003	mg/L	S
Cadmium	WG92222CCB1	CCB	11/19/1999 1:07:00 P	0.003		U	-0.003	0.003	mg/L	
Cadmium	WG92222CCB2	CCB	11/19/1999 1:55:00 P	0.003		U	-0.003	0.003	mg/L	
Cadmium	WG92222CCB3	CCB	11/19/1999 2:42:00 P	0.003		U	-0.003	0.003	mg/L	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - ICP
QC Report **Calibration Verification-Blanks**

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	Analysis Date	Concentration MDL	Found	Q	Control Limits Lower	Upper	Units	Q
Chromium	WG91806ICB	ICB	11/13/1999 12:20:00 A	0.01		U	-0.01	0.01	mg/L	
Chromium	WG91806CCB4	CCB	11/13/1999 1:07:00 A	0.01		U	-0.01	0.01	mg/L	
Chromium	WG91806CCB5	CCB	11/13/1999 1:54:00 A	0.01		U	-0.01	0.01	mg/L	
Chromium	WG91846ICB	ICB	11/12/1999 2:47:00 P	0.01		U	-0.01	0.01	mg/L	
Chromium	WG91846CCB1	CCB	11/12/1999 3:34:00 P	0.01		U	-0.01	0.01	mg/L	
Chromium	WG91846CCB2	CCB	11/12/1999 3:54:00 P	0.01		U	-0.01	0.01	mg/L	
Cobalt	WG91806ICB	ICB	11/13/1999 12:20:00 A	0.01		U	-0.01	0.01	mg/L	
Cobalt	WG91806CCB4	CCB	11/13/1999 1:07:00 A	0.01		U	-0.01	0.01	mg/L	
Cobalt	WG91806CCB5	CCB	11/13/1999 1:54:00 A	0.01		U	-0.01	0.01	mg/L	
Cobalt	WG91846ICB	ICB	11/12/1999 2:47:00 P	0.01		U	-0.01	0.01	mg/L	
Cobalt	WG91846CCB1	CCB	11/12/1999 3:34:00 P	0.01		U	-0.01	0.01	mg/L	
Cobalt	WG91846CCB2	CCB	11/12/1999 3:54:00 P	0.01		U	-0.01	0.01	mg/L	
Copper	WG91806ICB	ICB	11/13/1999 12:20:00 A	0.01		U	-0.01	0.01	mg/L	
Copper	WG91806CCB4	CCB	11/13/1999 1:07:00 A	0.01		U	-0.01	0.01	mg/L	
Copper	WG91806CCB5	CCB	11/13/1999 1:54:00 A	0.01		U	-0.01	0.01	mg/L	
Copper	WG91846ICB	ICB	11/12/1999 2:47:00 P	0.01		U	-0.01	0.01	mg/L	
Copper	WG91846CCB1	CCB	11/12/1999 3:34:00 P	0.01		U	-0.01	0.01	mg/L	
Copper	WG91846CCB2	CCB	11/12/1999 3:54:00 P	0.01		U	-0.01	0.01	mg/L	
Nickel	WG91806ICB	ICB	11/13/1999 12:20:00 A	0.01		U	-0.01	0.01	mg/L	
Nickel	WG91806CCB4	CCB	11/13/1999 1:07:00 A	0.01		U	-0.01	0.01	mg/L	
Nickel	WG91806CCB5	CCB	11/13/1999 1:54:00 A	0.01		U	-0.01	0.01	mg/L	
Nickel	WG91846ICB	ICB	11/12/1999 2:47:00 P	0.01		U	-0.01	0.01	mg/L	
Nickel	WG91846CCB1	CCB	11/12/1999 3:34:00 P	0.01		U	-0.01	0.01	mg/L	
Nickel	WG91846CCB2	CCB	11/12/1999 3:54:00 P	0.01		U	-0.01	0.01	mg/L	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - ICP
QC Report Calibration Verification-Blanks

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	Analysis Date	Concentration MDL	Found	Q	Control Limits Lower	Upper	Units	Q
Silver	WG91846ICB	ICB	11/12/1999 2:47:00 P	0.005		U	-0.005	0.005	mg/L	
Silver	WG91846CCB1	CCB	11/12/1999 3:34:00 P	0.005		U	-0.005	0.005	mg/L	
Silver	WG91846CCB2	CCB	11/12/1999 3:54:00 P	0.005		U	-0.005	0.005	mg/L	
Silver	WG92213ICB	ICB	11/19/1999 5:15:00 P	0.005		U	-0.005	0.005	mg/L	
Silver	WG92213CCB1	CCB	11/19/1999 5:57:00 P	0.005		U	-0.005	0.005	mg/L	
Silver	WG92213CCB2	CCB	11/19/1999 6:36:00 P	0.005		U	-0.005	0.005	mg/L	
Silver	WG92179ICB	ICB	11/19/1999 11:50:00 A	0.005		U	-0.005	0.005	mg/L	S
Silver	WG92222CCB1	CCB	11/19/1999 1:07:00 P	0.005		U	-0.005	0.005	mg/L	
Silver	WG92222CCB2	CCB	11/19/1999 1:55:00 P	0.005		U	-0.005	0.005	mg/L	
Silver	WG92222CCB3	CCB	11/19/1999 2:42:00 P	0.005		U	-0.005	0.005	mg/L	
Silver	WG92623ICB	ICB	11/29/1999 1:12:00 P	0.005		U	-0.005	0.005	mg/L	
Silver	WG92623CCB1	CCB	11/29/1999 1:56:00 P	0.005		U	-0.005	0.005	mg/L	
Tin	WG91806ICB	ICB	11/13/1999 12:20:00 A	0.1		U	-0.1	0.1	mg/L	
Tin	WG91806CCB4	CCB	11/13/1999 1:07:00 A	0.1		U	-0.1	0.1	mg/L	
Tin	WG91806CCB5	CCB	11/13/1999 1:54:00 A	0.1		U	-0.1	0.1	mg/L	
Tin	WG92213ICB	ICB	11/19/1999 5:15:00 P	0.1		U	-0.1	0.1	mg/L	
Tin	WG92213CCB1	CCB	11/19/1999 5:57:00 P	0.1		U	-0.1	0.1	mg/L	
Tin	WG92213CCB2	CCB	11/19/1999 6:36:00 P	0.1		U	-0.1	0.1	mg/L	
Vanadium	WG91806ICB	ICB	11/13/1999 12:20:00 A	0.005		U	-0.005	0.005	mg/L	
Vanadium	WG91806CCB4	CCB	11/13/1999 1:07:00 A	0.005		U	-0.005	0.005	mg/L	
Vanadium	WG91806CCB5	CCB	11/13/1999 1:54:00 A	0.005		U	-0.005	0.005	mg/L	
Vanadium	WG91846ICB	ICB	11/12/1999 2:47:00 P	0.005		U	-0.005	0.005	mg/L	
Vanadium	WG91846CCB1	CCB	11/12/1999 3:34:00 P	0.005		U	-0.005	0.005	mg/L	
Vanadium	WG91846CCB2	CCB	11/12/1999 3:54:00 P	0.005		U	-0.005	0.005	mg/L	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix *Aqueous*
Analysis Group *Metals - ICP*
QC Report ***Calibration Verification-Blanks***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	Analysis Date	Concentration			Control Limits		Units	Q
				MDL	Found	Q	Lower	Upper		
Zinc	WG91806ICB	ICB	11/13/1999 12:20:00 A	0.01		U	-0.01	0.01	mg/L	
Zinc	WG91806CCB4	CCB	11/13/1999 1:07:00 A	0.01		U	-0.01	0.01	mg/L	
Zinc	WG91806CCB5	CCB	11/13/1999 1:54:00 A	0.01		U	-0.01	0.01	mg/L	
Zinc	WG91846ICB	ICB	11/12/1999 2:47:00 P	0.01		U	-0.01	0.01	mg/L	
Zinc	WG91846CCB1	CCB	11/12/1999 3:34:00 P	0.01		U	-0.01	0.01	mg/L	
Zinc	WG91846CCB2	CCB	11/12/1999 3:54:00 P	0.01		U	-0.01	0.01	mg/L	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix *Aqueous*
Analysis Group *Metals - ICPMS*
QC Report ***Calibration Verification-Blanks***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6020 ICP-MS

Element	ACZ ID	QC Type	Analysis Date	Concentration MDL	Found	Q	Control Limits Lower	Upper	Units	Q
Antimony	WG91951ICB	ICB	11/17/1999 5:23:00 P	0.0001		U	-0.0003	0.0003	mg/L	
Antimony	WG91951CCB2	CCB	11/17/1999 6:57:00 P	0.0001		U	-0.0003	0.0003	mg/L	
Antimony	WG91951CCB1	CCB	11/17/1999 8:29:00 P	0.0001		U	-0.0003	0.0003	mg/L	
Antimony	WG92118ICB	ICB	11/18/1999 6:57:00 P	0.0001		U	-0.0003	0.0003	mg/L	
Antimony	WG92118CCB2	CCB	11/18/1999 8:30:00 P	0.0001		U	-0.0003	0.0003	mg/L	
Antimony	WG92118CCB1	CCB	11/18/1999 10:02:00 P	0.0001		U	-0.0003	0.0003	mg/L	
Arsenic	WG91951ICB	ICB	11/17/1999 5:23:00 P	0.0005		U	-0.0015	0.0015	mg/L	
Arsenic	WG91951CCB2	CCB	11/17/1999 6:57:00 P	0.0005		U	-0.0015	0.0015	mg/L	
Arsenic	WG91951CCB1	CCB	11/17/1999 8:29:00 P	0.0005		U	-0.0015	0.0015	mg/L	
Arsenic	WG92118ICB	ICB	11/18/1999 6:57:00 P	0.0005		U	-0.0015	0.0015	mg/L	
Arsenic	WG92118CCB2	CCB	11/18/1999 8:30:00 P	0.0005		U	-0.0015	0.0015	mg/L	
Arsenic	WG92118CCB1	CCB	11/18/1999 10:02:00 P	0.0005		U	-0.0015	0.0015	mg/L	
Lead	WG91951ICB	ICB	11/17/1999 5:23:00 P	0.0001		U	-0.0003	0.0003	mg/L	
Lead	WG91951CCB2	CCB	11/17/1999 6:57:00 P	0.0001		U	-0.0003	0.0003	mg/L	
Lead	WG91951CCB1	CCB	11/17/1999 8:29:00 P	0.0001		U	-0.0003	0.0003	mg/L	
Thallium	WG91951ICB	ICB	11/17/1999 5:23:00 P	0.00005		U	-0.00015	0.00015	mg/L	
Thallium	WG91951CCB2	CCB	11/17/1999 6:57:00 P	0.00005		U	-0.00015	0.00015	mg/L	
Thallium	WG91951CCB1	CCB	11/17/1999 8:29:00 P	0.00005		U	-0.00015	0.00015	mg/L	

ACZ	Client
✓	

ACZ

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Spike Verification

Cover Page

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

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Metal Analysis	23
Metals - Cold Vapor	
Total Metals	
Metals - Hydride	
Total Metals	
Metals - ICP	
Total Metals	
Metals - ICPMS	
Total Metals	

Additional analytical runs may have been required as a result of matrix effects and/or instrumental problems.
Re-analysis data immediately follows initial QC data as outlined in above sequence.

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix *Aqueous*
Analysis Group *Metals - Cold Vapor*
QC Report ***Spike Verification***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Mercury, total

Method M7470 CVAA

ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration Added	Sample	Q	Spike	Q	Units	Rec (%)	Control Limits, % Lower	Upper	Q
L25265-02AS	AS	II990903-4	11/16/1999 6:06:18 P	0.005		U	0.00542		mg/L	108.4	75	125	
L25265-02ASD	ASD	II990903-4	11/16/1999 6:08:50 P	0.005		U	0.00538		mg/L	107.5	75	125	
L25265-11AS	AS	II990903-4	11/16/1999 6:25:33 P	0.005		U	0.00540		mg/L	108	75	125	
L25265-11ASD	ASD	II990903-4	11/16/1999 6:26:45 P	0.005		U	0.00540		mg/L	107.9	75	125	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix | *Aqueous*
Analysis Group | *Metals - Hydride*
QC Report | ***Spike Verification***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Selenium, total

Method SM 3500-Se C, AA-Hydride

ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration Added	Sample	Q	Spike	Q	Units	Rec (%)	Control Limits, % Lower	Upper	Q
L25244-02AS	AS	II990315-5	11/16/1999 6:49:00 P	0.02		U	0.0206		mg/L	103	75	125	
L25244-02ASD	ASD	II990315-5	11/16/1999 6:50:00 P	0.02		U	0.0209		mg/L	104.5	75	125	
L25265-10AS	AS	II991118-7	11/17/1999 8:54:00 P	0.02	0.001	B	0.0225		mg/L	107.5	75	125	
L25265-10ASD	ASD	II991118-7	11/17/1999 8:56:00 P	0.02	0.001	B	0.0226		mg/L	108	75	125	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - ICP
QC Report Spike Verification

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration Added	Sample	Q	Spike	Q	Units	Rec (%)	Control Limits,% Lower	Upper	Q
Barium	L25265-07MS	MS	II991105-6	11/12/99 03:22 pm	0.5	0.0413		0.517		mg/L	95.1	75	125	
Barium	L25265-07MSD	MSD	II991105-6	11/12/99 03:26 pm	0.5	0.0413		0.580		mg/L	107.7	75	125	
Barium	L25265-01AS	AS	II991120-2	11/19/99 01:35 pm	0.5	0.012613		0.504		mg/L	98.2	75	125	
Barium	L25265-01ASD	ASD	II991120-2	11/19/99 01:39 pm	0.5	0.012613		0.503		mg/L	98.1	75	125	
Barium	L25265-01MS	MS	II991105-6	11/19/99 01:47 pm	0.5	0.14		0.688		mg/L	109.6	75	125	
Barium	L25265-01MSD	MSD	II991105-6	11/19/99 01:59 pm	0.5	0.14		0.681		mg/L	108.2	75	125	
Beryllium	L25265-07MS	MS	II991105-6	11/12/99 03:22 pm	0.5		U	0.470		mg/L	94	75	125	
Beryllium	L25265-07MSD	MSD	II991105-6	11/12/99 03:26 pm	0.5		U	0.473		mg/L	94.6	75	125	
Beryllium	L25265-01MS	MS	II991105-6	11/13/99 12:51 am	0.5		U	0.522		mg/L	104.4	75	125	
Beryllium	L25265-01MSD	MSD	II991105-6	11/13/99 12:55 am	0.5		U	0.513		mg/L	102.5	75	125	
Cadmium	L25265-07MS	MS	II991105-6	11/12/99 03:22 pm	0.5		U	0.503		mg/L	100.6	75	125	
Cadmium	L25265-07MSD	MSD	II991105-6	11/12/99 03:26 pm	0.5		U	0.556		mg/L	111.2	75	125	
Cadmium	L25265-01AS	AS	II991120-2	11/19/99 01:35 pm	0.5		U	0.497		mg/L	99.4	75	125	
Cadmium	L25265-01ASD	ASD	II991120-2	11/19/99 01:39 pm	0.5		U	0.498		mg/L	99.6	75	125	
Cadmium	L25265-01MS	MS	II991105-6	11/19/99 01:47 pm	0.5		U	0.475		mg/L	95	75	125	
Cadmium	L25265-01MSD	MSD	II991105-6	11/19/99 01:59 pm	0.5		U	0.574		mg/L	114.7	75	125	
Cadmium	L25265-02AS	AS	II991120-2	11/19/99 02:06 pm	0.5		U	0.498		mg/L	99.7	75	125	
Cadmium	L25265-03AS	AS	II991120-2	11/19/99 02:14 pm	0.5		U	0.505		mg/L	101	75	125	
Cadmium	L25265-04AS	AS	II991120-2	11/19/99 02:22 pm	0.5		U	0.492		mg/L	98.5	75	125	
Cadmium	L25265-05AS	AS	II991120-2	11/19/99 02:30 pm	0.5		U	0.500		mg/L	99.9	75	125	
Chromium	L25265-07MS	MS	II991105-6	11/12/99 03:22 pm	0.5		U	0.501		mg/L	100.2	75	125	
Chromium	L25265-07MSD	MSD	II991105-6	11/12/99 03:26 pm	0.5		U	0.557		mg/L	111.4	75	125	
Chromium	L25265-01MS	MS	II991105-6	11/13/99 12:51 am	0.5		U	0.547		mg/L	109.4	75	125	
Chromium	L25265-01MSD	MSD	II991105-6	11/13/99 12:55 am	0.5		U	0.539		mg/L	107.8	75	125	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix | *Aqueous*
Analysis Group | *Metals - ICP*
QC Report | ***Spike Verification***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration Added	Sample	Q	Spike	Q	Units	Rec (%)	Control Limits,% Lower	Upper	Q
Cobalt	L25265-07MS	MS	II991105-6	11/12/99 03:22 pm	0.5		U	0.499		mg/L	99.8	75	125	
Cobalt	L25265-07MSD	MSD	II991105-6	11/12/99 03:26 pm	0.5		U	0.560		mg/L	112.1	75	125	
Cobalt	L25265-01MS	MS	II991105-6	11/13/99 12:51 am	0.5		U	0.541		mg/L	108.2	75	125	
Cobalt	L25265-01MSD	MSD	II991105-6	11/13/99 12:55 am	0.5		U	0.536		mg/L	107.2	75	125	
Copper	L25265-07MS	MS	II991105-6	11/12/99 03:22 pm	0.5		U	0.506		mg/L	101.2	75	125	
Copper	L25265-07MSD	MSD	II991105-6	11/12/99 03:26 pm	0.5		U	0.569		mg/L	113.8	75	125	
Copper	L25265-01MS	MS	II991105-6	11/13/99 12:51 am	0.5		U	0.541		mg/L	108.2	75	125	
Copper	L25265-01MSD	MSD	II991105-6	11/13/99 12:55 am	0.5		U	0.534		mg/L	106.8	75	125	
Nickel	L25265-07MS	MS	II991105-6	11/12/99 03:22 pm	0.5		U	0.495		mg/L	99	75	125	
Nickel	L25265-07MSD	MSD	II991105-6	11/12/99 03:26 pm	0.5		U	0.554		mg/L	110.8	75	125	
Nickel	L25265-01MS	MS	II991105-6	11/13/99 12:51 am	0.5		U	0.533		mg/L	106.6	75	125	
Nickel	L25265-01MSD	MSD	II991105-6	11/13/99 12:55 am	0.5		U	0.527		mg/L	105.4	75	125	
Silver	L25265-01AS	AS	II991120-2	11/19/99 01:35 pm	0.5		U	0.499		mg/L	99.7	75	125	
Silver	L25265-01ASD	ASD	II991120-2	11/19/99 01:39 pm	0.5		U	0.498		mg/L	99.7	75	125	
Silver	L25265-02AS	AS	II991120-2	11/19/99 02:06 pm	0.5		U	0.508		mg/L	101.6	75	125	
Silver	L25265-03AS	AS	II991120-2	11/19/99 02:14 pm	0.5		U	0.504		mg/L	100.8	75	125	
Silver	L25265-04AS	AS	II991120-2	11/19/99 02:22 pm	0.5		U	0.500		mg/L	100	75	125	
Silver	L25265-05AS	AS	II991120-2	11/19/99 02:30 pm	0.5		U	0.496		mg/L	99.2	75	125	
Silver	L25265-06AS	AS	II991120-2	11/19/99 05:39 pm	0.5		U	0.461		mg/L	92.3	75	125	
Silver	L25265-06ASD	ASD	II991120-2	11/19/99 05:43 pm	0.5		U	0.427		mg/L	85.3	75	125	
Silver	L25265-07AS	AS	II991120-2	11/19/99 06:08 pm	0.5		U	0.443		mg/L	88.6	75	125	
Silver	L25265-10AS	AS	II991120-2	11/29/99 01:32 pm	0.5		U	0.412		mg/L	82.3	75	125	
Silver	L25265-11AS	AS	II991120-2	11/29/99 01:40 pm	0.5		U	0.427		mg/L	85.4	75	125	
Silver	L25265-12AS	AS	II991120-2	11/29/99 01:48 pm	0.5		U	0.481		mg/L	96.3	75	125	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix | *Aqueous*
Analysis Group | *Metals - ICP*
QC Report | ***Spike Verification***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration Added	Sample	Q	Spike	Q	Units	Rec (%)	Control Limits,% Lower	Upper	Q
Tin	L25265-01MS	MS	II991105-6	11/13/99 12:51 am	1		U	1.05		mg/L	105	75	125	
Tin	L25265-01MSD	MSD	II991105-6	11/13/99 12:55 am	1		U	1.05		mg/L	105	75	125	
Tin	L25265-06AS	AS	II991120-2	11/19/99 05:39 pm	1		U	0.999		mg/L	99.9	75	125	
Tin	L25265-06ASD	ASD	II991120-2	11/19/99 05:43 pm	1		U	0.980		mg/L	98	75	125	
Tin	L25265-07MS	MS	II991120-2	11/19/99 06:01 pm	1		U	1.08		mg/L	108	75	125	
Tin	L25265-07MSD	MSD	II991120-2	11/19/99 06:04 pm	1		U	1.08		mg/L	108	75	125	
Tin	L25265-07AS	AS	II991120-2	11/19/99 06:08 pm	1		U	1.01		mg/L	100.5	75	125	
Tin	L25265-10AS	AS	II991120-2	11/19/99 06:15 pm	1		U	1.01		mg/L	101	75	125	
Tin	L25265-11AS	AS	II991120-2	11/19/99 06:22 pm	1		U	1.00		mg/L	100	75	125	
Tin	L25265-12AS	AS	II991120-2	11/19/99 06:29 pm	1		U	1.05		mg/L	105	75	125	
Vanadium	L25265-07MS	MS	II991105-6	11/12/99 03:22 pm	0.5		U	0.524		mg/L	104.8	75	125	
Vanadium	L25265-07MSD	MSD	II991105-6	11/12/99 03:26 pm	0.5		U	0.562		mg/L	112.3	75	125	
Vanadium	L25265-01MS	MS	II991105-6	11/13/99 12:51 am	0.5		U	0.561		mg/L	112.2	75	125	
Vanadium	L25265-01MSD	MSD	II991105-6	11/13/99 12:55 am	0.5		U	0.542		mg/L	108.3	75	125	
Zinc	L25265-07MS	MS	II991105-6	11/12/99 03:22 pm	0.5		U	0.528		mg/L	105.6	75	125	
Zinc	L25265-07MSD	MSD	II991105-6	11/12/99 03:26 pm	0.5		U	0.565		mg/L	113	75	125	
Zinc	L25265-01MS	MS	II991105-6	11/13/99 12:51 am	0.5		U	0.564		mg/L	112.8	75	125	
Zinc	L25265-01MSD	MSD	II991105-6	11/13/99 12:55 am	0.5		U	0.547		mg/L	109.3	75	125	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix | *Aqueous*
Analysis Group | *Metals - ICPMS*
QC Report | ***Spike Verification***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6020 ICP-MS

Element	ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration Added	Sample	Q	Spike	Q	Units	Rec (%)	Control Limits,% Lower	Upper	Q
Antimony	L25265-03MS	MS	MS991019-4	11/17/99 07:50 pm	0.1		U	0.112		mg/L	112	75	125	
Antimony	L25265-03MSD	MSD	MS991019-4	11/17/99 07:58 pm	0.1		U	0.113		mg/L	113	75	125	
Antimony	L25265-07MS	MS	MS991118-6	11/18/99 09:16 pm	0.1		U	0.120		mg/L	120	75	125	
Antimony	L25265-07MSD	MSD	MS991118-6	11/18/99 09:24 pm	0.1		U	0.120		mg/L	120	75	125	
Arsenic	L25265-03MS	MS	MS991019-4	11/17/99 07:50 pm	0.1	0.002	B	0.112		mg/L	110	75	125	
Arsenic	L25265-03MSD	MSD	MS991019-4	11/17/99 07:58 pm	0.1	0.002	B	0.111		mg/L	109	75	125	
Arsenic	L25265-07MS	MS	MS991118-6	11/18/99 09:16 pm	0.1		U	0.112		mg/L	112	75	125	
Arsenic	L25265-07MSD	MSD	MS991118-6	11/18/99 09:24 pm	0.1		U	0.108		mg/L	108	75	125	
Lead	L25265-03MS	MS	MS991019-4	11/17/99 07:50 pm	0.1		U	0.113		mg/L	113	75	125	
Lead	L25265-03MSD	MSD	MS991019-4	11/17/99 07:58 pm	0.1		U	0.110		mg/L	110	75	125	
Lead	L25265-07MS	MS	MS991019-4	11/17/99 09:15 pm	0.1		U	0.106		mg/L	106	75	125	
Lead	L25265-07MSD	MSD	MS991019-4	11/17/99 09:22 pm	0.1		U	0.106		mg/L	106	75	125	
Thallium	L25265-03MS	MS	MS991019-4	11/17/99 07:50 pm	0.1		U	0.111		mg/L	111	75	125	
Thallium	L25265-03MSD	MSD	MS991019-4	11/17/99 07:58 pm	0.1		U	0.113		mg/L	113	75	125	
Thallium	L25265-07MS	MS	MS991019-4	11/17/99 09:15 pm	0.1		U	0.110		mg/L	110	75	125	
Thallium	L25265-07MSD	MSD	MS991019-4	11/17/99 09:22 pm	0.1		U	0.111		mg/L	111	75	125	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Duplicate Verification

Cover Page

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

	Page
Metal Analysis	30
Metals - Cold Vapor	
Total Metals	
Metals - Hydride	
Total Metals	
Metals - ICP	
Total Metals	
Metals - ICPMS	
Total Metals	

Additional analytical runs may have been required as a result of matrix effects and/or instrumental problems.
Re-analysis data immediately follows initial QC data as outlined in above sequence.

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix *Aqueous*
Analysis Group *Metals - Cold Vapor*
QC Report ***Duplicate Verification***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Mercury, total

Method M7470 CVAA

ACZ ID	QC Type	Analysis Date	Concentration (mg/L)				RPD	Control Limits, %		Q
			Sample	Q	Duplicate	Q	(%)	Lower	Upper	
L25265-02ASD	ASD	11/16/1999 6:08:50 PM	0.00542		0.00538		0.8	0	20	
L25265-11ASD	ASD	11/16/1999 6:26:45 PM	0.00540		0.00540		0.1	0	20	

ACZ	Client
√	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix *Aqueous*
Analysis Group *Metals - Hydride*
QC Report ***Duplicate Verification***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Selenium, total

Method SM 3500-Se C, AA-Hydride

ACZ ID	QC Type	Analysis Date	Concentration (mg/L)				RPD	Control Limits, %		Q
			Sample	Q	Duplicate	Q	(%)	Lower	Upper	
L25244-02ASD	ASD	11/16/1999 6:50:00 PM	0.0206		0.0209		1.4	0	20	
L25265-10ASD	ASD	11/17/1999 8:56:00 PM	0.0225		0.0226		0.4	0	20	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix | *Aqueous*
Analysis Group | *Metals - ICP*
QC Report | ***Duplicate Verification***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	Concentration (mg/L)				RPD	Control Limits, %		Q
			Sample	Q	Duplicate	Q	(%)	Lower	Upper	
Barium	L25265-07MSD	MSD	0.517		0.580		11.5	0	20	
Barium	L25265-01ASD	ASD	0.504		0.503		0.1	0	20	
Barium	L25265-01MSD	MSD	0.688		0.681		1	0	20	
Beryllium	L25265-07MSD	MSD	0.470		0.473		0.6	0	20	
Beryllium	L25265-01MSD	MSD	0.522		0.513		1.8	0	20	
Cadmium	L25265-07MSD	MSD	0.503		0.556		10	0	20	
Cadmium	L25265-01ASD	ASD	0.497		0.498		0.2	0	20	
Cadmium	L25265-01MSD	MSD	0.475		0.574		18.9	0	20	
Chromium	L25265-07MSD	MSD	0.501		0.557		10.6	0	20	
Chromium	L25265-01MSD	MSD	0.547		0.539		1.5	0	20	
Cobalt	L25265-07MSD	MSD	0.499		0.560		11.5	0	20	
Cobalt	L25265-01MSD	MSD	0.541		0.536		1	0	20	
Copper	L25265-07MSD	MSD	0.506		0.569		11.7	0	20	
Copper	L25265-01MSD	MSD	0.541		0.534		1.3	0	20	
Nickel	L25265-07MSD	MSD	0.495		0.554		11.2	0	20	
Nickel	L25265-01MSD	MSD	0.533		0.527		1.1	0	20	
Silver	L25265-01ASD	ASD	0.499		0.498		0.2	0	20	
Silver	L25265-06ASD	ASD	0.461		0.427		7.9	0	20	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix | *Aqueous*
Analysis Group | *Metals - ICP*
QC Report | ***Duplicate Verification***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	Concentration (mg/L)				RPD	Control Limits, %		Q
			Sample	Q	Duplicate	Q	(%)	Lower	Upper	
Tin	L25265-01MSD	MSD	1.05		1.05		0.3	0	20	
Tin	L25265-06ASD	ASD	0.999		0.980		2	0	20	
Tin	L25265-07MSD	MSD	1.08		1.08		0.3	0	20	
Vanadium	L25265-07MSD	MSD	0.524		0.562		7	0	20	
Vanadium	L25265-01MSD	MSD	0.561		0.542		3.6	0	20	
Zinc	L25265-07MSD	MSD	0.528		0.565		6.8	0	20	
Zinc	L25265-01MSD	MSD	0.564		0.547		3.1	0	20	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix | *Aqueous*
Analysis Group | *Metals - ICPMS*
QC Report | ***Duplicate Verification***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6020 ICP-MS

Element	ACZ ID	QC Type	Concentration (mg/L) Sample	Q	Duplicate	Q	RPD (%)	Control Limits, % Lower	Upper	Q
Antimony	L25265-03MSD	MSD	0.112		0.113		0.5	0	20	
Antimony	L25265-07MSD	MSD	0.120		0.120		0	0	20	
Arsenic	L25265-03MSD	MSD	0.112		0.111		0.6	0	20	
Arsenic	L25265-07MSD	MSD	0.112		0.108		3.3	0	20	
Lead	L25265-03MSD	MSD	0.113		0.110		2.4	0	20	
Lead	L25265-07MSD	MSD	0.106		0.106		0.3	0	20	
Thallium	L25265-03MSD	MSD	0.111		0.113		1.6	0	20	
Thallium	L25265-07MSD	MSD	0.110		0.111		0.9	0	20	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Method Verification - Control Samples
Cover Page

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

	Page
Metal Analysis	36
Metals - Cold Vapor	
Total Metals	
Metals - Hydride	
Total Metals	
Metals - ICP	
Total Metals	
Metals - ICPMS	
Total Metals	

Additional analytical runs may have been required as a result of matrix effects and/or instrumental problems.
Re-analysis data immediately follows initial QC data as outlined in above sequence.

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix *Aqueous*
Analysis Group *Metals - Cold Vapor*
QC Report ***Method Verification-Control Samples***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Mercury, total

Method M7470 CVAA

ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration (mg/L) True	Found	Q	Rec (%)	Control Limits,% Lower	Upper	Q
WG91854LFB	LFB	II990903-4	11/16/1999 6:02:36 PM	0.005	0.00539		107.8	85	115	
WG91854LCSW1	LCSW	II990903-5	11/16/1999 6:38:42 PM	0.01	0.0112		112.3	85	115	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - Hydride
QC Report ***Method Verification-Control Samples***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Selenium, total

Method SM 3500-Se C, AA-Hydride

ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration (mg/L) True	Found	Q	Rec (%)	Control Limits,% Lower	Upper	Q
WG91744LCSW	LCSW	II990315-4	11/16/1999 6:24:00 PM	0.02	0.0203		101.5	85	115	
WG91744LFB	LFB	II990315-5	11/16/1999 6:26:00 PM	0.02	0.0205		102.5	85	115	
WG91997LCSW	LCSW	II991118-5	11/17/1999 8:48:00 PM	0.02	0.0214		107	85	115	
WG91997LFB	LFB	II991118-7	11/17/1999 8:50:00 PM	0.02	0.0216		108	85	115	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - ICP
QC Report **Method Verification-Control Samples**

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration (mg/L) True	Found	Q	Rec (%)	Control Limits,% Lower	Upper	Q
Barium	WG91755LCSW	LCSW	II991027-1	11/12/1999 3:06:00 P	1	1.00		101	85	115	
Barium	WG91562LCSW	LCSW	II991027-1	11/19/1999 1:27:00 P	1	0.987		98.7	85	115	
Beryllium	WG91755LCSW	LCSW	II991027-1	11/12/1999 3:06:00 P	1	0.974		97.4	85	115	
Beryllium	WG91562LCSW	LCSW	II991027-1	11/13/1999 12:39:00 A	1	0.968		96.8	85	115	
Cadmium	WG91755LCSW	LCSW	II991027-1	11/12/1999 3:06:00 P	1	0.978		97.8	85	115	
Cadmium	WG91562LCSW	LCSW	II991027-1	11/19/1999 1:27:00 P	1	0.964		96.4	85	115	
Chromium	WG91755LCSW	LCSW	II991027-1	11/12/1999 3:06:00 P	1	0.978		97.8	85	115	
Chromium	WG91562LCSW	LCSW	II991027-1	11/13/1999 12:39:00 A	1	0.973		97.3	85	115	
Cobalt	WG91755LCSW	LCSW	II991027-1	11/12/1999 3:06:00 P	1	0.983		98.3	85	115	
Cobalt	WG91562LCSW	LCSW	II991027-1	11/13/1999 12:39:00 A	1	0.979		97.9	85	115	
Copper	WG91755LCSW	LCSW	II991027-1	11/12/1999 3:06:00 P	1	0.977		97.7	85	115	
Copper	WG91562LCSW	LCSW	II991027-1	11/13/1999 12:39:00 A	1	0.968		96.8	85	115	
Nickel	WG91755LCSW	LCSW	II991027-1	11/12/1999 3:06:00 P	1	0.981		98.1	85	115	
Nickel	WG91562LCSW	LCSW	II991027-1	11/13/1999 12:39:00 A	1	0.965		96.5	85	115	
Silver	WG91562LCSW	LCSW	II991027-1	11/19/1999 1:27:00 P	1	0.981		98.1	85	115	
Silver	WG91755LCSW	LCSW	II991027-1	11/19/1999 5:32:00 P	1	0.939		93.9	85	115	
Tin	WG91562LCSW	LCSW	II991027-1	11/13/1999 12:39:00 A	1	0.990		99.3	85	115	
Tin	WG91755LCSW	LCSW	II991027-1	11/19/1999 5:32:00 P	1	0.940		93.6	85	115	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
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(800) 334-5493
Fax: (970) 879-2216

Matrix *Aqueous*
Analysis Group *Metals - ICP*
QC Report ***Method Verification-Control Samples***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration (mg/L) True	Found	Q	Rec (%)	Control Limits,% Lower	Upper	Q
Vanadium	WG91755LCSW	LCSW	II991027-1	11/12/1999 3:06:00 P	1	1.00		100	85	115	
Vanadium	WG91562LCSW	LCSW	II991027-1	11/13/1999 12:39:00 A	1	0.992		99.2	85	115	
Zinc	WG91755LCSW	LCSW	II991027-1	11/12/1999 3:06:00 P	1	0.980		98	85	115	
Zinc	WG91562LCSW	LCSW	II991027-1	11/13/1999 12:39:00 A	1	0.986		98.6	85	115	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix Aqueous
Analysis Group Metals - ICPMS
QC Report ***Method Verification-Control Samples***

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Total Metals

Method M6020 ICP-MS

Element	ACZ ID	QC Type	PCN / SCN#	Analysis Date	Concentration (mg/L) True	Found	Q	Rec (%)	Control Limits,% Lower	Upper	Q
Antimony	WG91562LCSW	LCSW	II991018-1	11/17/1999 7:12:00 P	0.1	0.0922		92.2	80	120	
Antimony	WG90807LCSW	LCSW	II991018-1	11/18/1999 7:35:00 P	0.1	1.01		101	80	120	
Antimony	WG91755LCSW	LCSW	II991018-1	11/18/1999 8:46:00 P	0.1	0.101		101	80	120	
Arsenic	WG91562LCSW	LCSW	II991018-1	11/17/1999 7:12:00 P	0.1	0.100		100	80	120	
Arsenic	WG90807LCSW	LCSW	II991018-1	11/18/1999 7:35:00 P	0.1	0.987		98.7	80	120	
Arsenic	WG91755LCSW	LCSW	II991018-1	11/18/1999 8:46:00 P	0.1	0.104		104	80	120	
Lead	WG90807LCSW	LCSW	II991018-1	11/17/1999 6:01:00 P	0.1	0.0995		99.5	80	120	
Lead	WG91562LCSW	LCSW	II991018-1	11/17/1999 7:12:00 P	0.1	0.0902		90.2	80	120	
Lead	WG91755LCSW	LCSW	II991018-1	11/17/1999 8:44:00 P	0.1	0.0958		95.8	80	120	
Thallium	WG90807LCSW	LCSW	II991018-1	11/17/1999 6:01:00 P	0.1	0.102		102	80	120	
Thallium	WG91562LCSW	LCSW	II991018-1	11/17/1999 7:12:00 P	0.1	0.0959		95.9	80	120	
Thallium	WG91755LCSW	LCSW	II991018-1	11/17/1999 8:44:00 P	0.1	0.0995		99.5	80	120	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

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Method Verification - Blanks

Cover Page

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

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Metal Analysis	42
Metals - Cold Vapor	
Total Metals	
Metals - Hydride	
Total Metals	
Metals - ICP	
Total Metals	
Metals - ICPMS	
Total Metals	

Additional analytical runs may have been required as a result of matrix effects and/or instrumental problems.
Re-analysis data immediately follows initial QC data as outlined in above sequence.

ACZ

Inorganic QC Summary

2773 Downhill Drive
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Matrix Aqueous
Analysis Group Metals - Cold Vapor
QC Report **Method Verification-Blanks**

ACZ Project #	L25265
QC Report ID	QC3123-C
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Mercury, total

Method M7470 CVAA

ACZ ID	QC Type	Analysis Date	Concentration (mg/L)			Control Limits		Q
			MDL	Found	Q	Lower	Upper	
WG91854PBW	PBW	11/16/1999 6:00:10 PM	0.0002		U	-0.0002	0.0002	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
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Fax: (970) 879-2216

Matrix *Aqueous*
Analysis Group *Metals - Hydride*
QC Report ***Method Verification-Blanks***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Selenium, total

Method SM 3500-Se C, AA-Hydride

ACZ ID	QC Type	Analysis Date	Concentration (mg/L)			Control Limits		Q
			MDL	Found	Q	Lower	Upper	
WG91744PBW	PBW	11/16/1999 6:23:00 PM	0.001		U	-0.001	0.001	
WG91997PBW	PBW	11/17/1999 8:47:00 PM	0.001		U	-0.001	0.001	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix | *Aqueous*
Analysis Group | *Metals - ICP*
QC Report | ***Method Verification-Blank***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	Analysis Date	Concentration (mg/L) MDL	Found	Q	Control Limits Lower	Upper	Q
Barium	WG91755PBW	PBW	11/12/1999 3:02:00 PM	0.003		U	-0.003	0.003	
Barium	WG91562PBW	PBW	11/19/1999 1:23:00 PM	0.003		U	-0.003	0.003	
Beryllium	WG91755PBW	PBW	11/12/1999 3:02:00 PM	0.002		U	-0.002	0.002	
Beryllium	WG91562PBW	PBW	11/13/1999 12:35:00 AM	0.002		U	-0.002	0.002	
Cadmium	WG91755PBW	PBW	11/12/1999 3:02:00 PM	0.003		U	-0.003	0.003	
Cadmium	WG91562PBW	PBW	11/19/1999 1:23:00 PM	0.003		U	-0.003	0.003	
Chromium	WG91755PBW	PBW	11/12/1999 3:02:00 PM	0.01		U	-0.01	0.01	
Chromium	WG91562PBW	PBW	11/13/1999 12:35:00 AM	0.01		U	-0.01	0.01	
Cobalt	WG91755PBW	PBW	11/12/1999 3:02:00 PM	0.01		U	-0.01	0.01	
Cobalt	WG91562PBW	PBW	11/13/1999 12:35:00 AM	0.01		U	-0.01	0.01	
Copper	WG91755PBW	PBW	11/12/1999 3:02:00 PM	0.01		U	-0.01	0.01	
Copper	WG91562PBW	PBW	11/13/1999 12:35:00 AM	0.01		U	-0.01	0.01	
Nickel	WG91755PBW	PBW	11/12/1999 3:02:00 PM	0.01		U	-0.01	0.01	
Nickel	WG91562PBW	PBW	11/13/1999 12:35:00 AM	0.01		U	-0.01	0.01	
Silver	WG91562PBW	PBW	11/19/1999 1:23:00 PM	0.006		U	-0.006	0.006	
Silver	WG91755PBW	PBW	11/19/1999 5:29:00 PM	0.006		U	-0.006	0.006	
Tin	WG91562PBW	PBW	11/13/1999 12:35:00 AM	0.1		U	-0.1	0.1	
Tin	WG91755PBW	PBW	11/19/1999 5:29:00 PM	0.1		U	-0.1	0.1	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix *Aqueous*
Analysis Group *Metals - ICP*
QC Report ***Method Verification-Blank***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6010B ICP

Element	ACZ ID	QC Type	Analysis Date	Concentration (mg/L) MDL	Found	Q	Control Limits Lower	Upper	Q
Vanadium	WG91755PBW	PBW	11/12/1999 3:02:00 PM	0.006		U	-0.006	0.006	
Vanadium	WG91562PBW	PBW	11/13/1999 12:35:00 AM	0.006		U	-0.006	0.006	
Zinc	WG91755PBW	PBW	11/12/1999 3:02:00 PM	0.01		U	-0.01	0.01	
Zinc	WG91562PBW	PBW	11/13/1999 12:35:00 AM	0.01		U	-0.01	0.01	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

Matrix | *Aqueous*
Analysis Group | *Metals - ICPMS*
QC Report | ***Method Verification-Blank***

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

Total Metals

Method M6020 ICP-MS

Element	ACZ ID	QC Type	Analysis Date	Concentration (mg/L) MDL	Found	Q	Control Limits Lower	Upper	Q
Antimony	WG91562PBW	PBW	11/17/1999 7:05:00 PM	0.0002		U	-0.0006	0.0006	
Antimony	WG90807PBW	PBW	11/18/1999 7:27:00 PM	0.0002		U	-0.0006	0.0006	
Antimony	WG91755PBW	PBW	11/18/1999 8:38:00 PM	0.0002		U	-0.0006	0.0006	
Arsenic	WG91562PBW	PBW	11/17/1999 7:05:00 PM	0.001		U	-0.003	0.003	
Arsenic	WG90807PBW	PBW	11/18/1999 7:27:00 PM	0.001		U	-0.003	0.003	
Arsenic	WG91755PBW	PBW	11/18/1999 8:38:00 PM	0.001		U	-0.003	0.003	
Lead	WG90807PBW	PBW	11/17/1999 5:54:00 PM	0.0002		U	-0.0006	0.0006	
Lead	WG91562PBW	PBW	11/17/1999 7:05:00 PM	0.0002		U	-0.0006	0.0006	
Lead	WG91755PBW	PBW	11/17/1999 8:36:00 PM	0.0002		U	-0.0006	0.0006	
Thallium	WG90807PBW	PBW	11/17/1999 5:54:00 PM	0.0001		U	-0.0003	0.0003	
Thallium	WG91562PBW	PBW	11/17/1999 7:05:00 PM	0.0001		U	-0.0003	0.0003	
Thallium	WG91755PBW	PBW	11/17/1999 8:36:00 PM	0.0001		U	-0.0003	0.0003	

ACZ	Client
✓	

ACZ

Inorganic QC Summary

2773 Downhill Drive
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Analysis Run Log

Cover Page

ACZ Project #	*L25265*
QC Report ID	*QC3123-C*
Client	*Daniel B. Stephens & Associates*
Client Project ID	*9001.4*
Date Received	*10/22/1999*
Date Reported	*11/30/1999*

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Metal Analysis		48
Selenium (Total) by Hydride	WG91744	
	WG91997	
Metals (Total) by ICP	WG91806	
	WG91846	
	WG92213	
	WG92222	
	WG92623	
Metals (Total) by ICP-MS	WG91951	
	WG92118	
Mercury (Total) by CVAA	WG91854	

ACZ

Inorganic
QC Summary

2773 Downhill Drive
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QC Report | ***Analysis Run Log***

Analysis | ***Selenium (Total) by Hydride***

ACZ Project #	L25265
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Workgroup: WG91744

ACZ ID	Measure Date	Dilution	Se
WG91744ICV	11/16/1999	1	X
WG91744ICB	11/16/1999	1	X
WG91744PBW	11/16/1999	1	X
WG91744LCSW	11/16/1999	1	X
WG91744LFB	11/16/1999	1	X
ZZZ	11/16/1999	1	X
ZZZ	11/16/1999	1	X
L25197-08AS	11/16/1999	1	X
L25197-08ASD	11/16/1999	1	X
ZZZ	11/16/1999	1	X
ZZZ	11/16/1999	1	X
ZZZ	11/16/1999	1	X
WG91744CCV1	11/16/1999	1	X
WG91744CCB1	11/16/1999	1	X
ZZZ	11/16/1999	1	X
ZZZ	11/16/1999	1	X
ZZZ	11/16/1999	1	X
ZZZ	11/16/1999	1	X
ZZZ	11/16/1999	1	X
ZZZ	11/16/1999	1	X
L25244-02AS	11/16/1999	1	X
L25244-02ASD	11/16/1999	1	X
ZZZ	11/16/1999	1	X
L25265-01	11/16/1999	1	X
WG91744CCV2	11/16/1999	1	X
WG91744CCB2	11/16/1999	1	X
L25265-02	11/16/1999	1	X
L25265-03	11/16/1999	1	X
L25265-04	11/16/1999	1	X
L25265-05	11/16/1999	1	X
L25265-06	11/16/1999	1	X
L25265-07	11/16/1999	1	X
L25265-08	11/16/1999	1	X
WG91744CCV3	11/16/1999	1	X
WG91744CCB3	11/16/1999	1	X

ACZ	Client
✓	

ACZ

Inorganic QC Summary

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QC Report | ***Analysis Run Log***

Analysis | ***Selenium (Total) by Hydride***

ACZ Project # L25265
Client Daniel B. Stephens & Associates
Client Project ID 9001.4
Date Received 10/22/1999
Date Reported 11/30/1999

Workgroup: WG91997

ACZ ID	Measure Date	Dilution	Se
WG91997ICV	11/17/1999	1	X
WG91997ICB	11/17/1999	1	X
WG91997PBW	11/17/1999	1	X
WG91997LCSW	11/17/1999	1	X
WG91997LFB	11/17/1999	1	X
L25265-09	11/17/1999	1	X
L25265-10	11/17/1999	1	X
L25265-10AS	11/17/1999	1	X
L25265-10ASD	11/17/1999	1	X
L25265-11	11/17/1999	1	X
L25265-12	11/17/1999	1	X
ZZZ	11/17/1999	1	X
WG91997CCV1	11/17/1999	1	X
WG91997CCB1	11/17/1999	1	X
ZZZ	11/17/1999	1	X
ZZZ	11/17/1999	1	X
ZZZ	11/17/1999	1	X
ZZZ	11/17/1999	1	X
ZZZ	11/17/1999	1	X
ZZZ	11/17/1999	1	X
ZZZ	11/17/1999	1	X
L25334-07AS	11/17/1999	1	X
L25334-07ASD	11/17/1999	1	X
ZZZ	11/17/1999	1	X
WG91997CCV2	11/17/1999	1	X
WG91997CCB2	11/17/1999	1	X
ZZZ	11/17/1999	1	X
ZZZ	11/17/1999	1	X
ZZZ	11/17/1999	1	X
ZZZ	11/17/1999	1	X
ZZZ	11/17/1999	1	X
ZZZ	11/17/1999	1	X
ZZZ	11/17/1999	1	X
WG91997CCV3	11/17/1999	1	X
WG91997CCB3	11/17/1999	1	X
WG91997CCV4	11/17/1999	1	X

ACZ	Client
✓	

ACZ

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QC Report | ***Analysis Run Log***

Analysis | ***Selenium (Total) by Hydride***

ACZ Project #	L25265
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Workgroup: WG91997 **(Continued)**

ACZ ID	Measure Date	Dilution	Se
WG91997CCB4	11/17/1999	1	X
ZZZ	11/17/1999	5	X
ZZZ	11/17/1999	5	X
ZZZ	11/17/1999	5	X
WG91997CCV5	11/17/1999	1	X
WG91997CCB5	11/17/1999	1	X

ACZ

Inorganic QC Summary

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QC Report | ***Analysis Run Log***

Analysis | ***Metals (Total) by ICP***

ACZ Project # L25265
Client Daniel B. Stephens & Associates
Client Project ID 9001.4
Date Received 10/22/1999
Date Reported 11/30/1999

Workgroup: WG91806

ACZ ID	Measure Date	Dilution	Ba	Be	Co	Cr	Cu	Ni	Sn	V	Zn
WG91806ICV	11/13/1999	1	X	X	X	X	X	X	X	X	X
WG91806ICB	11/13/1999	1	X	X	X	X	X	X	X	X	X
WG91806ICSABI	11/13/1999	1	X	X	X	X	X	X	X	X	X
WG91562PBW	11/13/1999	1.11		X	X	X	X	X	X	X	X
WG91562LCSW	11/13/1999	1.11		X	X	X	X	X	X	X	X
L25265-01	11/13/1999	1.11		X	X	X	X	X	X	X	X
L25265-01SDL	11/13/1999	1.11		X	X	X	X	X	X	X	X
L25265-01MS	11/13/1999	1.11		X	X	X	X	X	X	X	X
L25265-01MSD	11/13/1999	1.11		X	X	X	X	X	X	X	X
L25265-02	11/13/1999	1.11	X	X	X	X	X	X	X	X	X
WG91806CCV4	11/13/1999	1	X	X	X	X	X	X	X	X	X
WG91806CCB4	11/13/1999	1	X	X	X	X	X	X	X	X	X
L25265-03	11/13/1999	1.11	X	X	X	X	X	X	X	X	X
L25265-04	11/13/1999	1.11	X	X	X	X	X	X	X	X	X
L25265-05	11/13/1999	1.11	X	X	X	X	X	X	X	X	X
ZZZ	11/13/1999	5	X	X	X	X	X	X		X	X
ZZZ	11/13/1999	5.55	X	X	X	X	X	X		X	X
ZZZ	11/13/1999	5.55	X	X	X	X	X	X		X	X
ZZZ	11/13/1999	5.55	X	X	X	X	X	X		X	X
ZZZ	11/13/1999	5	X	X	X	X	X	X		X	X
ZZZ	11/13/1999	22.2		X	X	X	X	X		X	X
L25342-06SDL	11/13/1999	22.2		X	X	X	X	X	X	X	X
WG91806CCV5	11/13/1999	1	X	X	X	X	X	X	X	X	X
WG91806CCB5	11/13/1999	1	X	X	X	X	X	X	X	X	X
L25342-06AS	11/13/1999	22.2		X	X	X	X	X	X	X	X
L25342-06ASD	11/13/1999	22.2		X	X	X	X	X	X	X	X
L25342-06MS	11/13/1999	22.2		X	X	X	X	X	X	X	X
L25342-06MSD	11/13/1999	22.2		X	X	X	X	X	X	X	X
ZZZ	11/13/1999	1.11		X	X	X	X	X		X	X
ZZZ	11/13/1999	5.55		X	X	X	X	X		X	X
ZZZ	11/13/1999	2.22		X	X	X	X	X		X	X
ZZZ	11/13/1999	1.11		X	X	X	X	X		X	X
ZZZ	11/13/1999	2.22		X	X	X	X	X		X	X
ZZZ	11/13/1999	1.11		X	X	X	X	X		X	X
WG91806CCV6	11/13/1999	1	X	X	X	X	X	X	X	X	X
WG91806CCB6	11/13/1999	1	X	X	X	X	X	X	X	X	X

ACZ	Client
✓	

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QC Report | ***Analysis Run Log***

Analysis | ***Metals (Total) by ICP***

ACZ Project # L25265
Client Daniel B. Stephens & Associates
Client Project ID 9001.4
Date Received 10/22/1999
Date Reported 11/30/1999

Workgroup: WG91806 **(Continued)**

ACZ ID	Measure Date	Dilution	Ba	Be	Co	Cr	Cu	Ni	Sn	V	Zn
ZZZ	11/13/1999	1.11		X	X	X	X	X		X	X
WG91806CCV7	11/13/1999	1	X	X	X	X	X	X	X	X	X
WG91806CCB7	11/13/1999	1	X	X	X	X	X	X	X	X	X

ACZ

Inorganic QC Summary

2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493
Fax: (970) 879-2216

QC Report | ***Analysis Run Log***

Analysis | ***Metals (Total) by ICP***

ACZ Project # L25265
Client Daniel B. Stephens & Associates
Client Project ID 9001.4
Date Received 10/22/1999
Date Reported 11/30/1999

Workgroup: WG91846

ACZ ID	Measure Date	Dilution	Ba	Be	Cd	Co	Cr	Cu	Ni	V	Zn
WG91846ICV	11/12/1999	1	X	X	X	X	X	X	X	X	X
WG91846ICB	11/12/1999	1	X	X	X	X	X	X	X	X	X
WG91846ICSABI	11/12/1999	1	X	X	X	X	X	X	X	X	X
WG91755PBW	11/12/1999	1.11	X	X	X	X	X	X	X	X	X
WG91755LCSW	11/12/1999	1.11	X	X	X	X	X	X	X	X	X
L25265-06	11/12/1999	1.11	X	X	X	X	X	X	X	X	X
L25265-07	11/12/1999	1.11	X	X	X	X	X	X	X	X	X
L25265-07SDL	11/12/1999	1.11	X	X	X	X	X	X	X	X	X
L25265-07MS	11/12/1999	1.11	X	X	X	X	X	X	X	X	X
L25265-07MSD	11/12/1999	1.11	X	X	X	X	X	X	X	X	X
WG91846CCV1	11/12/1999	1	X	X	X	X	X	X	X	X	X
WG91846CCB1	11/12/1999	1	X	X	X	X	X	X	X	X	X
L25265-10	11/12/1999	1.11	X	X	X	X	X	X	X	X	X
L25265-11	11/12/1999	1.11	X	X	X	X	X	X	X	X	X
L25265-12	11/12/1999	1.11	X	X	X	X	X	X	X	X	X
WG91846CCV2	11/12/1999	1	X	X	X	X	X	X	X	X	X
WG91846CCB2	11/12/1999	1	X	X	X	X	X	X	X	X	X

ACZ	Client
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Inorganic QC Summary

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QC Report | ***Analysis Run Log***

Analysis | ***Metals (Total) by ICP***

ACZ Project # L25265
Client Daniel B. Stephens & Associates
Client Project ID 9001.4
Date Received 10/22/1999
Date Reported 11/30/1999

Workgroup: WG92213

ACZ ID	Measure Date	Dilution	Ag	Sn
WG92213ICV	11/19/1999	1	X	X
WG92213ICB	11/19/1999	1	X	X
WG92213PQV	11/19/1999	1	X	X
WG92213ICSABI	11/19/1999	1	X	X
WG91755PBW	11/19/1999	1.11	X	X
WG91755LCSW	11/19/1999	1.11	X	X
L25265-06	11/19/1999	1.11	X	X
L25265-06AS	11/19/1999	1.11	X	X
L25265-06ASD	11/19/1999	1.11	X	X
L25265-07	11/19/1999	1.11	X	X
L25265-07SDL	11/19/1999	1.11	X	X
WG92213CCV1	11/19/1999	1	X	X
WG92213CCB1	11/19/1999	1	X	X
L25265-07MS	11/19/1999	1.11	X	X
L25265-07MSD	11/19/1999	1.11	X	X
L25265-07AS	11/19/1999	1.11	X	X
L25265-10	11/19/1999	1.11		X
L25265-10AS	11/19/1999	1.11		X
L25265-11	11/19/1999	1.11		X
L25265-11AS	11/19/1999	1.11		X
L25265-12	11/19/1999	1.11		X
L25265-12AS	11/19/1999	1.11		X
WG92213CCV2	11/19/1999	1	X	X
WG92213CCB2	11/19/1999	1	X	X

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QC Report | ***Analysis Run Log***

Analysis | ***Metals (Total) by ICP***

ACZ Project # L25265
Client Daniel B. Stephens & Associates
Client Project ID 9001.4
Date Received 10/22/1999
Date Reported 11/30/1999

Workgroup: WG92222

ACZ ID	Measure Date	Dilution	Ag	Ba	Cd
WG92222CCV1	11/19/1999	1	X	X	X
WG92222CCB1	11/19/1999	1	X	X	X
WG92222PQV	11/19/1999	1	X	X	X
WG92222ICSABI	11/19/1999	1	X	X	X
WG91562PBW	11/19/1999	1.11	X	X	X
WG91562LCSW	11/19/1999	1.11	X	X	X
L25265-01	11/19/1999	11.1	X	X	X
L25265-01AS	11/19/1999	11.1	X	X	X
L25265-01ASD	11/19/1999	11.1	X	X	X
L25265-01SDL	11/19/1999	11.1	X	X	X
L25265-01MS	11/19/1999	11.1	X	X	X
WG92222CCV2	11/19/1999	1	X	X	X
WG92222CCB2	11/19/1999	1	X	X	X
L25265-01MSD	11/19/1999	11.1	X	X	X
L25265-02	11/19/1999	11.1	X		X
L25265-02AS	11/19/1999	11.1	X	X	X
L25265-03	11/19/1999	2.22	X		X
L25265-03AS	11/19/1999	2.22	X	X	X
L25265-04	11/19/1999	2.22	X		X
L25265-04AS	11/19/1999	2.22	X	X	X
L25265-05	11/19/1999	2.22	X		X
L25265-05AS	11/19/1999	2.22	X	X	X
ZZZ	11/19/1999	10	X		
WG92222CCV3	11/19/1999	1	X	X	X
WG92222CCB3	11/19/1999	1	X	X	X
L25342-01AS	11/19/1999	10	X	X	X
ZZZ	11/19/1999	5.55	X		X
L25342-02AS	11/19/1999	5.55	X	X	X
ZZZ	11/19/1999	5.55	X		X
L25342-03AS	11/19/1999	5.55	X	X	X
ZZZ	11/19/1999	5.55	X		X
L25342-04AS	11/19/1999	5.55	X	X	X
ZZZ	11/19/1999	25	X		
L25342-05AS	11/19/1999	25	X	X	X
ZZZ	11/19/1999	22.2	X	X	X
WG92222CCV4	11/19/1999	1	X	X	X

ACZ	Client
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QC Report | ***Analysis Run Log***

Analysis | ***Metals (Total) by ICP***

ACZ Project # L25265
Client Daniel B. Stephens & Associates
Client Project ID 9001.4
Date Received 10/22/1999
Date Reported 11/30/1999

Workgroup: WG92222 **(Continued)**

ACZ ID	Measure Date	Dilution	Ag	Ba	Cd
WG92222CCB4	11/19/1999	1	X	X	X
L25342-06SDL	11/19/1999	22.2	X	X	X
L25342-06MS	11/19/1999	22.2	X	X	X
L25342-06MSD	11/19/1999	22.2	X	X	X
L25342-06AS	11/19/1999	22.2	X	X	X
L25342-06ASD	11/19/1999	22.2	X	X	X
ZZZ	11/19/1999	2.22	X	X	X
L25342-07AS	11/19/1999	2.22	X	X	X
ZZZ	11/19/1999	5.55	X	X	X
L25352-01AS	11/19/1999	5.55	X	X	X
ZZZ	11/19/1999	2.22	X	X	X
WG92222CCV5	11/19/1999	1	X	X	X
WG92222CCB5	11/19/1999	1	X	X	X
L25352-02AS	11/19/1999	2.22	X	X	X
ZZZ	11/19/1999	2.22	X	X	X
L25352-03AS	11/19/1999	2.22	X	X	X
ZZZ	11/19/1999	2.22	X	X	X
L25352-04AS	11/19/1999	2.22	X	X	X
ZZZ	11/19/1999	2.22	X	X	X
L25352-05AS	11/19/1999	2.22	X	X	X
ZZZ	11/19/1999	2.22	X	X	X
L25352-06AS	11/19/1999	2.22	X	X	X
WG92222CCV6	11/19/1999	1	X	X	X
WG92222CCB6	11/19/1999	1	X	X	X

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Inorganic QC Summary

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QC Report | ***Analysis Run Log***

Analysis | ***Metals (Total) by ICP***

ACZ Project #	L25265
Client	Daniel B. Stephens & Associates
Client Project ID	9001.4
Date Received	10/22/1999
Date Reported	11/30/1999

Workgroup: WG92623

ACZ ID	Measure Date	Dilution	Ag
WG92623ICV	11/29/1999	1	X
WG92623ICB	11/29/1999	1	X
WG92623PQV	11/29/1999	1	X
WG92623ICSABI	11/29/1999	1	X
L25265-10	11/29/1999	1.11	X
L25265-10AS	11/29/1999	1.11	X
L25265-11	11/29/1999	1.11	X
L25265-11AS	11/29/1999	1.11	X
L25265-12	11/29/1999	1.11	X
L25265-12AS	11/29/1999	1.11	X
WG92623CCV1	11/29/1999	1	X
WG92623CCB1	11/29/1999	1	X

ACZ	Client
✓	

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Inorganic QC Summary

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QC Report | ***Analysis Run Log***

Analysis | ***Metals (Total) by ICP-MS***

ACZ Project # L25265
Client Daniel B. Stephens & Associates
Client Project ID 9001.4
Date Received 10/22/1999
Date Reported 11/30/1999

Workgroup: WG91951

ACZ ID	Measure Date	Dilution	As	Pb	Sb	Tl
WG91951ICV	11/17/1999	1	X	X	X	X
WG91951ICB	11/17/1999	1	X	X	X	X
WG91951ICSAB	11/17/1999	1	X	X	X	X
WG90807PBW	11/17/1999	2.22		X		X
WG90807LCSW	11/17/1999	5.55		X		X
L25248-02SDL	11/17/1999	27.75		X		X
L25248-02MS	11/17/1999	5.55		X		X
L25248-02MSD	11/17/1999	5.55		X		X
WG91951CCV2	11/17/1999	1	X	X	X	X
WG91951CCB2	11/17/1999	1	X	X	X	X
WG91562PBW	11/17/1999	2.22	X	X	X	X
WG91562LCSW	11/17/1999	5.55	X	X	X	X
L25265-01	11/17/1999	2.22	X	X	X	X
L25265-02	11/17/1999	2.22	X	X	X	X
L25265-03	11/17/1999	2.22	X	X	X	X
L25265-03SDL	11/17/1999	11.1	X	X	X	X
L25265-03MS	11/17/1999	2.22	X	X	X	X
L25265-03MSD	11/17/1999	2.22	X	X	X	X
L25265-04	11/17/1999	2.22	X	X	X	X
L25265-05	11/17/1999	2.22	X	X	X	X
WG91951CCV1	11/17/1999	1	X	X	X	X
WG91951CCB1	11/17/1999	1	X	X	X	X
WG91755PBW	11/17/1999	2.22		X		X
WG91755LCSW	11/17/1999	5.55		X		X
L25265-06	11/17/1999	2.22		X		X
L25265-07	11/17/1999	2.22		X		X
L25265-07SDL	11/17/1999	11.1		X		X
L25265-07MS	11/17/1999	2.22		X		X
L25265-07MSD	11/17/1999	2.22		X		X
L25265-10	11/17/1999	2.22		X		X
L25265-11	11/17/1999	2.22		X		X
L25265-12	11/17/1999	2.22		X		X
WG91951CCV2	11/17/1999	1	X	X	X	X
WG91951CCB2	11/17/1999	1	X	X	X	X

ACZ	Client
✓	

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Inorganic QC Summary

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QC Report | ***Analysis Run Log***

Analysis | ***Metals (Total) by ICP-MS***

ACZ Project # L25265
Client Daniel B. Stephens & Associates
Client Project ID 9001.4
Date Received 10/22/1999
Date Reported 11/30/1999

Workgroup: WG92118

ACZ ID	Measure Date	Dilution	As	Sb
WG92118ICV	11/18/1999	1	X	X
WG92118ICB	11/18/1999	1	X	X
WG92118ICSAB	11/18/1999	1	X	X
WG90807PBW	11/18/1999	2.22	X	X
WG90807LCSW	11/18/1999	5.55	X	X
L25248-02SDL	11/18/1999	55.5	X	X
L25248-02MS	11/18/1999	11.1	X	X
L25248-02MSD	11/18/1999	11.1	X	X
WG92118CCV2	11/18/1999	1	X	X
WG92118CCB2	11/18/1999	1	X	X
WG91755PBW	11/18/1999	2.22	X	X
WG91755LCSW	11/18/1999	5.55	X	X
L25265-06	11/18/1999	5.55	X	X
L25265-07	11/18/1999	5.55	X	X
L25265-07SDL	11/18/1999	27.75	X	X
L25265-07MS	11/18/1999	5.55	X	X
L25265-07MSD	11/18/1999	5.55	X	X
L25265-10	11/18/1999	5.55	X	X
L25265-11	11/18/1999	5.55	X	X
L25265-12	11/18/1999	5.55	X	X
WG92118CCV1	11/18/1999	1	X	X
WG92118CCB1	11/18/1999	1	X	X

ACZ	Client
✓	

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Inorganic QC Summary

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QC Report | *Analysis Run Log*

Analysis | *Mercury (Total) by CVAA*

ACZ Project # L25265
Client Daniel B. Stephens & Associates
Client Project ID 9001.4
Date Received 10/22/1999
Date Reported 11/30/1999

Workgroup: WG91854

ACZ ID	Measure Date	Dilution	Hg
WG91854ICV	11/16/1999	1	X
WG91854ICB	11/16/1999	1	X
WG91854PBW	11/16/1999	1	X
WG91854LCSW	11/16/1999	1	X
WG91854LFB	11/16/1999	1	X
L25265-01	11/16/1999	1	X
L25265-02	11/16/1999	1	X
L25265-02AS	11/16/1999	1	X
L25265-02ASD	11/16/1999	1	X
L25265-03	11/16/1999	1	X
L25265-04	11/16/1999	1	X
L25265-05	11/16/1999	1	X
WG91854CCV1	11/16/1999	1	X
WG91854CCB1	11/16/1999	1	X
L25265-06	11/16/1999	1	X
L25265-07	11/16/1999	1	X
L25265-08	11/16/1999	1	X
L25265-09	11/16/1999	1	X
L25265-10	11/16/1999	1	X
L25265-11	11/16/1999	1	X
L25265-11AS	11/16/1999	1	X
L25265-11ASD	11/16/1999	1	X
L25265-12	11/16/1999	1	X
WG91854CCV2	11/16/1999	1	X
WG91854CCB2	11/16/1999	1	X
WG91854CCV3	11/16/1999	1	X
WG91854CCB3	11/16/1999	1	X
WG91854LCSW1	11/16/1999	1	X
WG91854CCV4	11/16/1999	1	X
WG91854CCB4	11/16/1999	1	X

ACZ	Client
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QC SUMMARY

QC REFERENCE

QC Report Types

(1)	Calibration Verification - Blanks	Verifies that there is no or minimal contamination in the instrument calibration.
(2)	Calibration Verification - Control Samples	Verifies the accuracy of the instrument calibration.
(3)	Method Verification - Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
(4)	Method Verification - Control Samples	Verifies the accuracy of the method, including the prep procedure.
(5)	Spike Verification	Determines sample matrix interferences, if any.
(6)	Duplicate Verification	Verifies the precision of the instrument and/or method.

QC Sample Types

ICV	Initial Calibration Verification	QCS	Quality Control Sample
CCV	Continuing Calibration Verification	ICS	Instrument Check Sample
LCSW	Laboratory Control Sample - Water	LFB	Laboratory Fortified Blank
LCSS	Laboratory Control Sample - Soil	LFM	Laboratory Fortified Matrix
ICB	Initial Calibration Blank	AS	Analytical (Post Digestion) Spike
CCB	Continuing Calibration Blank	MS	Matrix Spike
LRB	Laboratory Reagent Blank	LFMD	Laboratory Fortified Matrix Duplicate
PBW	Prep Blank - Water	ASD	Analytical Spike (Post Digestion) Duplicate
PBS	Prep Blank - Soil	MSD	Matrix Spike Duplicate
		DUP	Sample Duplicate

Unique ACZ QC Summary Qualifiers (Q)

Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.
Y	This sample, instead of one of yours, was used as the quality control sample for the workgroup batch.
X	QC is out of control. See Case Narrative.
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
U	Analyte was analyzed for but not detected at the indicated MDL
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
S	ICV/QCS sample not part of workgroup; analyzed immediately following instrument calibration as part of a prevous workgroup.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
J	Oraganic: Analyte concentration detected at a value between the MDL & PQL.
B	Inorganic: Analyte concentration detected at a value between the MDL & PQL. Organic: Analyte found in daily blank.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA 600/4-80-032. Prescribed Procedures for Measurement of Radioactivity in Drinking Water, August 1980.
(5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update II, September 1994.
(6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the reported (rounded) values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) All matrices for Organic analyses are reported on an "as received" basis, except for TPH-IR analyses on soils which are reported on a dry weight basis.
(5) The PCN/SCN header on the QC reports stands for Primary Control Number/Secondary Control Number. All stock chemicals are given a PCN and any reagent made at the bench level is assigned a SCN. These numbers track our standards and chemicals so that any reagent is traceable to a manufacturer's certificate of analysis.

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