CHAIN OF CUSTODY

BC LABORATORIES, INC. 4100 Atlas Court - Bakersfield, CA 93308 (805) 327-4911 - FAX (805) 327-1918

Report To: Arcadis

Name: Geraghty & Miller, Inc.

Address: 1400 N Harbor Blvd

City: Fullerton

State: CA Zip: 92835

Attn:

Phone:

Project: LLM/Torrance

Project #: CA000280000700001

Sampler Name: Tim Teeple

Submission #: 99-8336

Lab #	Sample Description	Date & Time Sampled	8260 – VOCs	6010 – CAM 17	8015M – TPH	7196 – Cr+6	Alkalinity (Total)	Ammonia Nitrogen	4151 – DOC	Ortho-Phosphate	Nitrate/Nitrate	207.7 – Fe/Mn	Sulfate	Chloride				MATRIX (DW - Drinking Water, GW - Ground Water, WW - Waste Water, S - Soil, O - Oil, SL - Sludge, M - Miscellaneous)	Turn Around Time Requested	Number and Container Type
-1	BL-6	7-16-99/0805	X	X	X	X	X	X	X	X	X	X	X	X				GW		9 Bottles
-2	BL-15	7-16-99/0825	X	X	X	X	X	X	X	X	X	X	X	X				GW		9 Bottles
-3TB	Trip blank	—																W		2 Bottles

DISTRIBUTION

NUMBERING CHECKED BY

Billing Information:

Name: Same as above

Address:

City State Zip

Attention:

PO #

BC Lab. Field Service

Time : Miles:

Equipment: Flat Rate:

Report Drinking Water on State Form ? Y / N

Send Copy to State of Calif. Y / N

Comments: * Please review LTO for specifics

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Timothy Teeple	[signature]	7/16/99	1:15
[signature]	[signature]	7-16-99	14:15
[signature]			
[signature]			

Revised 5/97 Sample Disposal by BC Labs may be billed at $5.00 / sample for non-aqueous Samples.

BOE-C6-0102314

BC LABORATORIES INC.

SAMPLE RECEIPT FORM

Rev. No.6 10/13/98 Page ___ Of ___

Submission #: 99-8336

Project Code:

SHIPPING INFORMATION

Federal Express ☐ UPS ☐ Hand Delivery ☐

BC Lab Field Service ☒ Other ☐ (Specify) _____

SHIPPING CONTAINER

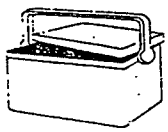
Ice Chest ☒ None ☐

Box ☐ Other ☐ (Specify) _____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐



Ice Chest ID Red/White Date/Time 7/16/99 1700
Temperature: 1.5 °C
Thermometer ID: #48 Analyst Init CFORD
Emissivity .90
Container A+PE

Ice Chest ID _____ Date/Time _____
Temperature: _____ °C
Thermometer ID: _____ Analyst Init _____
Emissivity _____
Container _____

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
			TB																					
QT GENERAL MINERAL/ GENERAL PHYSICAL	1	1																						
PT PE UNPRESERVED																								
QT INORGANIC CHEMICAL METALS	2	2																						
PT INORGANIC CHEMICAL METALS																								
PT CYANIDE																								
PT NITROGEN FORMS	1	1																						
PT TOTAL SULFIDE																								
2oz. NITRATE / NITRITE																								
100ml TOTAL ORGANIC CARBON																								
QT TOX																								
PT CHEMICAL OXYGEN DEMAND																								
100ml PHENOLICS																								
40ml VOA VIAL TRAVEL BLANK			2																					
40ml VOA VIAL	3	3																						
QT EPA 413.1, 413.2, 418.1																								
PT ODOR																								
RADIOLOGICAL																								
BACTERIOLOGICAL																								
PT EPA 504																								
QT EPA 508/608/8080																								
QT EPA 515.1/8150																								
QT EPA 525																								
QT EPA 525 TRAVEL BLANK																								
100ml EPA 547																								
100ml EPA 531.1																								
QT EPA 548																								
QT EPA 549																								
QT EPA 632																								
QT EPA 8015M																								
QT QA/QC	1	1																						
QT AMBER																								
8 OZ. JAR																								
32 OZ. JAR																								
SOIL SLEEVE																								
PCB VIAL																								
PLASTIC BAG																								

Comments: _____ Date/Time: 7/16 18:37

(F:\WP80\LAB_DOCS\FORMS\SAMREC2.WF

BC Laboratories, Inc.

WATER ANALYSIS
(GENERAL CHEMISTRY)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 07/29/99
Date Received: 07/16/99
Laboratory No.: 99-08336-1

Project Number: CA000280000700001
Sampling Location: ILM-TORRANCE
Sample ID: BL-6
Sampling Date/Time: 07/16/99 @ 08:05AM
Sample Collected By: TIM TEEPLE

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Sulfate	72.	mg/L	2.0	EPA-300.0	07/23/99	07/23/99	2
Chloride	331.	mg/L	1.0	EPA-300.0	07/23/99	07/23/99	2
Nitrate/Nitrite as N	7.7	mg/L	1.0	EPA-353.2	07/22/99	07/22/99	10
Total Alkalinity as CaCO3	369.	mg/L	5.0	EPA-310.1	07/20/99	07/20/99	1
Ammonia as N	None Detected	mg/L	0.02	EPA-350.1	07/26/99	07/26/99	1
Ortho-phosphate	0.17	mg/L	0.05	EPA-365.1	07/16/99	07/16/99	1
Dissolved Non-Volatile Organic Carbon	4.6	mg/L	1.0	EPA-415.1	07/22/99	07/22/99	1

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte quantifiable based on sample size used and analytical technique employed).

Flag Explanations:
* = Batch matrix spike recoveries were outside QC limits.

California D.O.H.S. Cert. #1186

Marna Atencio
Department Supervisor

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4100 Atlas Court * Bakersfield, CA 93308 * (661)327-4911 * Fax(661)327-1918 * www..bclabs.com

BC Laboratories, Inc.

WATER ANALYSIS
(GENERAL CHEMISTRY)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 07/29/99
Date Received: 07/16/99
Laboratory No.: 99-08336-2

Project Number: CA000280000700001
Sampling Location: ILM-TORRANCE
Sample ID: BL-15
Sampling Date/Time: 07/16/99 @ 08:25AM
Sample Collected By: TIM TEEPLE

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor	
Sulfate	78.	mg/L	1.0	EPA-300.0	07/23/99	07/23/99	1	
Chloride	332.	mg/L	0.5	EPA-300.0	07/23/99	07/23/99	1	
Nitrate/Nitrite as N	7.7	mg/L	1.0	EPA-353.2	07/22/99	07/22/99	10	
Total Alkalinity as CaCO3	373.	mg/L	5.0	EPA-310.1	07/20/99	07/20/99	1	
Ammonia as N	None Detected	mg/L	0.02	EPA-350.1	07/26/99	07/26/99	1	*
Ortho-phosphate	0.17	mg/L	0.05	EPA-365.1	07/16/99	07/16/99	1	
Dissolved Non-Volatile Organic Carbon	1.4	mg/L	1.0	EPA-415.1	07/22/99	07/22/99	1	

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte quantifiable based on sample size used and analytical technique employed).

Flag Explanations:
* = Batch matrix spike recoveries were outside QC limits.

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BC Laboratories, Inc.

WATER ANALYSIS
(METALS)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 08/01/99
Date Received: 07/16/99
Laboratory No.: 99-08336-1

Project Number: CA000280000700001
Sampling Location: ILM-TORRANCE
Sample ID: BL-6
Sampling Date/Time: 07/16/99 @ 08:05AM
Sample Collected By: TIM TEEPLE

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Dissolved Aluminum	None Detected	µg/L	50.	EPA-6010	07/16/99	07/28/99	1
Dissolved Antimony	None Detected	µg/L	100.	EPA-6010	07/16/99	07/23/99	1
Dissolved Arsenic	60.	µg/L	10.	SM-3114B	07/21/99	07/23/99	5
Dissolved Barium	None Detected	µg/L	100.	EPA-6010	07/16/99	07/23/99	1
Dissolved Beryllium	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Cadmium	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Chromium	203.	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Hexavalent Chromium	214.	µg/L	20.	EPA-7196	07/16/99	07/16/99	10
Dissolved Cobalt	None Detected	µg/L	50.	EPA-6010	07/16/99	07/23/99	1
Dissolved Copper	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Lead	None Detected	µg/L	5.	EPA-7421	07/16/99	07/19/99	1
Dissolved Manganese	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Mercury	None Detected	µg/L	0.2	EPA-7470	07/22/99	07/23/99	1
Dissolved Molybdenum	None Detected	µg/L	50.	EPA-6010	07/16/99	07/23/99	1
Dissolved Nickel	None Detected	µg/L	50.	EPA-6010	07/16/99	07/23/99	1
Dissolved Selenium	None Detected	µg/L	2.	SM-3114B	07/21/99	07/23/99	1
Dissolved Silver	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Titanium	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Thallium	None Detected	µg/L	1.	EPA-7841	07/16/99	07/22/99	1
Dissolved Vanadium	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Zinc	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Total Aluminum	284000.	µg/L	50.	EPA-6010	07/21/99	07/23/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	07/21/99	07/23/99	1
Total Arsenic	275.	µg/L	20.	SM-3114B	07/19/99	07/21/99	10
Total Barium	1720.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Cadmium	7.9	µg/L	5.	EPA-6010	07/21/99	07/23/99	1
Total Chromium	1160.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Cobalt	158.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Copper	None Detected	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Iron	431000.	µg/L	50.	EPA-6010	07/21/99	07/23/99	1
Total Lead	111.	µg/L	10.	EPA-7421	07/23/99	07/25/99	10
Total Manganese	7490.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Mercury	None Detected	µg/L	0.2	EPA-7470	07/22/99	07/23/99	1
Total Molybdenum	28.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Nickel	375.	µg/L	50.	EPA-6010	07/21/99	07/23/99	1
Total Selenium	None Detected	µg/L	2.	SM-3114B	07/19/99	07/20/99	1
Total Silver	*10 None Detected	µg/L	50.	EPA-6010	07/21/99	07/23/99	5
Total Titanium	10800.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Thallium	None Detected	µg/L	5.0	EPA-7841	07/23/99	07/25/99	1
Total Vanadium	729.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Zinc	1070.	µg/L	50.	EPA-6010	07/21/99	07/23/99	1

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BC Laboratories, Inc.

WATER ANALYSIS
(METALS)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 08/01/99
Date Received: 07/16/99
Laboratory No.: 99-08336-1

Sample Description: CA000280000700001, ILM-TORRANCE, BL-6, 07/16/99 @ 08:05AM, TIM TEEPLE

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte quantifiable based on sample size used and analytical technique employed).

Dissolved analysis reported on sample filtered and acidified in the field.

Flag Explanations:
*10 = Note: PQL's were raised due to matrix interference.

California D.O.H.S., Cert. #1186

M. Atencio for

Dan Schultz
Laboratory Director

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BC Laboratories, Inc.

WATER ANALYSIS
(METALS)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 08/01/99
Date Received: 07/16/99
Laboratory No.: 99-08336-2

Project Number: CA000280000700001
Sampling Location: ILM-TORRANCE
Sample ID: BL-15
Sampling Date/Time: 07/16/99 @ 08:25AM
Sample Collected By: TIM TEEPLE

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Dissolved Aluminum	None Detected	µg/L	50.	EPA-6010	07/16/99	07/28/99	1
Dissolved Antimony	None Detected	µg/L	100.	EPA-6010	07/16/99	07/23/99	1
Dissolved Arsenic	10.	µg/L	2.	SM-3114B	07/21/99	07/23/99	1
Dissolved Barium	None Detected	µg/L	100.	EPA-6010	07/16/99	07/23/99	1
Dissolved Beryllium	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Cadmium	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Chromium	201.	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Hexavalent Chromium	214.	µg/L	20.	EPA-7196	07/16/99	07/16/99	10
Dissolved Cobalt	None Detected	µg/L	50.	EPA-6010	07/16/99	07/23/99	1
Dissolved Copper	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Lead	None Detected	µg/L	5.	EPA-7421	07/16/99	07/19/99	1
Dissolved Manganese	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Mercury	None Detected	µg/L	0.2	EPA-7470	07/22/99	07/23/99	1
Dissolved Molybdenum	None Detected	µg/L	50.	EPA-6010	07/16/99	07/23/99	1
Dissolved Nickel	None Detected	µg/L	50.	EPA-6010	07/16/99	07/23/99	1
Dissolved Selenium	None Detected	µg/L	2.	SM-3114B	07/21/99	07/23/99	1
Dissolved Silver	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Titanium	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Thallium	None Detected	µg/L	1.	EPA-7841	07/16/99	07/22/99	1
Dissolved Vanadium	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Dissolved Zinc	None Detected	µg/L	10.	EPA-6010	07/16/99	07/23/99	1
Total Aluminum	244000.	µg/L	50.	EPA-6010	07/21/99	07/23/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	07/21/99	07/23/99	1
Total Arsenic	338.	µg/L	20.	SM-3114B	07/19/99	07/21/99	10
Total Barium	1530.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Cadmium	5.3	µg/L	5.	EPA-6010	07/21/99	07/23/99	1
Total Chromium	1040.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Cobalt	137.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Copper	None Detected	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Iron	375000.	µg/L	50.	EPA-6010	07/21/99	07/23/99	1
Total Lead	100.	µg/L	10.	EPA-7421	07/23/99	07/25/99	10
Total Manganese	6520.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Mercury	0.74	µg/L	0.2	EPA-7470	07/22/99	07/23/99	1
Total Molybdenum	24.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Nickel	324.	µg/L	50.	EPA-6010	07/21/99	07/23/99	1
Total Selenium	2.1	µg/L	2.	SM-3114B	07/19/99	07/20/99	1
Total Silver	*10 None Detected	µg/L	50.	EPA-6010	07/21/99	07/23/99	5
Total Titanium	9150.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Thallium	None Detected	µg/L	5.0	EPA-7841	07/23/99	07/25/99	1
Total Vanadium	639.	µg/L	10.	EPA-6010	07/21/99	07/23/99	1
Total Zinc	939.	µg/L	50.	EPA-6010	07/21/99	07/23/99	1

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BC Laboratories, Inc.

WATER ANALYSIS
(METALS)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 08/01/99
Date Received: 07/16/99
Laboratory No.: 99-08336-2

Sample Description: CA000280000700001, ILM-TORRANCE, BL-15, 07/16/99 @ 08:25AM, TIM TEEPLE

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte quantifiable based on sample size used and analytical technique employed).

Dissolved analysis reported on sample filtered and acidified in the field.

Flag Explanations:
*10 = Note: PQL's were raised due to matrix interference.

California D.O.H.S. Cert. #1186

Dan Schultz
Laboratory Director

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BC Laboratories, Inc.

EPA 8015M
Fuel Identification / Quantitation Summary

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 07/27/99
Date Received: 07/16/99
Laboratory No.: 99-08336-1

Project Number: CA000280000700001
Sampling Location: ILM-TORRANCE
Sample ID: BL-6
Sample Matrix: Groundwater
Sample Collected By: TIM TEEPLE

Date Collected: 07/16/99 @ 08:05AM
Date Extracted: 07/19/99
Date Analyzed: 07/21/99
Dilution Used: 1

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit
Stoddard / White Spirits	None Detected	µg/L	200.
JP 4	None Detected	µg/L	1000.
JP 5	None Detected	µg/L	1000.
JP 6	None Detected	µg/L	1000.
JP 8	None Detected	µg/L	200.
Kerosene / Jet Fuel	None Detected	µg/L	200.
Diesel	None Detected	µg/L	200.
Crude Oil	None Detected	µg/L	1000.
Hydraulic Oil	None Detected	µg/L	1000.
Waste Oil	None Detected	µg/L	1000.
Motor Oil	None Detected	µg/L	1000.
Surrogate % Recovery	83.	%	33-138

METHOD: 8015M DOHS LUFT MANUAL
Boiling Range: 70 - 300 C

Mixtures of hydrocarbons are identified by a boiling point range and a fingerprint. Hydrocarbons that fall within a boiling range but do not exhibit the pattern are quantitated versus the fuel that corresponds with the boiling range, but are qualified with a note.

California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

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BC Laboratories, Inc.

EPA 8015M
Fuel Identification / Quantitation Summary

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 07/27/99
Date Received: 07/16/99
Laboratory No.: 99-08336-2

Project Number: CA000280000700001
Sampling Location: ILM-TORRANCE
Sample ID: BL-15
Sample Matrix: Groundwater
Sample Collected By: TIM TEEPLE

Date Collected: 07/16/99 @ 08:25AM
Date Extracted: 07/19/99
Date Analyzed: 07/22/99
Dilution Used: 1

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit
Stoddard / White Spirits	None Detected	µg/L	200.
JP 4	None Detected	µg/L	1000.
JP 5	None Detected	µg/L	1000.
JP 6	None Detected	µg/L	1000.
JP 8	None Detected	µg/L	200.
Kerosene / Jet Fuel	None Detected	µg/L	200.
Diesel	None Detected	µg/L	200.
Crude Oil	None Detected	µg/L	1000.
Hydraulic Oil	None Detected	µg/L	1000.
Waste Oil	None Detected	µg/L	1000.
Motor Oil	None Detected	µg/L	1000.
Surrogate % Recovery	90.	%	33-138

METHOD: 8015M DOHS LUFT MANUAL
Boiling Range: 70 - 300 C

Mixtures of hydrocarbons are identified by a boiling point range and a fingerprint. Hydrocarbons that fall within a boiling range but do not exhibit the pattern are quantitated versus the fuel that corresponds with the boiling range, but are qualified with a note.

California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

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BC Laboratories, Inc.

Volatile Organic Analysis
(EPA Method 8260)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 07/27/99
Date Received: 07/16/99
Laboratory No.: 99-08336-1

Project Number: CA000280000700001
Sampling Location: ILM-TORRANCE
Sample ID: BL-6
Sample Matrix: Groundwater
Sample Collected By: TIM TEEPLE

Date Collected: 07/16/99 @ 08:05AM
Date Extracted: 07/20/99
Date Analyzed: 07/20/99
Dilution Used: 100

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit	
Benzene	None Detected	µg/L	50.	
Bromobenzene	None Detected	µg/L	50.	
Bromochloromethane	None Detected	µg/L	50.	
Bromodichloromethane	None Detected	µg/L	50.	
Bromoform	None Detected	µg/L	50.	
Bromomethane	None Detected	µg/L	50.	
n-Butylbenzene	None Detected	µg/L	50.	
sec-Butylbenzene	None Detected	µg/L	50.	
tert-Butylbenzene	None Detected	µg/L	50.	
Carbon tetrachloride	None Detected	µg/L	50.	
Chlorobenzene	None Detected	µg/L	50.	
Chloroethane	None Detected	µg/L	50.	
2-Chloroethylvinyl ether	None Detected	µg/L	2000.	*03
Chloroform	None Detected	µg/L	50.	
Chloromethane	None Detected	µg/L	50.	
2-Chlorotoluene	None Detected	µg/L	50.	
4-Chlorotoluene	None Detected	µg/L	50.	
Dibromochloromethane	None Detected	µg/L	50.	
1,2-Dibromo-3-Chloropropane	None Detected	µg/L	50.	
1,2-Dibromoethane	None Detected	µg/L	50.	
Dibromomethane	None Detected	µg/L	50.	
1,2-Dichlorobenzene	None Detected	µg/L	50.	
1,3-Dichlorobenzene	None Detected	µg/L	50.	
1,4-Dichlorobenzene	None Detected	µg/L	50.	
Dichlorodifluoromethane	None Detected	µg/L	50.	
1,1-Dichloroethane	None Detected	µg/L	50.	
1,2-Dichloroethane	None Detected	µg/L	50.	
1,1-Dichloroethene	None Detected	µg/L	50.	
cis-1,2-Dichloroethene	None Detected	µg/L	50.	
trans-1,2-Dichloroethene	None Detected	µg/L	50.	
1,2-Dichloropropane	None Detected	µg/L	50.	
1,3-Dichloropropane	None Detected	µg/L	50.	
2,2-Dichloropropane	None Detected	µg/L	50.	
1,1-Dichloropropene	None Detected	µg/L	50.	
cis-1,3-Dichloropropene	None Detected	µg/L	50.	
trans-1,3-Dichloropropene	None Detected	µg/L	50.	
Ethyl Benzene	None Detected	µg/L	50.	
Hexachlorobutadiene	None Detected	µg/L	50.	
Isopropylbenzene	None Detected	µg/L	50.	
p-Isopropyltoluene	None Detected	µg/L	50.	
Methylene Chloride	None Detected	µg/L	50.	
Naphthalene	None Detected	µg/L	50.	

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BC Laboratories, Inc.

Volatile Organic Analysis
(EPA Method 8260)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 07/27/99
Date Received: 07/16/99
Laboratory No.: 99-08336-1

Sample Description: CA000280000700001, ILM-TORRANCE, BL-6, 07/16/99 @ 08:05AM, TIM TEEPLE

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit
n-Propylbenzene	None Detected	µg/L	50.
Styrene	None Detected	µg/L	50.
1,1,1,2-Tetrachloroethane	None Detected	µg/L	50.
1,1,2,2-Tetrachloroethane	None Detected	µg/L	50.
Tetrachloroethene	None Detected	µg/L	50.
Toluene	None Detected	µg/L	50.
1,2,3-Trichlorobenzene	None Detected	µg/L	50.
1,2,4-Trichlorobenzene	None Detected	µg/L	50.
1,1,1-Trichloroethane	None Detected	µg/L	50.
1,1,2-Trichloroethane	None Detected	µg/L	50.
Trichloroethene	5600.	µg/L	50.
Trichlorofluoromethane	None Detected	µg/L	50.
1,2,3-Trichloropropane	None Detected	µg/L	50.
1,2,4-Trimethylbenzene	None Detected	µg/L	50.
1,3,5-Trimethylbenzene	None Detected	µg/L	50.
Vinyl Chloride	None Detected	µg/L	50.
Total Xylenes	None Detected	µg/L	100.

Quality Control Data

Surrogates	% Recovery	Control Limits
1,2-Dichloroethane-d4	83.	76-114
Toluene-d8	102.	88-110
4-Bromofluorobenzene	94.	86-115

Note: PQL's were raised due to high concentration of target analytes requiring sample dilution.

Flag Explanations:
*03 = CCV recovery not within method limits.
California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

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BC Laboratories, Inc.

Volatile Organic Analysis
(EPA Method 8260)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 07/27/99
Date Received: 07/16/99
Laboratory No.: 99-08336-2

Project Number: CA000280000700001
Sampling Location: ILM-TORRANCE
Sample ID: BL-15
Sample Matrix: Groundwater
Sample Collected By: TIM TEEPLE

Date Collected: 07/16/99 @ 08:25AM
Date Extracted: 07/20/99
Date Analyzed: 07/20/99
Dilution Used: 1

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit
Benzene	None Detected	µg/L	50.
Bromobenzene	None Detected	µg/L	50.
Bromochloromethane	None Detected	µg/L	50.
Bromodichloromethane	None Detected	µg/L	50.
Bromoform	None Detected	µg/L	50.
Bromomethane	None Detected	µg/L	50.
n-Butylbenzene	None Detected	µg/L	50.
sec-Butylbenzene	None Detected	µg/L	50.
tert-Butylbenzene	None Detected	µg/L	50.
Carbon tetrachloride	None Detected	µg/L	50.
Chlorobenzene	None Detected	µg/L	50.
Chloroethane	None Detected	µg/L	50.
2-Chloroethylvinyl ether	None Detected	µg/L	2000.
Chloroform	None Detected	µg/L	50.
Chloromethane	None Detected	µg/L	50.
2-Chlorotoluene	None Detected	µg/L	50.
4-Chlorotoluene	None Detected	µg/L	50.
Dibromochloromethane	None Detected	µg/L	50.
1,2-Dibromo-3-Chloropropane	None Detected	µg/L	50.
1,2-Dibromoethane	None Detected	µg/L	50.
Dibromomethane	None Detected	µg/L	50.
1,2-Dichlorobenzene	None Detected	µg/L	50.
1,3-Dichlorobenzene	None Detected	µg/L	50.
1,4-Dichlorobenzene	None Detected	µg/L	50.
Dichlorodifluoromethane	None Detected	µg/L	50.
1,1-Dichloroethane	None Detected	µg/L	50.
1,2-Dichloroethane	None Detected	µg/L	50.
1,1-Dichloroethene	None Detected	µg/L	50.
cis-1,2-Dichloroethene	None Detected	µg/L	50.
trans-1,2-Dichloroethene	None Detected	µg/L	50.
1,2-Dichloropropane	None Detected	µg/L	50.
1,3-Dichloropropane	None Detected	µg/L	50.
2,2-Dichloropropane	None Detected	µg/L	50.
1,1-Dichloropropene	None Detected	µg/L	50.
cis-1,3-Dichloropropene	None Detected	µg/L	50.
trans-1,3-Dichloropropene	None Detected	µg/L	50.
Ethyl Benzene	None Detected	µg/L	50.
Hexachlorobutadiene	None Detected	µg/L	50.
Isopropylbenzene	None Detected	µg/L	50.
p-Isopropyltoluene	None Detected	µg/L	50.
Methylene Chloride	None Detected	µg/L	50.
Naphthalene	None Detected	µg/L	50.

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BC Laboratories, Inc.

Volatile Organic Analysis
(EPA Method 8260)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 07/27/99
Date Received: 07/16/99
Laboratory No.: 99-08336-2

Sample Description: CA000280000700001, ILM-TORRANCE, BL-15, 07/16/99 @ 08:25AM, TIM TEEPLE

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit
n-Propylbenzene	None Detected	µg/L	50.
Styrene	None Detected	µg/L	50.
1,1,1,2-Tetrachloroethane	None Detected	µg/L	50.
1,1,2,2-Tetrachloroethane	None Detected	µg/L	50.
Tetrachloroethene	None Detected	µg/L	50.
Toluene	None Detected	µg/L	50.
1,2,3-Trichlorobenzene	None Detected	µg/L	50.
1,2,4-Trichlorobenzene	None Detected	µg/L	50.
1,1,1-Trichloroethane	None Detected	µg/L	50.
1,1,2-Trichloroethane	None Detected	µg/L	50.
Trichloroethene	5600.	µg/L	50.
Trichlorofluoromethane	None Detected	µg/L	50.
1,2,3-Trichloropropane	None Detected	µg/L	50.
1,2,4-Trimethylbenzene	None Detected	µg/L	50.
1,3,5-Trimethylbenzene	None Detected	µg/L	50.
Vinyl Chloride	None Detected	µg/L	50.
Total Xylenes	None Detected	µg/L	100.

Quality Control Data

Surrogates	% Recovery	Control Limits
1,2-Dichloroethane-d4	82.	76-114
Toluene-d8	101.	88-110
4-Bromofluorobenzene	96.	86-115

Note: PQL's were raised due to high concentration of target analytes requiring sample dilution.

California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

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BC Laboratories, Inc.

Volatile Organic Analysis
(EPA Method 8260)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 07/27/99
Date Received: 07/16/99
Laboratory No.: 99-08336-3TB

Project Number: CA000280000700001
Sampling Location: ILM-TORRANCE
Sample ID: TRIP BLANK
Sample Matrix: Blank Water
Sample Collected By: TIM TEEPLE

Date Collected: 07/16/99
Date Extracted: 07/20/99
Date Analyzed: 07/20/99
Dilution Used: 1

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit	
Benzene	None Detected	µg/L	0.5	
Bromobenzene	None Detected	µg/L	0.5	
Bromochloromethane	None Detected	µg/L	0.5	
Bromodichloromethane	None Detected	µg/L	0.5	
Bromoform	None Detected	µg/L	0.5	
Bromomethane	None Detected	µg/L	0.5	
n-Butylbenzene	None Detected	µg/L	0.5	
sec-Butylbenzene	None Detected	µg/L	0.5	
tert-Butylbenzene	None Detected	µg/L	0.5	
Carbon tetrachloride	None Detected	µg/L	0.5	
Chlorobenzene	None Detected	µg/L	0.5	
Chloroethane	None Detected	µg/L	0.5	
2-Chloroethylvinyl ether	None Detected	µg/L	20.	*03
Chloroform	None Detected	µg/L	0.5	
Chloromethane	None Detected	µg/L	0.5	
2-Chlorotoluene	None Detected	µg/L	0.5	
4-Chlorotoluene	None Detected	µg/L	0.5	
Dibromochloromethane	None Detected	µg/L	0.5	
1,2-Dibromo-3-Chloropropane	None Detected	µg/L	0.5	
1,2-Dibromoethane	None Detected	µg/L	0.5	
Dibromomethane	None Detected	µg/L	0.5	
1,2-Dichlorobenzene	None Detected	µg/L	0.5	
1,3-Dichlorobenzene	None Detected	µg/L	0.5	
1,4-Dichlorobenzene	None Detected	µg/L	0.5	
Dichlorodifluoromethane	None Detected	µg/L	0.5	
1,1-Dichloroethane	None Detected	µg/L	0.5	
1,2-Dichloroethane	None Detected	µg/L	0.5	
1,1-Dichloroethene	None Detected	µg/L	0.5	
cis-1,2-Dichloroethene	None Detected	µg/L	0.5	
trans-1,2-Dichloroethene	None Detected	µg/L	0.5	
1,2-Dichloropropane	None Detected	µg/L	0.5	
1,3-Dichloropropane	None Detected	µg/L	0.5	
2,2-Dichloropropane	None Detected	µg/L	0.5	*03
1,1-Dichloropropene	None Detected	µg/L	0.5	
cis-1,3-Dichloropropene	None Detected	µg/L	0.5	
trans-1,3-Dichloropropene	None Detected	µg/L	0.5	
Ethyl Benzene	None Detected	µg/L	0.5	
Hexachlorobutadiene	None Detected	µg/L	0.5	
Isopropylbenzene	None Detected	µg/L	0.5	
p-Isopropyltoluene	None Detected	µg/L	0.5	
Methylene Chloride	2.8	µg/L	0.5	
Naphthalene	None Detected	µg/L	0.5	

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BC Laboratories, Inc.

Volatile Organic Analysis
(EPA Method 8260)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: TERESA WILSON 714-278-0992

Date Reported: 07/27/99
Date Received: 07/16/99
Laboratory No.: 99-08336-3TB

Sample Description: CA000280000700001, ILM-TORRANCE, TRIP BLANK, 07/16/99, TIM TEEPLE

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit
n-Propylbenzene	None Detected	µg/L	0.5
Styrene	None Detected	µg/L	0.5
1,1,1,2-Tetrachloroethane	None Detected	µg/L	0.5
1,1,2,2-Tetrachloroethane	None Detected	µg/L	0.5
Tetrachloroethene	None Detected	µg/L	0.5
Toluene	None Detected	µg/L	0.5
1,2,3-Trichlorobenzene	None Detected	µg/L	0.5
1,2,4-Trichlorobenzene	None Detected	µg/L	0.5
1,1,1-Trichloroethane	None Detected	µg/L	0.5
1,1,2-Trichloroethane	None Detected	µg/L	0.5
Trichloroethene	None Detected	µg/L	0.5
Trichlorofluoromethane	None Detected	µg/L	0.5
1,2,3-Trichloropropane	None Detected	µg/L	0.5
1,2,4-Trimethylbenzene	None Detected	µg/L	0.5
1,3,5-Trimethylbenzene	None Detected	µg/L	0.5
Vinyl Chloride	None Detected	µg/L	0.5
Total Xylenes	None Detected	µg/L	1.

Quality Control Data

Surrogates	% Recovery	Control Limits
1,2-Dichloroethane-d4	80.	76-114
Toluene-d8	88.	88-110
4-Bromofluorobenzene	95.	86-115

Flag Explanations:
*03 = CCV recovery not within method limits.
California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

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BC Laboratories, Inc

B. C LABORATORIES
QUALITY CONTROL REPORT
(Instrumental & Blank Parameters)

Date of Report: 08/11/99
Sample Matrix: Groundwater

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Samples Affected: 99-08336-1, 99-08336-2

Constituents	ICV % Found	ICV %Found Control Limits	CCV % Found Before	CCV % Found After	% Found Control Limits	CCB Readings Before	Units	CCB Readings After	Units	Method Blank Readings	Units
Sulfate	102.	90 - 110	98.	101.	90 - 110	< 1.0	mg/L	< 1.0	mg/L	< 1.	mg/L
Chloride	103.	90 - 110	100.	101.	90 - 110	< 0.5	mg/L	< 0.5	mg/L	< 0.5	mg/L
Nitrate/Nitrite as N	101.	90 - 110	107.	101.	90 - 110	< 0.1	mg/L	< 0.1	mg/L	< 0.1	mg/L
Total Alkalinity as CaCO3										< 5.0	mg/L
Ammonia as N	100.	90 - 110	104.	104.	90 - 110	< 0.02	mg/L	< 0.02	mg/L	< 0.02	mg/L
Ortho-phosphate	100.	90 - 110	102.	102.	90 - 110	< 0.05	mg/L	< 0.05	mg/L	< 0.05	mg/L
Dissolved Non-Volatile Organic Carbon	103.	90 - 110	103.	102.	90 - 110	< 1.	mg/L	< 1.	mg/L	< 1.	mg/L

ICV = Initial Calibration Verification; CCV = Continuing Calibration Verification; CCB = Continuing Calibration Blank

Quality Control Officer

Anthony Bonanno

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BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Precision & Accuracy)

Date of Report: 08/11/99
Sample Matrix: Groundwater

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Samples Affected: 99-08336-1, 99-08336-2

Constituents	QC Sample ID	Sample Result	Sample Duplicate	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Sample R.P.D.	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
Sulfate	8336-1X2	71.6	71.8	287.	287.	200.	200.	mg/L	0.	0.	10	108.	108.	90 - 110
Chloride	8336-1X2	331.	333.	537.	536.	200.	200.	mg/L	1.	0.	10	103.	103.	90 - 110
Nitrate/Nitrite as N	8335-1X10	14.8	14.8	35.	35.	21.	21.	mg/L	0.	0.	10	96.	96.	90 - 110
Bicarbonate	8335-1	1.90	1.88	3.20	3.21	1.33	1.33	mls. titr.	1.	0.	10	98.	98.	80 - 120
Ammonia as N	8335-1	0.0519	0.0519	0.661	0.661	0.526	0.526	mg/L	<PQL	0.	10	116.	116.	90 - 110
Ortho-phosphate	8335-1	0.173	0.173	0.746	0.764	0.613	0.613	mg/L	<PQL	2.	10	94.	96.	90 - 110
Dissolved Non-Volatile Organic Carbon	DOC-8335-1	8.06	8.28	26.6	26.3	20.	20.	mg/L	3.	1.	10	93.	91.	80 - 120

MS = Matrix Spike; MSD = Matrix Spike Duplicate; RPD = Relative Percent Difference

The matrix spike recoveries for ammonia are outside QC limits.

Quality Control Officer

Anthony Bonanno

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BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Laboratory Control Sample)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Sulfate	LCSW-07-23	99.	100.	mg/L	99.	90 - 110
Chloride	LCSW-07-23	100.	100.	mg/L	100.	90 - 110
Nitrate/Nitrite as N	LCSW	1.93	2.	mg/L	96.	90 - 110
Bicarbonate	LCSW	2.22	2.12	mls. titr.	105.	90 - 110
Ammonia as N	LCSW-07269	0.552	0.5	mg/L	110.	90 - 110
Ortho-phosphate	LCSW-7-16-	30.2	30.662	mg/L	99.	90 - 110
Dissolved Non-Volatile Organic Carbon	LCSW1-07-2	20.4	20.	mg/L	102.	85 - 115

Quality Control Officer

Anthony Bonanno

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BC Laboratories, Inc

B. C LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Instrumental & Blank Parameters)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2

Constituents	ICV % Found	CCV % Found Before	CCV % Found After	% Found Control Limits	CCB Readings Before	CCB Readings After	Units	Method Blank Readings	Units
Dissolved Aluminum	101.	102.	103.	90 - 110	<50.	64.79	µg/L	<50.	µg/L
Dissolved Antimony	103.	108.	108.	90 - 110	<100.	<100.	µg/L	<100.	µg/L
Dissolved Arsenic	101.	97.	101.	90 - 110	< 1.	< 1.	µg/L	< 2.	µg/L
Dissolved Barium	99.	99.	100.	90 - 110	<100.	<100.	µg/L	<100.	µg/L
Dissolved Beryllium	97.	95.	95.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Cadmium	99.	103.	103.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Chromium	99.	100.	100.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Hexavalent Chromium	99.	106.	96.	90 - 110	< 0.002	< 0.002	mg/L	< 2.	µg/L
Dissolved Cobalt	99.	102.	102.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Dissolved Copper	97.	99.	101.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Lead	100.	98.	99.	80 - 120	< 5.	< 5.	µg/L	< 5.	µg/L
Dissolved Manganese	99.	101.	101.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Mercury	100.	101.	94.	80 - 120	< 0.2	< 0.2	µg/L	< 0.2	µg/L
Dissolved Molybdenum	97.	98.	98.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Dissolved Nickel	98.	98.	97.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Dissolved Selenium	102.	102.	98.	90 - 110	< 1.	< 1.	µg/L	< 2.	µg/L
Dissolved Silver	106.	98.	102.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Titanium	96.	95.	95.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Thallium	101.	101.	103.	80 - 120	< 1.	< 1.	µg/L	< 1.	µg/L
Dissolved Vanadium	103.	103.	103.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Zinc	100.	105.	106.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Aluminum	99.	100.	99.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Total Antimony	103.	102.	101.	90 - 110	<100.	<100.	µg/L	<100.	µg/L
Total Arsenic	99.	93.	106.	90 - 110	< 1.	< 1.	µg/L	< 2.	µg/L
Total Barium	99.	96.	95.	90 - 110	<100.	<100.	µg/L	<10.	µg/L
Total Beryllium	97.	97.	96.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Cadmium	99.	98.	97.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Chromium	99.	99.	99.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Cobalt	99.	97.	96.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Total Copper	97.	95.	94.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Iron	98.	98.	97.	90 - 110	<50.	<50.	µg/L	<50.	µg/L

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BC Laboratories, Inc

BC LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Instrumental & Blank Parameters)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2

Constituents	ICV % Found	CCV % Found Before	CCV % Found After	% Found Control Limits	CCB Readings Before	CCB Readings After	Units	Method Blank Readings	Units
Total Lead	99.	98.	99.	80 - 120	< 5.	< 5.	µg/L	< 5.	µg/L
Total Manganese	99.	97.	96.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Mercury	100.	94.	102.	80 - 120	< 0.2	< 0.2	µg/L	< 0.2	µg/L
Total Molybdenum	97.	97.	97.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Total Nickel	98.	98.	98.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Total Selenium	103.	103.	100.	90 - 110	< 1.	< 1.	µg/L	< 2.	µg/L
Total Silver	106.	100.	93.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Titanium	96.	96.	95.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Thallium	103.	108.	103.	90 - 110	< 1.	< 1.	µg/L	< 1.	µg/L
Total Vanadium	103.	100.	99.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Zinc	100.	99.	99.	90 - 110	<50.	<50.	µg/L	<50.	µg/L

ICV = Initial Calibration Verification; CCV = Continuing Calibration Verification
CCB = Continuing Calibration Blank

Dissolved Aluminum was detected in the ending CCB.

Quality Control Officer

Anthony Bonanno

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BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Precision & Accuracy)

Date of Report: 08/11/99
Sample Matrix: Groundwater

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Samples Affected: 99-08336-1, 99-08336-2

Constituents	QC Sample ID	Sample Result	Sample Duplicate	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Sample R.P.D.	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
Dissolved Aluminum	DISS-8336-2	< 50.	< 50.	333.9	332.3	408.2	408.2	µg/L	<PQL	0.	20	92.	92.	85 - 115
Dissolved Antimony	8335-3	<100.	<100.	448.3	456.4	408.2	408.2	µg/L	<PQL	2.	20	109.	111.	85 - 115
Dissolved Arsenic	TOTAL-8315-1	1.74	1.5	21.72	21.8	20.00	20.00	µg/L	<PQL	0.	20	103.	100.	80 - 120
Dissolved Barium	8335-3	<100.	<100.	208.3	207.	204.1	204.1	µg/L	<PQL	1.	20	99.	102.	85 - 115
Dissolved Beryllium	8335-3	< 10.	< 10.	202.1	202.	204.1	204.1	µg/L	<PQL	0.	20	107.	99.	85 - 115
Dissolved Cadmium	8335-3	< 10.	< 10.	217.7	217.1	204.1	204.1	µg/L	<PQL	0.	20	104.	107.	85 - 115
Dissolved Chromium	8335-3	< 10.	< 10.	212.6	211.5	204.1	204.1	µg/L	<PQL	1.	20	107.	103.	85 - 115
Hexavalent Chromium	8335-1	24.65	25.29	80.79	81.47	52.60	52.60	µg/L	3.	1.	10	107.	108.	85 - 115
Dissolved Cobalt	8335-3	< 50.	< 50.	220.3	219.3	204.1	204.1	µg/L	<PQL	0.	20	108.	107.	85 - 115
Dissolved Copper	8335-3	< 10.	< 10.	217.4	215.3	204.1	204.1	µg/L	<PQL	1.	20	107.	106.	85 - 115
Dissolved Lead	DISS-8335-1	< 5.	< 5.	22.24	22.23	25.00	25.00	µg/L	<PQL	0.	20	88.	88.	85 - 115
Dissolved Manganese	8335-3	< 10.	< 10.	212.9	212.2	204.1	204.1	µg/L	<PQL	0.	20	104.	104.	85 - 115
Dissolved Mercury	DISS-08335-1	< 0.2	< 0.2	1.07	1.081	1.000	1.000	µg/L	<PQL	1.	20	100.	101.	70 - 13
Dissolved Molybdenum	8335-3	< 50.	< 50.	183.3	193.6	204.1	204.1	µg/L	<PQL	5.	20	89.	94.	85 - 11
Dissolved Nickel	8335-3	< 50.	< 50.	416.4	416.6	408.2	408.2	µg/L	<PQL	0.	20	102.	102.	85 - 11
Dissolved Selenium	DISS-8335-1	1.52	1.5	17.8	18.66	20.00	20.00	µg/L	<PQL	5.	20	81.	86.	80 - 12
Dissolved Silver	8335-3	< 10.	< 10.	217.9	217.9	204.1	204.1	µg/L	<PQL	0.	20	106.	106.	85 - 11
Dissolved Titanium	8335-3	< 10.	< 10.	197.8	199.9	204.1	204.1	µg/L	<PQL	1.	20	97.	98.	85 - 11
Dissolved Thallium	DISS-8335-1	< 1.	< 1.	23.09	22.22	25.00	25.00	µg/L	<PQL	4.	20	93.	90.	85 - 11
Dissolved Vanadium	8335-3	< 10.	< 10.	206.4	207.3	204.1	204.1	µg/L	<PQL	0.	20	101.	102.	85 - 11
Dissolved Zinc	8335-3	< 10.	< 10.	229.3	231.8	204.1	204.1	µg/L	<PQL	1.	20	108.	109.	85 - 11
Total Aluminum	TOTAL-8335-1-0	1640.	1651.	2827.	2792.	400.0	400.0	µg/L	1.	1.	20	H MEAN	H MEAN	80 - 12
Total Antimony	TOTAL-8335-1-0	<100.	<100.	423.9	425.3	400.0	400.0	µg/L	<PQL	0.	20	107.	107.	80 - 12
Total Arsenic	TOTAL-8271-1	9.18	9.5	27.16	28.02	20.00	20.00	µg/L	<PQL	3.	20	90.	94.	80 - 12
Total Barium	TOTAL-8335-1-0	109.1	111.2	311.2	306.8	200.0	200.0	µg/L	<PQL	1.	20	101.	99.	80 - 12
Total Beryllium	TOTAL-8335-1-0	< 10.	< 10.	190.1	187.6	200.0	200.0	µg/L	<PQL	1.	20	95.	94.	80 - 12
Total Cadmium	TOTAL-8335-1-0	< 10.	< 10.	206.	201.	200.0	200.0	µg/L	<PQL	2.	20	103.	101.	80 - 12
Total Chromium	TOTAL-8335-1-0	26.4	26.1	219.5	215.5	200.0	200.0	µg/L	<PQL	2.	20	97.	95.	80 - 12
Total Cobalt	TOTAL-8335-1-0	< 50.	< 50.	218.4	212.9	200.0	200.0	µg/L	<PQL	3.	20	102.	100.	80 - 12
Total Copper	TOTAL-8335-1-0	< 10.	< 10.	191.9	187.9	200.0	200.0	µg/L	<PQL	2.	20	100.	98.	80 - 12
Total Iron	TOTAL-8335-1-0	2352.	2385.	2929.	2892.	400.0	400.0	µg/L	1.	1.	20	H MEAN	H MEAN	80 - 12

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BC Laboratories, Inc

BC LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Precision & Accuracy)

Date of Report: 08/11/99
Sample Matrix: Groundwater

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Samples Affected: 99-08336-1, 99-08336-2

Constituents	QC Sample ID	Sample Result	Sample Duplicate	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Sample R.P.D.	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
Total Lead	TOTAL-8335-3	< 5.	< 5.	21.01	21.12	20.00	20.00	µg/L	<PQL	1.	20	104.	105.	80 - 120
Total Manganese	TOTAL-8335-1-0	52.9	53.3	248.4	244.7	200.0	200.0	µg/L	1.	2.	20	98.	96.	80 - 120
Total Mercury	TOTAL-08335-1	< 0.2	< 0.2	1.004	1.327	1.000	1.000	µg/L	<PQL	28.	20	89.	122.	70 - 130
Total Molybdenum	TOTAL-8335-1-0	< 50.	< 50.	198.1	196.3	200.0	200.0	µg/L	<PQL	1.	20	96.	96.	80 - 120
Total Nickel	TOTAL-8335-1-0	< 50.	< 50.	380.2	375.2	400.0	400.0	µg/L	<PQL	1.	20	94.	92.	80 - 120
Total Selenium	TOTAL-8271-1	1.04	< 2.	20.3	20.02	20.00	20.00	µg/L	<PQL	1.	20	96.	95.	80 - 120
Total Silver	TOTAL-8335-1-0	< 10.	< 10.	187.6	182.3	200.0	200.0	µg/L	<PQL	3.	20	99.	96.	80 - 120
Total Titanium	TOTAL-8335-1-0	112.	111.7	325.8	325.6	200.0	200.0	µg/L	0.	0.	20	107.	107.	80 - 120
Total Thallium	TOTAL-8335-3	< 1.	< 1.	22.71	22.92	20.00	20.00	µg/L	<PQL	1.	20	112.	113.	80 - 120
Total Vanadium	TOTAL-8335-1-0	7.6	6.2	200.5	195.5	200.0	200.0	µg/L	<PQL	3.	20	96.	94.	80 - 120
Total Zinc	TOTAL-8335-1-0	< 50.	< 50.	223.3	222.6	200.0	200.0	µg/L	<PQL	0.	20	102.	102.	80 - 120

MS = Matrix Spike; MSD = Matrix Spike Duplicate; RPD = Relative Percent Difference

H Mean - sample concentration is greater than four times the spike level.

Quality Control Officer

Anthony Bonanno

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BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Laboratory Control Sample)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Dissolved Aluminum	LFB-1	437.	400.	µg/L	109.	85 - 115
Dissolved Antimony	LFB#2-0630	430.3	400.	µg/L	108.	85 - 115
Dissolved Arsenic	LCSW2-07-2	9.68	10.	µg/L	97.	85 - 115
Dissolved Barium	LFB#2-0630	202.7	200.	µg/L	101.	85 - 115
Dissolved Beryllium	LFB#2-0630	195.	200.	µg/L	98.	85 - 115
Dissolved Cadmium	LFB#2-0630	209.	200.	µg/L	105.	85 - 115
Dissolved Chromium	LFB#2-0630	203.6	200.	µg/L	102.	85 - 115
Hexavalent Chromium	LCSW-5-15	1059.	1000.	µg/L	106.	85 - 115
Dissolved Cobalt	LFB#2-0630	213.1	200.	µg/L	107.	85 - 115
Dissolved Copper	LFB#2-0630	207.1	200.	µg/L	104.	85 - 115
Dissolved Lead	LFB-25-LCS	23.69	25.	µg/L	95.	85 - 115
Dissolved Manganese	LFB#2-0630	204.4	200.	µg/L	102.	85 - 115
Dissolved Mercury	LCSW1-07-2	1.02	1.0	µg/L	102.	85 - 115
Dissolved Molybdenum	LFB#2-0630	189.4	200.	µg/L	95.	85 - 115
Dissolved Nickel	LFB#2-0630	401.2	400.	µg/L	100.	85 - 115
Dissolved Selenium	LCSW2-07-2	9.29	10.	µg/L	93.	85 - 115
Dissolved Silver	LFB#2-0630	213.3	200.	µg/L	107.	85 - 115
Dissolved Titanium	LFB#2-0630	193.2	200.	µg/L	97.	85 - 115
Dissolved Thallium	LFB-25-LCS	25.07	25.	µg/L	100.	85 - 115
Dissolved Vanadium	LFB#2-0630	200.	200.	µg/L	100.	85 - 115
Dissolved Zinc	LFB#2-0630	214.2	200.	µg/L	107.	85 - 115
Total Aluminum	TOTAL-LCSW	386.9	400.	µg/L	97.	85 - 115
Total Antimony	TOTAL-LCSW	429.7	400.	µg/L	107.	85 - 115
Total Arsenic	LCSW1-07-1	9.81	10.	µg/L	98.	85 - 115
Total Barium	TOTAL-LCSW	202.2	200.	µg/L	101.	85 - 115
Total Beryllium	TOTAL-LCSW	196.7	200.	µg/L	98.	85 - 115
Total Cadmium	TOTAL-LCSW	206.7	200.	µg/L	103.	85 - 115
Total Chromium	TOTAL-LCSW	202.4	200.	µg/L	101.	85 - 115
Total Cobalt	TOTAL-LCSW	215.5	200.	µg/L	108.	85 - 115
Total Copper	TOTAL-LCSW	188.6	200.	µg/L	94.	85 - 115
Total Iron	TOTAL-LCSW	400.7	400.	µg/L	100.	85 - 115

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BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Laboratory Control Sample)

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Total Lead	TOTAL-LCSW	21.08	20.	µg/L	105.	85 - 115
Total Manganese	TOTAL-LCSW	204.8	200.	µg/L	102.	85 - 115
Total Mercury	LCSW2-07-2	0.9276	1.0	µg/L	93.	85 - 115
Total Molybdenum	TOTAL-LCSW	184.4	200.	µg/L	92.	85 - 115
Total Nickel	TOTAL-LCSW	399.4	400.	µg/L	100.	85 - 115
Total Selenium	LCSW1-07-1	9.99	10.	µg/L	100.	85 - 115
Total Silver	TOTAL-LCSW	197.6	200.	µg/L	99.	85 - 115
Total Titanium	TOTAL-LCSW	194.	200.	µg/L	97.	85 - 115
Total Thallium	TOTAL-LCSW	22.76	20.	µg/L	114.	85 - 115
Total Vanadium	TOTAL-LCSW	198.2	200.	µg/L	99.	85 - 115
Total Zinc	TOTAL-LCSW	209.8	200.	µg/L	105.	85 - 115

Quality Control Officer

Anthony Bonanno

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BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT
(Instrumental & Blank Parameters)
METHOD 8015M TPH FUEL FINGERPRINT

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2

Constituents	Method Blank Readings	Units
Stoddard / White Spirits	<200.	µg/L
JP 4	<1000.	µg/L
JP 5	<1000.	µg/L
JP 6	<1000.	µg/L
JP 8	<200.	µg/L
Kerosene / Jet Fuel	<200.	µg/L
Diesel	<200.	µg/L
Crude Oil	<1000.	µg/L
Hydraulic Oil	<1000.	µg/L
Waste Oil	<1000.	µg/L
Motor Oil	<1000.	µg/L
Surrogate % Recovery	83.	%

Quality Control Officer

Anthony Bonanno

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BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT
(Precision & Accuracy)
METHOD 8015M TPH FUEL FINGERPRINT

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2

Constituents	QC Sample ID	Sample Result	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
Diesel	8233-5	<200.	2549.	2523.	2500.	2500.	µg/L	1.	30	102.	101.	54 - 127
Surrogate % Recovery	MS/MSD									97.	99.	33 - 138

MS = Matrix Spike; MSD = Matrix Spike Duplicate; RPD = Relative Percent Difference

Quality Control Officer

Anthony Bonanno

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BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT
(Laboratory Control Sample)
METHOD 8015M TPH FUEL FINGERPRINT

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Diesel	LCSW	2418.	2500.	µg/L	97.	43 - 148
Surrogate % Recovery	LCSW				88.	33 - 138

Quality Control Officer

Anthony Bonanno

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BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT
(Instrumental & Blank Parameters)
Method 8260

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2, 99-08336-3TB

Constituents	Method Blank Readings	Units
Benzene	< 0.5	µg/L
Bromobenzene	< 0.5	µg/L
Bromochloromethane	< 0.5	µg/L
Bromodichloromethane	< 0.5	µg/L
Bromoform	< 0.5	µg/L
Bromomethane	< 0.5	µg/L
n-Butylbenzene	< 0.5	µg/L
sec-Butylbenzene	< 0.5	µg/L
tert-Butylbenzene	< 0.5	µg/L
Carbon tetrachloride	< 0.5	µg/L
Chlorobenzene	< 0.5	µg/L
Chloroethane	< 0.5	µg/L
2-Chloroethylvinyl ether	<20.	µg/L
Chloroform	< 0.5	µg/L
Chloromethane	< 0.5	µg/L
2-Chlorotoluene	< 0.5	µg/L
4-Chlorotoluene	< 0.5	µg/L
Dibromochloromethane	< 0.5	µg/L
1,2-Dibromo-3-Chloropropane	< 0.5	µg/L
1,2-Dibromoethane	< 0.5	µg/L
Dibromomethane	< 0.5	µg/L
1,2-Dichlorobenzene	< 0.5	µg/L
1,3-Dichlorobenzene	< 0.5	µg/L
1,4-Dichlorobenzene	< 0.5	µg/L
Dichlorodifluoromethane	< 0.5	µg/L
1,1-Dichloroethane	< 0.5	µg/L
1,2-Dichloroethane	< 0.5	µg/L
1,1-Dichloroethene	< 0.5	µg/L
cis-1,2-Dichloroethene	< 0.5	µg/L
trans-1,2-Dichloroethene	< 0.5	µg/L

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.
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BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT
(Instrumental & Blank Parameters)
Method 8260

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2, 99-08336-3TB

Constituents	Method Blank Readings	Units
1,2-Dichloropropane	< 0.5	µg/L
1,3-Dichloropropane	< 0.5	µg/L
2,2-Dichloropropane	< 0.5	µg/L
1,1-Dichloropropene	< 0.5	µg/L
cis-1,3-Dichloropropene	< 0.5	µg/L
trans-1,3-Dichloropropene	< 0.5	µg/L
Ethyl Benzene	< 0.5	µg/L
Hexachlorobutadiene	< 0.5	µg/L
Isopropylbenzene	< 0.5	µg/L
p-Isopropyltoluene	< 0.5	µg/L
Methylene Chloride	< 0.5	µg/L
Naphthalene	< 0.5	µg/L
n-Propylbenzene	< 0.5	µg/L
Styrene	< 0.5	µg/L
1,1,1,2-Tetrachloroethane	< 0.5	µg/L
1,1,2,2-Tetrachloroethane	< 0.5	µg/L
Tetrachloroethene	< 0.5	µg/L
Toluene	< 0.5	µg/L
1,2,3-Trichlorobenzene	< 0.5	µg/L
1,2,4-Trichlorobenzene	< 0.5	µg/L
1,1,1-Trichloroethane	< 0.5	µg/L
1,1,2-Trichloroethane	< 0.5	µg/L
Trichloroethene	< 0.5	µg/L
Trichlorofluoromethane	< 0.5	µg/L
1,2,3-Trichloropropane	< 0.5	µg/L
1,2,4-Trimethylbenzene	< 0.5	µg/L
1,3,5-Trimethylbenzene	< 0.5	µg/L
Vinyl Chloride	< 0.5	µg/L
Total Xylenes	< 1.	µg/L
1,2-Dichloroethane-d4	86.	%

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BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT
(Instrumental & Blank Parameters)
Method 8260

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2, 99-08336-3TB

Constituents	Method Blank Readings	Units
Toluene-d8	93.	%
4-Bromofluorobenzene	98.	%

Quality Control Officer

Anthony Bonanno

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4100 Atlas Court * Bakersfield, CA 93308 * (661) 327-4911 * Fax (661) 327-1918 * www.bclabs.com

BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT
(Precision & Accuracy)
Method 8260

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2, 99-08336-3TB

Constituents	QC Sample ID	Sample Result	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
Benzene	8335-4X100	< 50.	2042.98	2075.41	2150.00	2150.00	µg/L	2.	20	95.	97.	80 - 120
Bromodichloromethane	8335-4X100	< 50.	1975.02	2017.91	2150.00	2150.00	µg/L	2.	20	92.	94.	80 - 120
Chlorobenzene	8335-4X100	< 50.	2183.90	2225.46	2150.00	2150.00	µg/L	2.	20	102.	104.	80 - 120
Chloroethane	8335-4X100	< 50.	2109.24	2176.80	2150.00	2150.00	µg/L	3.	20	98.	101.	80 - 120
1,4-Dichlorobenzene	8335-4X100	< 50.	2165.13	2221.83	2150.00	2150.00	µg/L	2.	20	101.	103.	80 - 120
1,1-Dichloroethane	8335-4X100	< 50.	2013.91	2062.59	2150.00	2150.00	µg/L	2.	20	94.	96.	80 - 120
1,1-Dichloroethene	8335-4X100	< 50.	2197.22	2254.46	2150.00	2150.00	µg/L	3.	20	102.	105.	80 - 120
Toluene	8335-4X100	< 50.	2109.38	2122.07	2150.00	2150.00	µg/L	1.	20	98.	99.	80 - 120
Trichloroethene	8335-4X100	5176.	7191.27	7107.98	2150.00	2150.00	µg/L	4.	20	94.	90.	80 - 120
1,2-Dichloroethane-d4	MS/MSD									87.	87.	76 - 114
Toluene-d8	MS/MSD									100.	99.	88 - 110
4-Bromofluorobenzene	MS/MSD									98.	99.	86 - 115

MS = Matrix Spike; MSD = Matrix Spike Duplicate; RPD = Relative Percent Difference

Quality Control Officer

Anthony Bonanno

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Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\JULY99\JULY19\19JULY41.D Vial: 41
Acq On : 20 Jul 1999 7:53 am Operator: M. CHAVEZ
Sample : CCV 11 Inst : MS-V4
Misc : 25 ML 25 UG/L VO-11-4277 Multiplr: 1.00
MS Integration Params: INTP1.P

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Wed Jul 14 20:17:59 1999
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	pentafluorobenzene	1.000	1.000	0.0	85	0.00
2		dichlorodifluoromethane	0.470	0.518	-10.3	92	0.00
3	P	chloromethane	0.526	0.517	1.8	89	0.00
4	C	vinyl chloride	0.516	0.571	-10.7	97	0.00
5		bromomethane	0.403	0.398	1.2	81	0.00
6	M	chloroethane	0.386	0.422	-9.2	94	0.00
7		trichlorofluoromethane	0.728	0.842	-15.7	97	0.00
8		1,1,2-trichloro-1,2,2-trifl	0.899	1.000	-11.3	93	0.00
9	MC	1,1-dichloroethene	0.517	0.584	-12.9	97	0.00
10		methylene chloride	0.473	0.437	-3.7 ~~7.4~~	90	0.00
11		MTBE	0.665	0.585	12.0	78	-0.02
12		trans-1,2-dichloroethene	0.610	0.667	-9.3	93	0.00
13	MP	1,1-dichloroethane	1.233	1.274	-3.3	91	-0.01
14		2,2-dichloropropane	0.878	0.632	28.0#	63	-0.01
15		cis-1,2-dichloroethene	0.589	0.595	-0.9	88	-0.01
16	C	chloroform	0.934	0.943	-0.9	88	-0.02
17		bromochloromethane	0.170	0.165	2.7	81	0.00
18		1,1,1-trichloroethane	0.910	1.051	-15.4	100	-0.02
19		1,1-dichloropropene	0.933	1.061	-13.7	98	-0.02
20		carbon tetrachloride	0.680	0.804	-18.3	99	-0.02
21	S	1,2-dichloroethane-d4	0.270	0.237	12.3	78	-0.01
22		1,2-dichloroethane	0.352	0.337	4.5	84	-0.02
23	M	benzene	1.949	2.040	-4.6	90	0.00
24	I	1,4-difluorobenzene	1.000	1.000	0.0	87	-0.01
25	M	trichloroethene	0.394	0.472	-19.9	105	-0.03
26	C	1,2-dichloropropane	0.357	0.346	3.0	86	-0.02
27	M	bromodichloromethane	0.375	0.362	3.5	83	-0.02
28		dibromomethane	0.123	0.109	11.7	78	-0.01
29		2-CEVE	0.104	0.082#	20.9#	71	-0.02
30		cis-1,3-dichloropropene	0.373	0.322	13.8	75	-0.03
31	S	toluene-d8	1.022	0.915	10.5	79	-0.02
32	MC	toluene	0.710	0.705	0.7	87	-0.02
33		trans-1,3-dichloropene	0.235	0.203	13.3	74	-0.03
34		1,1,2-trichloroethane	0.125	0.115	7.7	80	-0.03
35		1,3-dichloropropane	0.263	0.238	9.6	80	-0.02
36		tetrachloroethene	0.391	0.433	-10.8	96	-0.01
37		dibromochloromethane	0.177	0.167	5.5	80	-0.03
38		1,2-dibromoethane	0.170	0.157	7.8	79	-0.02
39	I	chlorobenzene-d5	1.000	1.000	0.0	79	-0.03

(#) = Out of Range

BOE-C6-0102346

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\JULY99\JULY19\19JULY41.D Vial: 41
Acq On : 20 Jul 1999 7:53 am Operator: M. CHAVEZ
Sample : CCV 11 Inst : MS-V4
Misc : 25 ML 25 UG/L VO-11-4277 Multiplr: 1.00
MS Integration Params: INTP1.P

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Wed Jul 14 20:17:59 1999
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	MP	chlorobenzene	3.325	3.531	-6.2	84	-0.02
41		1,1,1,2-tetrachloroethane	1.116	1.194	-7.0	84	-0.02
42	C	ethylbenzene	6.413	7.466	-16.4	92	-0.01
43		m&p-xylene	2.437	2.692	-10.5	88	0.00
44		o-xylene	4.568	5.042	-10.4	89	-0.02
45		styrene	3.293	3.580	-8.7	85	-0.01
46	P	isopropylbenzene	6.491	7.783	-19.9	94	-0.01
47	P	bromoform	0.518	0.506	16.6 ~~2.2~~	76	0.00 L
48	P	1,1,2,2-tetrachloroethane	0.803	0.653	18.7	63	-0.01
49	S	4-bromofluorobenzene	2.268	2.150	5.2	77	0.00
50	P	1,2,3-trichloropropane	0.206	0.199	3.4	75	-0.01
51		n-propylbenzene	7.723	9.210	-19.2	94	-0.01
52		bromobenzene	1.233	1.309	-6.1	84	-0.01
53		1,3,5-trimethylbenzene	4.815	5.576	-15.8	92	-0.01
54		2-chlorotoluene	4.579	5.164	-12.8	88	-0.01
55		4-chlorotoluene	5.142	5.482	-6.6	88	-0.01
56		tert-butylbenzene	4.768	5.672	-19.0	94	-0.01
57		1,2,4-trimethylbenzene	4.776	5.282	-10.6	88	-0.01
58		sec-butylbenzene	6.714	8.147	-21.3#	96	-0.01
59		4-isopropyltoluene	5.105	6.051	-18.5	93	-0.01
60		1,3-dichlorobenzene	2.332	2.472	-6.0	85	-0.01
61	M	1,4-dichlorobenzene	2.251	2.335	-3.7	83	-0.02
62		n-butylbenzene	5.162	5.934	-15.0	90	-0.01
63		1,2-dichlorobenzene	1.779	1.868	-5.0	82	-0.01
64		1,2-dibromo-3-chloropropane	0.121	0.115	14.8 ~~5.3~~	70	0.00 L
65		1,2,4-trichlorobenzene	1.424	1.425	-0.1	77	0.00
66		hexachlorobutadiene	1.119	1.213	-8.4	87	-0.01
67		naphthalene	1.260	1.158	8.1	71	-0.01
68		1,2,3-trichlorobenzene	1.060	1.037	2.2	76	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

BOE-C6-0102347

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\JULY99\JULY20\20JULY16.D Vial: 16
Acq On : 20 Jul 1999 7:19 pm Operator: M. CHAVEZ
Sample : CCV 12 Inst ': MS-V4
Misc : 25 UG/L; VO-11-4282 Multiplr: 1.00
MS Integration Params: INTP1.P

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Wed Jul 14 20:17:59 1999
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

CC 7/26-4

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
1	I	pentafluorobenzene	1.000	1.000	0.0	91	0.01	
2		dichlorodifluoromethane	0.470	0.452	3.8	87	0.00	
3	P	chloromethane	0.526	0.472	10.3	87	0.00	
4	C	vinyl chloride	0.516	0.515	0.2	94	0.00	
5		bromomethane	0.403	0.385	4.5	84	0.00	
6	M	chloroethane	0.386	0.385	0.4	92	0.00	
7		trichlorofluoromethane	0.728	0.762	-4.6	94	0.00	
8		1,1,2-trichloro-1,2,2-trifl	0.899	0.935	-4.0	94	0.00	
9	MC	1,1-dichloroethene	0.517	0.538	-4.0	96	0.00	
10		methylene chloride	0.473	0.372	11.8 ~~21.4#~~	83	0.00	LR
11		MTBE	0.665	0.544	18.2	77	0.00	
12		trans-1,2-dichloroethene	0.610	0.623	-2.2	94	0.00	
13	MP	1,1-dichloroethane	1.233	1.186	3.8	91	0.00	
14		2,2-dichloropropane	0.878	0.783	10.9	83	0.00	
15		cis-1,2-dichloroethene	0.589	0.553	6.2	87	0.00	
16	C	chloroform	0.934	0.885	5.3	89	-0.01	
17		bromochloromethane	0.170	0.152	10.6	80	0.00	
18		1,1,1-trichloroethane	0.910	0.953	-4.8	97	0.00	
19		1,1-dichloropropene	0.933	0.979	-4.9	97	0.00	
20		carbon tetrachloride	0.680	0.732	-7.6	97	-0.02	
21	S	1,2-dichloroethane-d4	0.270	0.223	17.4	79	0.00	
22		1,2-dichloroethane	0.352	0.316	10.2	85	-0.01	
23	M	benzene	1.949	1.903	2.4	91	0.00	
24	I	1,4-difluorobenzene	1.000	1.000	0.0	87	0.00	
25	M	trichloroethene	0.394	0.464	-17.8	103	0.00	
26	C	1,2-dichloropropane	0.357	0.351	1.7	87	0.00	
27	M	bromodichloromethane	0.375	0.365	2.6	84	0.00	
28		dibromomethane	0.123	0.114	7.4	81	0.00	
29		2-CEVE	0.104	0.092#	11.2	79	-0.01	
30		cis-1,3-dichloropropene	0.373	0.351	6.1	81	-0.02	
31	S	toluene-d8	1.022	1.018	0.4	87	0.00	
32	MC	toluene	0.710	0.739	-4.1	90	-0.01	
33		trans-1,3-dichloropene	0.235	0.216	8.0	78	-0.01	
34		1,1,2-trichloroethane	0.125	0.115	8.0	80	-0.01	
35		1,3-dichloropropane	0.263	0.242	7.8	81	0.00	
36		tetrachloroethene	0.391	0.435	-11.4	96	-0.01	
37		dibromochloromethane	0.177	0.166	6.2	79	-0.01	
38		1,2-dibromoethane	0.170	0.158	7.2	79	-0.01	
39	I	chlorobenzene-d5	1.000	1.000	0.0	80	-0.01	

(#) = Out of Range

BOE-C6-0102348

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\JULY99\JULY20\20JULY16.D Vial: 16
Acq On : 20 Jul 1999 7:19 pm Operator: M. CHAVEZ
Sample : CCV 12 Inst : MS-V4
Misc : 25 UG/L; VO-11-4282 Multiplr: 1.00
MS Integration Params: INTP1.P

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Wed Jul 14 20:17:59 1999
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	MP	chlorobenzene	3.325	3.568	-7.3	85	-0.01
41		1,1,1,2-tetrachloroethane	1.116	1.209	-8.4	85	-0.01
42	C	ethylbenzene	6.413	7.408	-15.5	92	0.00
43		m&p-xylene	2.437	2.715	-11.4	89	0.00
44		o-xylene	4.568	5.078	-11.2	90	0.00
45		styrene	3.293	3.584	-8.8	86	0.00
46	P	isopropylbenzene	6.491	7.715	-18.9	94	0.00
47	P	bromoform	0.518	0.500	17.7 ~~3.4~~	76	0.00 LR
48	P	1,1,2,2-tetrachloroethane	0.803	0.685	14.7	67	0.00
49	S	4-bromofluorobenzene	2.268	2.186	3.7	79	0.00
50	P	1,2,3-trichloropropane	0.206	0.198	4.2	75	0.00
51		n-propylbenzene	7.723	9.259	-19.9	94	0.00
52		bromobenzene	1.233	1.307	-5.9	84	0.00
53		1,3,5-trimethylbenzene	4.815	5.594	-16.2	93	0.00
54		2-chlorotoluene	4.579	5.277	-15.3	90	0.00
55		4-chlorotoluene	5.142	5.435	-5.7	87	-0.01
56		tert-butylbenzene	4.768	5.677	-19.1	94	-0.01
57		1,2,4-trimethylbenzene	4.776	5.361	-12.2	89	0.00
58		sec-butylbenzene	6.714	8.109	-20.8#	96	0.00
59		4-isopropyltoluene	5.105	6.092	-19.3	94	-0.01
60		1,3-dichlorobenzene	2.332	2.489	-6.7	86	-0.01
61	M	1,4-dichlorobenzene	2.251	2.417	-7.4	86	-0.01
62		n-butylbenzene	5.162	6.072	-17.6	92	0.00
63		1,2-dichlorobenzene	1.779	1.865	-4.8	82	0.00
64		1,2-dibromo-3-chloropropane	0.121	0.116	13.8 ~~4.1~~	71	0.00 LR
65		1,2,4-trichlorobenzene	1.424	1.441	-1.2	78	0.00
66		hexachlorobutadiene	1.119	1.238	-10.6	89	0.00
67		naphthalene	1.260	1.159	8.1	72	0.00
68		1,2,3-trichlorobenzene	1.060	1.048	1.1	77	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report MS-V4

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Wed Jul 14 20:10:52 1999
Response via : Initial Calibration

Calibration Files
1 =14JULY03.D 2 =14JULY05.D 3 =14JULY14.D
4 =14JULY18.D 5 =14JULY08.D 6 =14JULY09.D

		Compound	1	2	3	4	5	6	Avg	%RSD	
1)	I	pentafluorobenzene	----------ISTD----------								
2)		dichlorodifluoromet	0.428	0.511	0.459	0.474	0.494	0.452	0.470	6.39	
3)	P	chloromethane	0.600	0.566	0.504	0.492	0.485	0.510	0.526	8.80	
4)	C	vinyl chloride	0.541	0.557	0.502	0.499	0.502	0.493	0.516	5.17	
5)		bromomethane	0.357	0.426	0.388	0.414	0.407	0.424	0.403	6.57	
6)	M	chloroethane	0.387	0.411	0.371	0.379	0.379	0.391	0.386	3.63	
7)		trichlorofluorometh	0.676	0.787	0.717	0.733	0.749	0.705	0.728	5.26	
8)		1,1,2-trichloro-1,2	0.855	0.938	0.890	0.907	0.924	0.879	0.899	3.37	
9)	MC	1,1-dichloroethene	0.506	0.543	0.499	0.507	0.519	0.529	0.517	3.20	
10)		methylene chloride		0.720	0.402	0.409	0.406	0.427	0.473	29.29	LR
11)		MTBE	0.697	0.709	0.631	0.638	0.635	0.681	0.665	5.22	
12)		trans-1,2-dichloroe	0.603	0.605	0.595	0.605	0.608	0.646	0.610	2.94	
13)	MP	1,1-dichloroethane	1.273	1.314	1.174	1.183	1.183	1.271	1.233	4.86	
14)		2,2-dichloropropane	0.961	0.945	0.796	0.852	0.839	0.877	0.878	7.27	
15)		cis-1,2-dichloroeth	0.573	0.626	0.563	0.574	0.575	0.624	0.589	4.71	
16)	C	chloroform	0.917	0.988	0.891	0.908	0.916	0.986	0.934	4.49	
17)		bromochloromethane	0.147	0.166	0.171	0.173	0.174	0.190	0.170	8.19	
18)		1,1,1-trichloroetha	0.882	0.968	0.878	0.891	0.893	0.948	0.910	4.21	
19)		1,1-dichloropropene	0.912	0.978	0.895	0.918	0.922	0.973	0.933	3.67	
20)		carbon tetrachlorid	0.623	0.691	0.675	0.685	0.692	0.715	0.680	4.52	
21)	S	1,2-dichloroethane-	0.275	0.275	0.274	0.258	0.266	0.271	0.270	2.58	
22)		1,2-dichloroethane	0.341	0.379	0.339	0.338	0.351	0.365	0.352	4.69	
23)	M	benzene	1.944	1.946	1.841	1.909	1.937	2.120	1.949	4.74	
24)	I	1,4-difluorobenzene	----------ISTD----------								
25)	M	trichloroethene	0.394	0.408	0.380	0.392	0.390	0.397	0.394	2.34	
26)	C	1,2-dichloropropane	0.364	0.373	0.341	0.352	0.351	0.362	0.357	3.23	
27)	M	bromodichloromethan	0.332	0.384	0.370	0.379	0.385	0.398	0.375	6.07	
28)		dibromomethane	0.119	0.125	0.118	0.122	0.127	0.129	0.123	3.56	
29)		2-CEVE	0.105	0.106	0.100	0.101	0.106	0.105	0.104	2.41	
30)		cis-1,3-dichloropro	0.357	0.377	0.361	0.374	0.382	0.388	0.373	3.19	
31)	S	toluene-d8	1.041	1.031	1.015	1.011	1.015	1.021	1.022	1.15	
32)	MC	toluene	0.697	0.756	0.677	0.709	0.699	0.722	0.710	3.79	
33)		trans-1,3-dichlorop	0.221	0.235	0.225	0.239	0.243	0.244	0.235	4.08	
34)		1,1,2-trichloroetha	0.119	0.128	0.123	0.125	0.126	0.128	0.125	2.75	
35)		1,3-dichloropropane	0.265	0.273	0.253	0.259	0.261	0.267	0.263	2.60	
36)		tetrachloroethene	0.387	0.406	0.374	0.393	0.390	0.394	0.391	2.69	
37)		dibromochloromethan	0.153	0.164	0.173	0.182	0.191	0.199	0.177	9.61	
38)		1,2-dibromoethane	0.146	0.171	0.169	0.173	0.178	0.185	0.170	7.79	
39)	I	chlorobenzene-d5	----------ISTD----------								
40)	MP	chlorobenzene	3.154	3.308	3.143	3.336	3.404	3.605	3.325	5.16	
41)		1,1,1,2-tetrachloro	0.996	1.070	1.059	1.137	1.187	1.244	1.116	8.19	
42)	C	ethylbenzene	6.200	6.355	5.863	6.442	6.602	7.015	6.413	6.04	
43)		m&p-xylene	2.304	2.510	2.193	2.427	2.509	2.680	2.437	7.04	
44)		o-xylene	4.562	4.510	4.225	4.526	4.673	4.909	4.568	4.90	
45)		styrene	3.020	3.174	3.101	3.343	3.472	3.649	3.293	7.28	
46)	P	isopropylbenzene	6.235	6.378	6.005	6.563	6.729	7.033	6.491	5.64	
47)	P	bromoform		0.390	0.467	0.527	0.585	0.620	0.518	17.76	LR

48)	P	1,1,2,2-tetrachloro	0.796	0.717	0.753	0.820	0.844	0.884	0.803	7.55	
49)	S	4-bromofluorobenzen	2.282	2.220	2.196	2.214	2.321	2.377	2.268	3.13	
50)	P	1,2,3-trichloroprop	0.196	0.192	0.197	0.211	0.217	0.224	0.206	6.33	
51)		n-propylbenzene	7.275	7.489	7.157	7.822	8.123	8.473	7.723	6.62	
52)		bromobenzene	1.170	1.202	1.154	1.239	1.285	1.351	1.233	6.04	
53)		1,3,5-trimethylbenz	4.565	4.760	4.458	4.826	5.004	5.277	4.815	6.18	
54)		2-chlorotoluene	4.692	4.188	4.034	4.663	4.811	5.085	4.579	8.63	
55)		4-chlorotoluene	5.113	5.255	4.803	4.965	5.202	5.514	5.142	4.78	
56)		tert-butylbenzene	4.550	4.616	4.409	4.806	4.998	5.229	4.768	6.40	
57)		1,2,4-trimethylbenz	4.696	4.620	4.347	4.791	4.978	5.224	4.776	6.33	
58)		sec-butylbenzene	6.383	6.684	6.153	6.747	7.046	7.273	6.714	6.13	
59)		4-isopropyltoluene	4.873	4.825	4.708	5.159	5.422	5.641	5.105	7.23	
60)		1,3-dichlorobenzene	2.271	2.291	2.132	2.320	2.425	2.552	2.332	6.14	
61)	M	1,4-dichlorobenzene	2.236	2.152	2.047	2.247	2.344	2.478	2.251	6.63	
62)		n-butylbenzene	4.982	4.976	4.751	5.246	5.434	5.581	5.162	6.08	
63)		1,2-dichlorobenzene	1.690	1.662	1.672	1.811	1.880	1.961	1.779	6.99	
64)		1,2-dibromo-3-chlor		0.086	0.122	0.131	0.133	0.136	0.121	17.00	LR
65)		1,2,4-trichlorobenz	1.355	1.313	1.302	1.473	1.512	1.591	1.424	8.32	
66)		hexachlorobutadiene	1.256	1.053	1.049	1.113	1.106	1.138	1.119	6.75	
67)		naphthalene	1.175	1.177	1.168	1.288	1.350	1.403	1.260	8.07	
68)		1,2,3-trichlorobenz	1.009	0.968	0.955	1.084	1.142	1.202	1.060	9.38	

(#) = Out of Range

82604.M Wed Jul 14 20:18:11 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\JULY99\JULY14\14JULY22.D Vial: 23
Acq On : 14 Jul 1999 9:54 pm Operator: M. CHAVEZ
Sample : ICV B 25 UG/L Inst : MS-V4
Misc : 25 ML VO-11-4243 Multiplr: 1.00
MS Integration Params: INTP1.P

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Wed Jul 14 20:17:59 1999
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
1	I	pentafluorobenzene	1.000	1.000	0.0	104	0.01	
2		dichlorodifluoromethane	0.470	0.575	-22.3#	126	0.00	
3	P	chloromethane	0.526	0.581	-10.4	123	0.00	
4	C	vinyl chloride	0.516	0.586	-13.6	122	0.00	
5		bromomethane	0.403	0.447	-11.1	113	0.00	
6	M	chloroethane	0.386	0.428	-10.9	118	0.00	
7		trichlorofluoromethane	0.728	0.825	-13.3	117	0.00	
8		1,1,2-trichloro-1,2,2-trifl	0.899	0.900	-0.1	103	0.00	
9	MC	1,1-dichloroethene	0.517	0.460	11.1	94	0.00	
10		methylene chloride	0.473	0.377	11.2 ~~10.6~~	96	0.00	LR
11		MTBE	0.665	0.638	4.0	104	0.00	
12		trans-1,2-dichloroethene	0.610	0.563	7.8	97	0.00	
13	MP	1,1-dichloroethane	1.233	1.104	10.4	97	0.00	
14		2,2-dichloropropane	0.878	0.832	5.3	102	0.00	
15		cis-1,2-dichloroethene	0.589	0.539	8.4	98	0.00	
16	C	chloroform	0.934	0.882	5.6	101	0.00	
17		bromochloromethane	0.170	0.168	1.3	101	0.00	
18		1,1,1-trichloroethane	0.910	0.852	6.4	100	0.00	
19		1,1-dichloropropene	0.933	0.898	3.7	102	0.00	
20		carbon tetrachloride	0.680	0.664	2.4	101	-0.01	
21	S	1,2-dichloroethane-d4	0.270	0.262	2.8	106	0.00	
22		1,2-dichloroethane	0.352	0.346	1.7	107	0.00	
23	M	benzene	1.949	1.862	4.5	102	0.00	
24	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	
25	M	trichloroethene	0.394	0.389	1.2	102	-0.01	
26	C	1,2-dichloropropane	0.357	0.365	-2.2	107	0.00	
27	M	bromodichloromethane	0.375	0.353	5.8	96	0.00	
28		dibromomethane	0.123	0.122	0.9	103	0.01	
29		2-CEVE	0.104	0.100#	3.7	102	0.00	
30		cis-1,3-dichloropropene	0.373	0.376	-0.9	104	-0.02	
31	S	toluene-d8	1.022	1.011	1.2	103	-0.01	
32	MC	toluene	0.710	0.678	4.4	99	-0.01	
33		trans-1,3-dichloropene	0.235	0.239	-1.8	103	-0.01	
34		1,1,2-trichloroethane	0.125	0.125	-0.1	103	0.00	
35		1,3-dichloropropane	0.263	0.263	-0.0	105	0.00	
36		tetrachloroethene	0.391	0.380	2.8	100	0.00	
37		dibromochloromethane	0.177	0.176	0.4	100	-0.01	
38		1,2-dibromoethane	0.170	0.176	-3.3	105	0.00	
39	I	chlorobenzene-d5	1.000	1.000	0.0	102	0.00	
40	MP	chlorobenzene	3.325	3.291	1.0	101	-0.01	
41		1,1,1,2-tetrachloroethane	1.116	1.141	-2.2	103	-0.01	
42	C	ethylbenzene	6.413	6.125	4.5	97	0.00	
43		m&p-xylene	2.437	2.377	2.5	100	0.00	

44		o-xylene	4.568	4.423	3.2	100	0.00	
45		styrene	3.293	3.328	-1.1	102	0.00	
46	P	isopropylbenzene	6.491	6.537	-0.7	102	0.00	
47	P	bromoform	0.518	0.533	12.2	104	0.00	LR
48	P	1,1,2,2-tetrachloroethane	0.803	0.804	-0.2	100	0.00	
49	S	4-bromofluorobenzene	2.268	2.235	1.5	103	0.00	
50	P	1,2,3-trichloropropane	0.206	0.208	-1.0	101	0.00	
51		n-propylbenzene	7.723	7.561	2.1	99	0.00	
52		bromobenzene	1.233	1.218	1.3	101	0.00	
53		1,3,5-trimethylbenzene	4.815	4.712	2.1	100	0.00	
54		2-chlorotoluene	4.579	4.500	1.7	99	0.00	
55		4-chlorotoluene	5.142	4.902	4.7	101	-0.01	
56		tert-butylbenzene	4.768	4.701	1.4	100	-0.01	
57		1,2,4-trimethylbenzene	4.776	4.708	1.4	101	0.00	
58		sec-butylbenzene	6.714	6.960	-3.7	106	0.00	
59		4-isopropyltoluene	5.105	5.009	1.9	99	0.00	
60		1,3-dichlorobenzene	2.332	2.254	3.3	100	0.00	
61	M	1,4-dichlorobenzene	2.251	2.260	-0.4	103	0.00	
62		n-butylbenzene	5.162	5.157	0.1	101	0.00	
63		1,2-dichlorobenzene	1.779	1.769	0.6	100	0.00	
64		1,2-dibromo-3-chloropropane	0.121	0.131	3.1 ~~3.0~~	102	0.00	LR
65		1,2,4-trichlorobenzene	1.424	1.455	-2.2	101	0.00	
66		hexachlorobutadiene	1.119	1.092	2.4	100	0.00	
67		naphthalene	1.260	1.321	-4.8	105	0.00	
68		1,2,3-trichlorobenzene	1.060	1.094	-3.2	103	0.00	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
14JULY18.D 82604.M Wed Jul 14 22:43:51 1999

BC Laboratories, Inc

B C LABORATORIES
QUALITY CONTROL REPORT
(Laboratory Control Sample)
Method 8260

ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
TERESA WILSON

Date of Report: 08/11/99
Sample Matrix: Groundwater

Samples Affected: 99-08336-1, 99-08336-2, 99-08336-3TB

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Benzene	CCV 12	24.41	25.00	µg/L	98.	80 - 120
Bromodichloromethane	CCV 12	24.33	25.00	µg/L	97.	80 - 120
Chlorobenzene	CCV 12	26.83	25.00	µg/L	107.	80 - 120
Chloroethane	CCV 12	24.94	25.00	µg/L	100.	80 - 120
1,4-Dichlorobenzene	CCV 12	26.84	25.00	µg/L	107.	80 - 120
1,1-Dichloroethane	CCV 12	24.05	25.00	µg/L	96.	80 - 120
1,1-Dichloroethene	CCV 12	26.02	25.00	µg/L	104.	80 - 120
Toluene	CCV 12	26.02	25.00	µg/L	104.	80 - 120
Trichloroethene	CCV 12	29.44	25.00	µg/L	118.	80 - 120
1,2-Dichloroethane-d4	CCV 12				83.	76 - 114
Toluene-d8	CCV 12				100.	88 - 110
4-Bromofluorobenzene	CCV 12				96.	86 - 115

Quality Control Officer

Anthony Pohanno

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.
4100 Atlas Court * Bakersfield, CA 93308 * (661) 327-4911 * Fax (661) 327-1918 * www.bclabs.com

Microseeps

GM2542-993016

— ARCADIS GERAGHTY & MILLER, INC. —
— PROJECT: CA000280.0006.00002 —
— LOCATION: ILM / TORRANCE —

Sample Names	Carbon Dioxide mg/l	Oxygen mg/l	Nitrogen mg/l	Propane ng/l	Methane mg/l	Methane ug/l	Ethane ng/l	Ethylene ng/l	Propylene ng/l	Lab ID	Date Sampled	Date Received	Date Analyzed	Analyst
P-20	51.57	5.36	16.71	149	*	3.302	25	10	<10	T22 115	07/16/99	07/17/99	07/21/99	BC
EB071699	<.60	8.56	13.67	<10	*	0.099	<5	38	<10	T22 116	07/16/99	07/17/99	07/21/99	BC
P-1	44.45	5.62	13.74	142	*	0.603	60	16	<10	T22 117	07/16/99	07/17/99	07/21/99	BC
P-30	51.72	4.98	15.60	147	*	3.293	23	15	<10	T22 118	07/16/99	07/17/99	07/21/99	BC
DETECTION LIMITS	0.60mg/l	0.15mg/l	0.40mg/l	10ng/l	0.07mg/l	0.015ug/l	5ng/l	5ng/l	10ng/l					

* Methane result taken from alternate detector

ANALYST INITIALS AL

REVIEW mk

Microseeps

GM2539-993006

— ARCADIS GERAGHTY & MILLER, INC. —
— PROJECT: CA000260.0006.00002 —
— LOCATION: ILM / TORRANCE —

Sample Names	Carbon Dioxide mg/l	Oxygen mg/l	Nitrogen mg/l	Propane ng/l	Methane mg/l	Methane ug/l	Ethane ng/l	Ethylene ng/l	Propylene ng/l	Lab ID	Date Sampled	Date Received	Date Analyzed	Analyst
P-16A	28.12	6.44	16.79	130	*	0.536	18	<5	<10	T22 109	07/15/99	07/16/99	07/21/99	BC
P-24	27.84	2.70	16.65	256	*	82.54	110	104	<10	T22 110	07/15/99	07/16/99	07/21/99	BC
P-7	20.69	0.82	16.46	48	*	0.086	<5	<5	<10	T22 111	07/15/99	07/16/99	07/21/99	BC
P-22	57.36	4.74	16.48	153	*	0.487	52	<5	<10	T22 112	07/15/99	07/16/99	07/21/99	BC
P-17	24.92	6.89	13.85	184	*	0.266	30	<5	<10	T22 113	07/15/99	07/16/99	07/21/99	BC
FB071599A	<.60	8.31	13.44	19	*	0.155	14	67	<10	T22 114	07/15/99	07/16/99	07/21/99	BC
DETECTION LIMITS	0.60mg/l	0.15mg/l	0.40mg/l	10ng/l	0.07mg/l	0.015ug/l	5ng/l	5ng/l	10ng/l					

* Methane result taken from alternate detector

ANALYST INITIALS BR

REVIEW