ARCADIS Geraghty Miller
BC Laboratory Number: 99-02725
Client Reference: ILM Groundwater

CASE NARRATIVE
Date: 05/12/99
Page 1

SAMPLE RECEIPT:

BC Laboratories, Inc (BCL) received a total of samples on 03-04-99 at 1855. The samples were collected by Arcadis Geraghty & Miller on 03-04-99 and were received by a BCL courier from the site and transported to the laboratory. The samples were logged into the Laboratory Information Management System (LIMS) and BCL numbers were assigned to each sample. The result of the temperature check was 4.2 and 5.4 °C and was recorded on the cooler receipt form. The following discrepancies were found on the chain of custody (COC) or the samples.

1. Not enough sample was received to run the requested analysis on the equipment blanks.

ORGANICS:

In accordance with the COC, EPA method 8260B for VOC's, 8015M for Fuel fingerprint were performed on designated samples. Copies of the Calibration, Method Blanks, LCS, duplicates, and MS/MDS if applicable are included in the following package. All holding times and quality control requirements were met.

INORGANICS:

In accordance with the COC, EPA method 6000/7000 for 17 metals and hexavalent chromium was performed on designated samples. Copies of the Calibration, Method Blanks, LCS, duplicates, and MS/MDS if applicable are included in the following package. All holding times and quality control requirements were met .

Data Package reviewed by: _____ 5-12-99

CHAIN OF CUSTODY

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

Report To:

Name: Arcadis G+M
Address: 1400 N Harbor
City: Fullerton
State: CA Zip: 92835
Attn: Teresa Wilson
Phone: (714) 278-0992

Project: Former ILM
Project #: CA002900020000.2
Sampler Name: Teeple / J. Newman
Submission #: 99-2725

Lab #	Sample Description	Date & Time Sampled	8260	8015 M	Inorganic Chemical Metals	Inorganic Chemical Metals - Filtered	CR6+										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	P-7	3-4-99 / 0935	X	X	X	X	X										GW	NA	3 VOA's 1 Plastic amber
-2	P-16A	3-4-99 / 1038	X	X	X	X	X										GW		
-3	P-20	3-4-99 / 1145	X	X	X	X	X										GW		
-4	P-29	3-4-99 / 1200	X	X	X	X	X										GW		
-5	EB-3	3-4-99 / 0750	X	X	X	X	X	* volatiles only									DIW		3 VOA's
-6	P-17	3-4-99 / 1350	X	X	X	X	X										GW		3 VOA's 1 Plastic amber
-7	P-1	3-4-99 / 1525	X	X	X	X	X										GW		
-8	EB-4	3-4-99 / 1600	X	X	X	X	X	*		J						per CA	DIW		3 VOA's

DISTRIBUTION: RP | MA | CS | TC | SB

NUMBERING CHECKED BY: [illegible]

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: * 24hr TAT on metals samples per lab - 24 hr Cr6 not TAT. RB 3-5

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Timothy J. Teeple	John M. Knight	3-4-99	1555
John M. Knight	Chrissy [illegible]	3-4-99	1855

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

0656

BOE-C6-0234782

BC LABORATORIES INC. **SAMPLE RECEIPT FORM** Rev. No.6 10/13/98 Page ___ Of ___

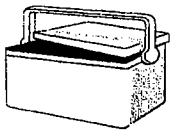
Submission #: 99-2725 **Project Code:**

SHIPPING INFORMATION	SHIPPING CONTAINER
·deral Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☒ None ☐
ɑC Lab Field Service ☒ Other ☐ (Specify) _____	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 3/4/99 14:30
Temperature: 4.2 °C
Thermometer ID: 17 Analyst Init CFORD
Emissivity .90
Container QtPE

Ice Chest ID Blue White Date/Time 3/4/99 19:35
Temperature: 5.4 °C
Thermometer ID: 17 Analyst Init CFORD
Emissivity .90
Container QtPE

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	TB	10	11	12
QT GENERAL MINERAL/ GENERAL PHYSICAL	1	1	1	1														1	1					
PT PE UNPRESERVED																								
QT INORGANIC CHEMICAL METALS	2	2	2	2														2	2					
PT INORGANIC CHEMICAL METALS																								
PT CYANIDE																								
PT NITROGEN FORMS																								
PT TOTAL SULFIDE																								
2oz. NITRATE / NITRITE																								
100ml TOTAL ORGANIC CARBON																								
·T TOX																								
CHEMICAL OXYGEN DEMAND																								
·J0ml PHENOLICS																								
40ml VOA VIAL TRAVEL BLANK																					1			
40ml VOA VIAL	3	3	3	3													3	3	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	1	1	1	1														1	1					
QT QA/QC																								
QT AMBER																								
8 OZ. JAR																								
32 OZ. JAR																								
SOIL SLEEVE																								
PCB VIAL																								
PLASTIC BAG																								

Comments:

Sample Numbering Completed By: CFORD Date/Time: 3/4/99 2050

[F:\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

BC LABORATORIES, INC.

FIELD TEMPERATURE FORM

Date: 3-4-99

Time: 1310

Completed By: John McKnight

Temperature: 3.0

Type of bottle Used: Templblank

Transportation Container: BC ice chest

Refrigerant: H_2O ice

Custody Seals: NO

Comments: NO

Samples were picked up at: Alton SFS

From: (signature if possible) NOT

BC LABORATORIES

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: 03/17/99
Date Received: 03/04/99
Laboratory No.: 99-02725-1

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-7
Sampling Date/Time: 03/04/99 @ 09:35AM
Sample Collected By: TEEPLE/J. NEWMAN

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Dissolved Aluminum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Antimony	None Detected	µg/L	100.	EPA-6010	03/04/99	03/11/99	1
Dissolved Arsenic	5.9	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Dissolved Barium	None Detected	µg/L	100.	EPA-6010	03/04/99	03/11/99	1
Dissolved Beryllium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Cadmium	None Detected	µg/L	5.	EPA-6010	03/04/99	03/11/99	1
Dissolved Chromium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Hexavalent Chromium	2.8	µg/L	2.	EPA-7196	03/05/99	03/05/99	1
Dissolved Cobalt	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Copper	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Iron	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Lead	None Detected	µg/L	5.	EPA-7421	03/04/99	03/05/99	1
Dissolved Mercury	None Detected	µg/L	0.2	EPA-7470	03/15/99	03/16/99	1
Dissolved Molybdenum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Nickel	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Selenium	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Dissolved Silver	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Titanium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Thallium	None Detected	µg/L	1.	EPA-7841	03/04/99	03/05/99	1
Dissolved Vanadium	10.	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Zinc	11.	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Total Aluminum	13800.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	03/05/99	03/06/99	1
Total Arsenic	9.0	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Total Barium	166.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Cadmium	None Detected	µg/L	5.	EPA-6010	03/05/99	03/06/99	1
Total Chromium	20.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Cobalt	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Copper	31.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Iron	15300.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Lead	14.	µg/L	5.	EPA-7421	03/11/99	03/11/99	1
Total Mercury	None Detected	µg/L	0.2	EPA-7470	03/15/99	03/16/99	1
Total Molybdenum	11.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Nickel	None Detected	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Selenium	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Total Silver	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Titanium	727.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Thallium	None Detected	µg/L	5.0	EPA-7841	03/11/99	03/11/99	1
Total Vanadium	37.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Zinc	60.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1

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 Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

BC LABORATORIES

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: 03/17/99
Date Received: 03/04/99
Laboratory No.: 99-02725-1

Sample Description: CA00028000200002, FORMER ILM, P-7, 03/04/99 @ 09:35AM, TEEPLE/J. NEWMAN

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

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

For Dan Schultz
Laboratory Director

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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: 03/17/99
Date Received: 03/04/99
Laboratory No.: 99-02725-2

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-16A
Sampling Date/Time: 03/04/99 @ 10:38AM
Sample Collected By: TEEPLE/J. NEWMAN

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Dissolved Aluminum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Antimony	None Detected	µg/L	100.	EPA-6010	03/04/99	03/11/99	1
Dissolved Arsenic	7.5	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Dissolved Barium	None Detected	µg/L	100.	EPA-6010	03/04/99	03/11/99	1
Dissolved Beryllium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Cadmium	None Detected	µg/L	5.	EPA-6010	03/04/99	03/11/99	1
Dissolved Chromium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Hexavalent Chromium	14.	µg/L	2.	EPA-7196	03/05/99	03/05/99	1
Dissolved Cobalt	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
issolved Copper	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
ssolved Iron	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Lead	None Detected	µg/L	5.	EPA-7421	03/04/99	03/05/99	1
Dissolved Mercury	None Detected	µg/L	0.2	EPA-7470	03/15/99	03/16/99	1
Dissolved Molybdenum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Nickel	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Selenium	2.0	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Dissolved Silver	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Titanium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Thallium	None Detected	µg/L	1.	EPA-7841	03/04/99	03/05/99	1
Dissolved Vanadium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Zinc	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Total Aluminum	8380.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	03/05/99	03/06/99	1
Total Arsenic	9.3	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Total Barium	156.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Cadmium	None Detected	µg/L	5.	EPA-6010	03/05/99	03/06/99	1
Total Chromium	21.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Cobalt	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Copper	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Iron	8350.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Lead	9.2	µg/L	5.	EPA-7421	03/11/99	03/11/99	1
Total Mercury	None Detected	µg/L	0.2	EPA-7470	03/15/99	03/16/99	1
Total Molybdenum	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Nickel	None Detected	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Selenium	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Total Silver	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Titanium	438.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Thallium	None Detected	µg/L	5.0	EPA-7841	03/11/99	03/11/99	1
tal Vanadium	22.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
otal Zinc	None Detected	µg/L	50.	EPA-6010	03/05/99	03/06/99	1

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BC LABORATORIES

WATER ANALYSIS
(METALS)

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

Date Reported: 03/17/99
Date Received: 03/04/99
Laboratory No.: 99-02725-2

Sample Description: CA00028000200002, FORMER ILM, P-16A, 03/04/99 @ 10:38AM, TEEPLE/J. NEWMAN

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

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

Dan Schultz
Laboratory Director

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BC LABORATORIES

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: 03/17/99
Date Received: 03/04/99
Laboratory No.: 99-02725-3

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-20
Sampling Date/Time: 03/04/99 @ 11:45AM
Sample Collected By: TEEPLE/J. NEWMAN

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Dissolved Aluminum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Antimony	None Detected	µg/L	100.	EPA-6010	03/04/99	03/11/99	1
Dissolved Arsenic	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Dissolved Barium	None Detected	µg/L	100.	EPA-6010	03/04/99	03/11/99	1
Dissolved Beryllium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Cadmium	None Detected	µg/L	5.	EPA-6010	03/04/99	03/11/99	1
Dissolved Chromium	27.	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Hexavalent Chromium	35.	µg/L	2.	EPA-7196	03/05/99	03/05/99	1
Dissolved Cobalt	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Copper	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Iron	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Lead	None Detected	µg/L	5.	EPA-7421	03/04/99	03/05/99	1
Dissolved Mercury	None Detected	µg/L	0.2	EPA-7470	03/15/99	03/16/99	1
Dissolved Molybdenum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Nickel	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Selenium	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Dissolved Silver	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Titanium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Thallium	None Detected	µg/L	1.	EPA-7841	03/04/99	03/05/99	1
Dissolved Vanadium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Zinc	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Total Aluminum	4060.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	03/05/99	03/06/99	1
Total Arsenic	4.4	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Total Barium	102.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Cadmium	None Detected	µg/L	5.	EPA-6010	03/05/99	03/06/99	1
Total Chromium	39.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Cobalt	19.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Copper	23.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Iron	5700.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Lead	5.2	µg/L	5.	EPA-7421	03/11/99	03/11/99	1
Total Mercury	None Detected	µg/L	0.2	EPA-7470	03/15/99	03/16/99	1
Total Molybdenum	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Nickel	None Detected	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Selenium	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Total Silver	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Titanium	290.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Thallium	None Detected	µg/L	5.0	EPA-7841	03/11/99	03/11/99	1
Total Vanadium	12.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Zinc	None Detected	µg/L	50.	EPA-6010	03/05/99	03/06/99	1

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BC LABORATORIES

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: 03/17/99
Date Received: 03/04/99
Laboratory No.: 99-02725-3

Sample Description: CA00028000200002, FORMER ILM, P-20, 03/04/99 @ 11:45AM, TEEPLE/J. NEWMAN

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

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

For Dan Schultz
Laboratory Director

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BC LABORATORIES

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: 03/17/99
Date Received: 03/04/99
Laboratory No.: 99-02725-4

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-29
Sampling Date/Time: 03/04/99 @ 12:00PM
Sample Collected By: TEEPLE/J. NEWMAN

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Dissolved Aluminum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Antimony	None Detected	µg/L	100.	EPA-6010	03/04/99	03/11/99	1
Dissolved Arsenic	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Dissolved Barium	None Detected	µg/L	100.	EPA-6010	03/04/99	03/11/99	1
Dissolved Beryllium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Cadmium	None Detected	µg/L	5.	EPA-6010	03/04/99	03/11/99	1
Dissolved Chromium	28.	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Hexavalent Chromium	33.	µg/L	2.	EPA-7196	03/05/99	03/05/99	1
Dissolved Cobalt	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
issolved Copper	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
ssolved Iron	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
ɔissolved Lead	None Detected	µg/L	5.	EPA-7421	03/04/99	03/05/99	1
Dissolved Mercury	None Detected	µg/L	0.2	EPA-7470	03/15/99	03/16/99	1
Dissolved Molybdenum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Nickel	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Selenium	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Dissolved Silver	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Titanium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Thallium	None Detected	µg/L	1.	EPA-7841	03/04/99	03/05/99	1
Dissolved Vanadium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Zinc	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Total Aluminum	4690.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	03/05/99	03/06/99	1
Total Arsenic	4.5	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Total Barium	106.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Cadmium	None Detected	µg/L	5.	EPA-6010	03/05/99	03/06/99	1
Total Chromium	43.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Cobalt	22.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Copper	12.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Iron	6360.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Lead	6.0	µg/L	5.	EPA-7421	03/11/99	03/11/99	1
Total Mercury	None Detected	µg/L	0.2	EPA-7470	03/15/99	03/16/99	1
Total Molybdenum	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Nickel	None Detected	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Selenium	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Total Silver	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Titanium	329.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Thallium	None Detected	µg/L	5.0	EPA-7841	03/11/99	03/11/99	1
ɪtal Vanadium	15.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
ɪotal Zinc	None Detected	µg/L	50.	EPA-6010	03/05/99	03/06/99	1

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BC LABORATORIES

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: 03/17/99
Date Received: 03/04/99
Laboratory No.: 99-02725-4

Sample Description: CA00028000200002, FORMER ILM, P-29, 03/04/99 @ 12:00PM, TEEPLE/J. NEWMAN

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

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

For Dan Schultz
Laboratory Director

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BC LABORATORIES

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: 03/17/99
Date Received: 03/04/99
Laboratory No.: 99-02725-6

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-17
Sampling Date/Time: 03/04/99 @ 01:50PM
Sample Collected By: TEEPLE/J. NEWMAN

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Dissolved Aluminum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Antimony	None Detected	µg/L	100.	EPA-6010	03/04/99	03/11/99	1
Dissolved Arsenic	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Dissolved Barium	None Detected	µg/L	100.	EPA-6010	03/04/99	03/11/99	1
Dissolved Beryllium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Cadmium	None Detected	µg/L	5.	EPA-6010	03/04/99	03/11/99	1
Dissolved Chromium	30.	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Hexavalent Chromium	40.	µg/L	2.	EPA-7196	03/05/99	03/05/99	1
Dissolved Cobalt	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Copper	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Iron	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Lead	None Detected	µg/L	5.	EPA-7421	03/04/99	03/05/99	1
Dissolved Mercury	None Detected	µg/L	0.2	EPA-7470	03/15/99	03/16/99	1
Dissolved Molybdenum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Nickel	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Selenium	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Dissolved Silver	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Titanium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Thallium	None Detected	µg/L	1.	EPA-7841	03/04/99	03/05/99	1
Dissolved Vanadium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Zinc	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Total Aluminum	2580.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	03/05/99	03/06/99	1
Total Arsenic	2.5	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Total Barium	69.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Cadmium	None Detected	µg/L	5.	EPA-6010	03/05/99	03/06/99	1
Total Chromium	40.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Cobalt	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Copper	21.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Iron	3370.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Lead	7.4	µg/L	5.	EPA-7421	03/11/99	03/11/99	1
Total Mercury	None Detected	µg/L	0.2	EPA-7470	03/15/99	03/16/99	1
Total Molybdenum	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Nickel	None Detected	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Selenium	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Total Silver	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Titanium	165.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Thallium	None Detected	µg/L	5.0	EPA-7841	03/11/99	03/11/99	1
Total Vanadium	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Zinc	None Detected	µg/L	50.	EPA-6010	03/05/99	03/06/99	1

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BC LABORATORIES

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: 03/17/99
Date Received: 03/04/99
Laboratory No.: 99-02725-6

Sample Description: CA00028000200002, FORMER ILM, P-17, 03/04/99 @ 01:50PM, TEEPLE/J. NEWMAN

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

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

Richard D. Lamm

for Dan Schultz
Laboratory Director

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BC LABORATORIES

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: 03/17/99
Date Received: 03/04/99
Laboratory No.: 99-02725-7

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-1
Sampling Date/Time: 03/04/99 @ 03:25PM
Sample Collected By: TEEPLE/J. NEWMAN

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Dissolved Aluminum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Antimony	None Detected	µg/L	100.	EPA-6010	03/04/99	03/11/99	1
Dissolved Arsenic	None Detected	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Dissolved Barium	112.	µg/L	100.	EPA-6010	03/04/99	03/11/99	1
Dissolved Beryllium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Cadmium	None Detected	µg/L	5.	EPA-6010	03/04/99	03/11/99	1
Dissolved Chromium	1370.	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Hexavalent Chromium	1280.	µg/L	80.	EPA-7196	03/05/99	03/05/99	40
Dissolved Cobalt	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Copper	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Iron	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Lead	None Detected	µg/L	5.	EPA-7421	03/04/99	03/05/99	1
Dissolved Mercury	None Detected	µg/L	0.2	EPA-7470	03/15/99	03/16/99	1
Dissolved Molybdenum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Nickel	None Detected	µg/L	50.	EPA-6010	03/04/99	03/11/99	1
Dissolved Selenium	4.1	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Dissolved Silver	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Titanium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Thallium	None Detected	µg/L	1.	EPA-7841	03/04/99	03/05/99	1
Dissolved Vanadium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Dissolved Zinc	None Detected	µg/L	10.	EPA-6010	03/04/99	03/11/99	1
Total Aluminum	8270.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	03/05/99	03/06/99	1
Total Arsenic	4.0	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Total Barium	164.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Cadmium	None Detected	µg/L	5.	EPA-6010	03/05/99	03/06/99	1
Total Chromium	1280.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Cobalt	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Copper	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Iron	10600.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Lead	12.	µg/L	5.	EPA-7421	03/11/99	03/11/99	1
Total Mercury	5.3	µg/L	0.2	EPA-7470	03/15/99	03/16/99	5
Total Molybdenum	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Nickel	None Detected	µg/L	50.	EPA-6010	03/05/99	03/06/99	1
Total Selenium	3.9	µg/L	2.	SM-3114B	03/11/99	03/12/99	1
Total Silver	None Detected	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Titanium	559.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Thallium	None Detected	µg/L	5.0	EPA-7841	03/11/99	03/11/99	1
Total Vanadium	21.	µg/L	10.	EPA-6010	03/05/99	03/06/99	1
Total Zinc	53.	µg/L	50.	EPA-6010	03/05/99	03/06/99	1

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BC LABORATORIES

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: 03/17/99
Date Received: 03/04/99
Laboratory No.: 99-02725-7

Sample Description: CA00028000200002, FORMER ILM, P-1, 03/04/99 @ 03:25PM, TEEPLE/J. NEWMAN

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

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

for Dan Schultz
Laboratory Director

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BC LABORATORIES

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: 03/15/99
Date Received: 03/04/99
Laboratory No.: 99-02725-1

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-7
Sample Matrix: Groundwater
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 09:35AM
Date Extracted: 03/05/99
Date Analyzed: 03/11/99
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	270.	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	88.	%	32-143

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, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

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BC LABORATORIES

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: 03/15/99
Date Received: 03/04/99
Laboratory No.: 99-02725-2

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-16A
Sample Matrix: Groundwater
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 10:38AM
Date Extracted: 03/05/99
Date Analyzed: 03/11/99
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	210.	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	104.	%	32-143

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, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

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BC LABORATORIES

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: 03/15/99
Date Received: 03/04/99
Laboratory No.: 99-02725-3

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-20
Sample Matrix: Groundwater
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 11:45AM
Date Extracted: 03/05/99
Date Analyzed: 03/11/99
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	71.	%	32-143

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, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

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BC LABORATORIES

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: 03/15/99
Date Received: 03/04/99
Laboratory No.: 99-02725-4

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-29
Sample Matrix: Groundwater
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 12:00PM
Date Extracted: 03/05/99
Date Analyzed: 03/11/99
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	81.	%	32-143

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.

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Stuart G. Buttram
Department Supervisor

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BC LABORATORIES

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: 03/15/99
Date Received: 03/04/99
Laboratory No.: 99-02725-6

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-17
Sample Matrix: Groundwater
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 01:50PM
Date Extracted: 03/05/99
Date Analyzed: 03/11/99
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	95.	%	32-143

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.

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Stuart G. Buttram
Department Supervisor

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BC LABORATORIES

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: 03/15/99
Date Received: 03/04/99
Laboratory No.: 99-02725-7

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-1
Sample Matrix: Groundwater
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 03:25PM
Date Extracted: 03/05/99
Date Analyzed: 03/11/99
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	79.	%	32-143

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, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

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BC LABORATORIES

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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-1

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-7
Sample Matrix: Groundwater
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 09:35AM
Date Extracted: 03/09/99
Date Analyzed: 03/09/99
Dilution Used: 1

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit
Benzene	0.61	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.
Chloroform	12.	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	2.2	µg/L	0.5
1,2-Dichloroethane	None Detected	µg/L	0.5
1,1-Dichloroethene	7.8	µg/L	0.5
cis-1,2-Dichloroethene	75.	µg/L	0.5
trans-1,2-Dichloroethene	3.3	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
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	None Detected	µg/L	0.5
Naphthalene	None Detected	µg/L	0.5

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BC LABORATORIES

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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-1

Sample Description: CA00028000200002, FORMER ILM, P-7, 03/04/99 @ 09:35AM, TEEPLE/J. NEWMAN

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	13.	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	7.2	µg/L	0.5	
1,1,2-Trichloroethane	None Detected	µg/L	0.5	
Trichloroethene	900.	µg/L	20.	*1
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	103.	76-114
Toluene-d8	95.	88-110
4-Bromofluorobenzene	94.	86-115

Note: PQL's were raised due to dilution required to bring target analytes into calibration range.

Flag Explanations:
*1 = Dilution factor = 25
California D.O.H.S. Cert. #1186, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

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BC LABORATORIES

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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-2

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-16A
Sample Matrix: Groundwater
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 10:38AM
Date Extracted: 03/09/99
Date Analyzed: 03/09/99
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.
Chloroform	3.4	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	0.62	µg/L	0.5
1,2-Dichloroethane	None Detected	µg/L	0.5
1,1-Dichloroethene	14.	µg/L	0.5
cis-1,2-Dichloroethene	8.7	µg/L	0.5
trans-1,2-Dichloroethene	0.56	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
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	None Detected	µg/L	0.5
Naphthalene	None Detected	µg/L	0.5

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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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-2

Sample Description: CA00028000200002, FORMER ILM, P-16A, 03/04/99 @ 10:38AM, TEEPLE/J. NEWMAN

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	9.5	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	1.7	µg/L	0.5	
1,1,2-Trichloroethane	None Detected	µg/L	0.5	
Trichloroethene	370.	µg/L	20.	*1
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	111.	76-114
Toluene-d8	95.	88-110
4-Bromofluorobenzene	92.	86-115

Note: PQL's were raised due to dilution required to bring target analytes into calibration range.

Flag Explanations:
*1 = Dilution factor = 25
California D.O.H.S. Cert. #1186, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

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BC LABORATORIES

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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-3

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-20
Sample Matrix: Groundwater
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 11:45AM
Date Extracted: 03/09/99
Date Analyzed: 03/09/99
Dilution Used: 1

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit	
Benzene	2.3	µg/L	0.5	
Bromobenzene	None Detected	µg/L	0.5	
Bromochloromethane	None Detected	µg/L	0.5	
Bromodichloromethane	0.65	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.	
Chloroform	24.	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	0.59	µg/L	0.5	
1,2-Dichloroethane	None Detected	µg/L	0.5	
1,1-Dichloroethene	8.2	µg/L	0.5	
cis-1,2-Dichloroethene	22.	µg/L	0.5	
trans-1,2-Dichloroethene	1.7	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	*1
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	None Detected	µg/L	0.5	
Naphthalene	None Detected	µg/L	0.5	

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BC LABORATORIES

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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-3

Sample Description: CA00028000200002, FORMER ILM, P-20, 03/04/99 @ 11:45AM, TEEPLE/J. NEWMAN

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	17.	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	7.5	µg/L	0.5	
Trichloroethene	6900.	µg/L	50.	*2
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	100.	76-114
Toluene-d8	95.	88-110
4-Bromofluorobenzene	98.	86-115

Note: PQL's were raised due to dilution required to bring target analytes into calibration range.

Flag Explanations:
*1 = CCV recovery not within method limits.
*2 = Dilution factor = 100
California D.O.H.S. Cert. #1186, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

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BC LABORATORIES

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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-4

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-29
Sample Matrix: Groundwater
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 12:00PM
Date Extracted: 03/09/99
Date Analyzed: 03/09/99
Dilution Used: 1

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit	
Benzene	2.1	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.	
Chloroform	23.	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	0.55	µg/L	0.5	
1,2-Dichloroethane	None Detected	µg/L	0.5	
1,1-Dichloroethene	7.8	µg/L	0.5	
cis-1,2-Dichloroethene	21.	µg/L	0.5	
trans-1,2-Dichloroethene	1.7	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	*1
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	None Detected	µg/L	0.5	
Naphthalene	None Detected	µg/L	0.5	

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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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-4

Sample Description: CA00028000200002, FORMER ILM, P-29, 03/04/99 @ 12:00PM, TEEPLE/J. NEWMAN

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	15.	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	7.3	µg/L	0.5	
Trichloroethene	6800.	µg/L	50.	*2
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	98.	76-114
Toluene-d8	94.	88-110
4-Bromofluorobenzene	100.	86-115

Note: PQL's were raised due to dilution required to bring target analytes into calibration range.

Flag Explanations:
*1 = CCV recovery not within method limits.
*2 = Dilution factor = 100
California D.O.H.S. Cert. #1186, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

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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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-5

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: EB-3
Sample Matrix: DIWATER
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 07:50AM
Date Extracted: 03/09/99
Date Analyzed: 03/09/99
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.	
Chloroform	0.57	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	*1
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	None Detected	µg/L	0.5	
Naphthalene	None Detected	µg/L	0.5	

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

Date Reported: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-5

Sample Description: CA00028000200002, FORMER ILM, EB-3, 03/04/99 @ 07:50AM, TEEPLE/J. NEWMAN

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	104.	76-114
Toluene-d8	95.	88-110
4-Bromofluorobenzene	92.	86-115

Flag Explanations:
*1 = CCV recovery not within method limits.
California D.O.H.S. Cert. #1186, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

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

Date Reported: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-6

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-17
Sample Matrix: Groundwater
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 01:50PM
Date Extracted: 03/09/99
Date Analyzed: 03/09/99
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.	
Chloroform	6.0	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	23.	µg/L	0.5	
1,2-Dichloroethane	None Detected	µg/L	0.5	
1,1-Dichloroethene	140.	µg/L	20.	*2
cis-1,2-Dichloroethene	4.3	µg/L	0.5	
trans-1,2-Dichloroethene	0.51	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	*1
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	
-Isopropyltoluene	None Detected	µg/L	0.5	
ethylene Chloride	None Detected	µg/L	0.5	
Naphthalene	None Detected	µg/L	0.5	

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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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-6

Sample Description: CA00028000200002, FORMER ILM, P-17, 03/04/99 @ 01:50PM, TEEPLE/J. NEWMAN

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	270.	µg/L	20.	*2
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	24.	µg/L	0.5	
1,1,2-Trichloroethane	None Detected	µg/L	0.5	
Trichloroethene	1400.	µg/L	20.	*2
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	104.	76-114
Toluene-d8	95.	88-110
4-Bromofluorobenzene	98.	86-115

Note: PQL's were raised due to dilution required to bring target analytes into calibration range.

Flag Explanations:
*1 = CCV recovery not within method limits.
*2 = Dilution factor = 25
California D.O.H.S. Cert. #1186, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

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BC LABORATORIES

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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-7

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: P-1
Sample Matrix: Groundwater
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 03:25PM
Date Extracted: 03/09/99
Date Analyzed: 03/09/99
Dilution Used: 1

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit	
Benzene	1.3	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.	
Chloroform	13.	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	1.7	µg/L	0.5	
1,2-Dichloroethane	None Detected	µg/L	0.5	
1,1-Dichloroethene	10.	µg/L	0.5	
cis-1,2-Dichloroethene	24.	µg/L	0.5	
trans-1,2-Dichloroethene	1.2	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	*1
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	
-Isopropyltoluene	None Detected	µg/L	0.5	
ethylene Chloride	None Detected	µg/L	0.5	
Naphthalene	None Detected	µg/L	0.5	

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BC LABORATORIES

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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-7

Sample Description: CA00028000200002, FORMER ILM, P-1, 03/04/99 @ 03:25PM, TEEPLE/J. NEWMAN

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	83.	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	8100.	µg/L	50.	*2
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	97.	76-114
Toluene-d8	95.	88-110
4-Bromofluorobenzene	99.	86-115

Note: PQL's were raised due to dilution required to bring target analytes into calibration range.

Flag Explanations:
*1 = CCV recovery not within method limits.
*2 = Dilution factor = 100
California D.O.H.S. Cert. #1186, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

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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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-8

Project Number: CA00028000200002
Sampling Location: FORMER ILM
Sample ID: EB-4
Sample Matrix: DIWATER
Sample Collected By: TEEPLE/J. NEWMAN

Date Collected: 03/04/99 @ 04:00PM
Date Extracted: 03/09/99
Date Analyzed: 03/09/99
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.	
Chloroform	0.60	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	*1
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	
-Isopropyltoluene	None Detected	µg/L	0.5	
ethylene Chloride	None Detected	µg/L	0.5	
Naphthalene	None Detected	µg/L	0.5	

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

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: 03/11/99
Date Received: 03/04/99
Laboratory No.: 99-02725-8

Sample Description: CA00028000200002, FORMER ILM, EB-4, 03/04/99 @ 04:00PM, TEEPLE/J. NEWMAN

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	106.	76-114
Toluene-d8	94.	88-110
4-Bromofluorobenzene	92.	86-115

Flag Explanations:
*1 = CCV recovery not within method limits.
California D.O.H.S. Cert. #1186, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

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BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Preparation & Analysis Information)

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

Date of Report: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-4,
99-02725-6 - 99-02725-7

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
Dissolved Aluminum	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Antimony	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Arsenic	SM-3114B	03/11/99	KSV	SM-3114B	03/12/99	TMS
Dissolved Barium	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Beryllium	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Cadmium	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Chromium	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Hexavalent Chromium	0.45uFilt	03/05/99	TDC	EPA-7196	03/05/99	TDC
Dissolved Cobalt	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Copper	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Iron	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Lead	EPA-600-4-79-02	03/04/99	FIELD	EPA-7421	03/05/99	MRM
Dissolved Mercury	EPA-7470	03/15/99	DIW	EPA-7470	03/16/99	DIW
Dissolved Molybdenum	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Nickel	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Selenium	SM-3114B	03/11/99	KSV	SM-3114B	03/12/99	TMS
Dissolved Silver	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Titanium	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Thallium	EPA-600-4-79-02	03/04/99	FIELD	EPA-7841	03/05/99	MRM
Dissolved Vanadium	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Dissolved Zinc	EPA-600-4-79-02	03/04/99	FIELD	EPA-6010	03/11/99	MTM
Total Aluminum	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Antimony	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Arsenic	SM-3114B	03/11/99	KSV	SM-3114B	03/12/99	TMS
Total Barium	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Beryllium	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Cadmium	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Chromium	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Cobalt	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Copper	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM

BOE-C6-0234819

BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Preparation & Analysis Information)

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

Date of Report: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-4,
99-02725-6 - 99-02725-7

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
Total Iron	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Lead	EPA-3020	03/11/99	PAP	EPA-7421	03/11/99	MRM
Total Mercury	EPA-7470	03/15/99	DIW	EPA-7470	03/16/99	DIW
Total Molybdenum	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Nickel	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Selenium	SM-3114B	03/11/99	KSV	SM-3114B	03/12/99	TMS
Total Silver	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Titanium	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Thallium	EPA-3010	03/11/99	PAP	EPA-7841	03/11/99	MRM
Total Vanadium	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM
Total Zinc	EPA-3010	03/05/99	PAP	EPA-6010	03/06/99	MTM

Quality Control Officer

Anthony Bonanno

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BOE-C6-0234820

BC LABORATORIES

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: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-4,
99-02725-6 - 99-02725-7

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.	105.	104.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Dissolved Antimony	97.	100.	103.	90 - 110	<100.	<100.	µg/L	<100.	µg/L
Dissolved Arsenic	104.	107.	100.	90 - 110	< 1.	< 1.	µg/L	< 2.	µg/L
Dissolved Barium	98.	93.	102.	90 - 110	<100.	<100.	µg/L	<100.	µg/L
Dissolved Beryllium	99.	98.	103.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Cadmium	98.	99.	103.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Chromium	98.	99.	103.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Hexavalent Chromium	99.	102.	102.	90 - 110	< 0.002	< 0.002	mg/L	< 2.	µg/L
Dissolved Cobalt	100.	101.	105.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Dissolved Copper	98.	96.	103.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Iron	101.	101.	104.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Dissolved Lead	100.	98.	99.	90 - 110	< 5.	< 5.	µg/L	< 5.	µg/L
Dissolved Mercury #1	103.	103.	99.	80 - 120	< 0.2	< 0.2	µg/L	< 0.2	µg/L
Dissolved Mercury	99.	99.	96.	80 - 120	< 0.2	< 0.2	µg/L	< 0.2	µg/L
Dissolved Molybdenum	100.	100.	104.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Dissolved Nickel	101.	102.	104.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Dissolved Selenium	99.	107.	108.	90 - 110	< 1.	< 1.	µg/L	< 2.	µg/L
Dissolved Silver	95.	91.	98.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Titanium	99.	96.	102.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Thallium	100.	98.	101.	90 - 110	< 1.	< 1.	µg/L	< 1.	µg/L
Dissolved Vanadium	98.	96.	102.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Dissolved Zinc	101.	104.	107.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Aluminum	99.	99.	100.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Total Antimony	101.	101.	101.	90 - 110	<100.	<100.	µg/L	<100.	µg/L
Total Arsenic	104.	107.	100.	90 - 110	< 1.	< 1.	µg/L	< 2.	µg/L
Total Barium	100.	100.	99.	90 - 110	<100.	<100.	µg/L	<100.	µg/L
Total Beryllium	97.	97.	98.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Cadmium	100.	100.	99.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Chromium	99.	99.	100.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Cobalt	101.	101.	100.	90 - 110	<50.	<50.	µg/L	<50.	µg/L

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BOE-C6-0234821

BC LABORATORIES

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: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-4,
99-02725-6 - 99-02725-7

Constituents	ICV % Found	CCV % Found Before	CCV % Found After	% Found Control Limits	CCB Readings Before	CCB Readings After	Units	Method Blank Readings	Units
Total Copper	101.	101.	100.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Iron	98.	98.	99.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Total Lead	100.	100.	104.	90 - 110	< 5.	< 5.	µg/L	< 5.	µg/L
Total Mercury	99.	99.	104.	80 - 120	< 0.2	< 0.2	µg/L	< 0.2	µg/L
Total Molybdenum	99.	99.	100.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Total Nickel	98.	98.	99.	90 - 110	<50.	<50.	µg/L	<50.	µg/L
Total Selenium	99.	107.	108.	90 - 110	< 1.	< 1.	µg/L	< 2.	µg/L
Total Silver	100.	100.	102.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Titanium	96.	96.	98.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Thallium	101.	104.	102.	90 - 110	< 1.	< 1.	µg/L	< 1.	µg/L
Total Vanadium	102.	102.	101.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Zinc	103.	103.	103.	90 - 110	<50.	<50.	µg/L	<50.	µg/L

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

Quality Control Officer

Anthony Bonanno

4100 Atlas Ct. · Bakersfield, CA 9330 (661) 327-4911 · FAX (661) 327-1918

BOE-C6-0234822

BC LABORATORIES

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

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

Date of Report: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-4,
99-02725-6 - 99-02725-7

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	2725-1	< 50.	< 50.	424.	442.	408.	408.	µg/L	<PQL	4.	20	110.	115.	85 - 115
Dissolved Antimony	2725-1	<100.	<100.	443.	454.	408.	408.	µg/L	<PQL	3.	20	110.	112.	85 - 115
Dissolved Arsenic #1	DISS-2724-5	1.44	1.58	21.	22.1	20.	20.	µg/L	<PQL	5.	20	98.	103.	80 - 120
Dissolved Arsenic #2-4,6,7	DISS-2725-2	7.46	7.08	26.8	28.	20.	20.	µg/L	<PQL	4.	20	97.	103.	80 - 120
Dissolved Barium	2725-1	89.4	90.9	296.	299.	204.	204.	µg/L	<PQL	1.	20	101.	103.	85 - 115
Dissolved Beryllium	2725-1	< 10.	< 10.	203.	206.	204.	204.	µg/L	<PQL	2.	20	100.	101.	85 - 115
Dissolved Cadmium	2725-1	< 10.	< 10.	211.	213.	204.	204.	µg/L	<PQL	1.	20	104.	105.	85 - 115
Dissolved Chromium	2725-1	< 10.	< 10.	203.	206.	204.	204.	µg/L	<PQL	1.	20	100.	102.	85 - 115
Hexavalent Chromium	2724-3	< 2.000	< 2.000	54.5	55.2	52.6	52.6	µg/L	<PQL	1.	10	104.	105.	85 - 115
Hexavalent Chromium #7	2725-7X40	1.28	1.28	3.41	3.44	2.1	2.1	µg/L	<PQL	1.	10	101.	103.	85 - 115
Dissolved Cobalt	2725-1	< 50.	< 50.	216.	219.	204.	204.	µg/L	<PQL	1.	20	106.	108.	85 - 115
Dissolved Copper	2725-1	< 10.	< 10.	205.	207.	204.	204.	µg/L	<PQL	1.	20	105.	106.	85 - 115
Dissolved Iron	2725-1	< 50.	< 50.	433.	439.	408.	408.	µg/L	<PQL	1.	20	103.	105.	85 - 115
Dissolved Lead	DISS-2725-1	< 5.	< 5.	23.	22.8	25.	25.	µg/L	<PQL	1.	20	92.	91.	85 - 115
Dissolved Mercury	DISS-02724-5	< 0.2	< 0.2	0.999	0.999	1.	1.	µg/L	<PQL	0.	20	98.	98.	70 - 130
Dissolved Molybdenum	2725-1	< 50.	< 50.	207.	214.	204.	204.	µg/L	<PQL	3.	20	97.	100.	85 - 115
Dissolved Nickel	2725-1	< 50.	< 50.	415.	419.	408.	408.	µg/L	<PQL	1.	20	102.	103.	85 - 115
Dissolved Selenium	DISS-2725-2	1.96	1.5	22.7	23.3	20.	20.	µg/L	<PQL	3.	20	104.	107.	80 - 120
Dissolved Selenium #2-4,6,7	DISS-2725-2	1.96	1.5	22.7	23.3	20.	20.	µg/L	<PQL	3.	20	104.	107.	80 - 120
Dissolved Silver	2725-1	< 10.	< 10.	187.	189.	204.	204.	µg/L	<PQL	1.	20	93.	94.	85 - 115
Dissolved Titanium	2725-1	< 10.	< 10.	201.	205.	204.	204.	µg/L	<PQL	2.	20	101.	103.	85 - 115
Dissolved Thallium	DISS-2725-1	< 1.	< 1.	25.2	26.	25.	25.	µg/L	<PQL	3.	20	101.	104.	85 - 115
Dissolved Vanadium	2725-1	10.1	10.7	212.	213.	204.	204.	µg/L	<PQL	1.	20	99.	100.	85 - 115
Dissolved Zinc	2725-1	< 50.	< 50.	234.	237.	204.	204.	µg/L	<PQL	1.	20	109.	111.	85 - 115
Total Aluminum	TOTAL-2725-6	2580.	2570.	4120.	4150.	400.	400.	µg/L	0.	1.	20	H MEAN	H MEAN	80 - 120
Total Antimony	TOTAL-2725-6	<100.	<100.	403.	408.	400.	400.	µg/L	<PQL	1.	20	102.	103.	80 - 120
Total Arsenic	DISS-2724-5	1.44	1.58	21.	22.1	20.	20.	µg/L	<PQL	5.	20	98.	103.	80 - 120
Total Arsenic #2-4,6,7	DISS-2725-2	7.46	7.08	26.8	28.	20.	20.	µg/L	<PQL	4.	20	97.	103.	80 - 120
Total Barium	TOTAL-2725-6	68.7	68.9	267.	269.	200.	200.	µg/L	<PQL	1.	20	99.	100.	80 - 120
Total Beryllium	TOTAL-2725-6	< 10.	< 10.	186.	187.	200.	200.	µg/L	<PQL	1.	20	93.	94.	80 - 120

BOE-C6-0234823

BC LABORATORIES

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

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

Date of Report: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-4,
99-02725-6 - 99-02725-7

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 Cadmium	TOTAL-2725-6	< 10.	< 10.	189.	193.	200.	200.	µg/L	<PQL	2.	20	94.	96.	80 - 120
Total Chromium	TOTAL-2725-6	40.	40.4	232.	235.	200.	200.	µg/L	<PQL	2.	20	96.	98.	80 - 120
Total Cobalt	TOTAL-2725-6	< 50.	< 50.	201.	202.	200.	200.	µg/L	<PQL	1.	20	99.	99.	80 - 120
Total Copper	TOTAL-2725-6	20.8	22.6	219.	225.	200.	200.	µg/L	<PQL	2.	20	99.	102.	80 - 120
Total Iron	TOTAL-2725-6	3370.	3390.	3930.	3970.	400.	400.	µg/L	1.	1.	20	H MEAN	H MEAN	80 - 120
Total Lead	TOTAL-2725-3	5.16	5.18	25.2	25.4	20.	20.	µg/L	<PQL	0.	20	100.	101.	80 - 120
Total Mercury	TOTAL-02724-3	< 0.2	< 0.2	0.969	0.993	1.	1.	µg/L	<PQL	2.	20	95.	98.	70 - 130
Total Mercury #7	DISS-02724-5	< 0.2	< 0.2	0.999	0.999	1.	1.	µg/L	<PQL	0.	20	98.	98.	70 - 130
Total Molybdenum	TOTAL-2725-6	< 50.	< 50.	196.	203.	200.	200.	µg/L	<PQL	4.	20	97.	101.	80 - 120
Total Nickel	TOTAL-2725-6	< 50.	< 50.	376.	383.	400.	400.	µg/L	<PQL	2.	20	92.	94.	80 - 120
Total Selenium	DISS-2724-5	2.62	2.64	22.8	22.9	20.	20.	µg/L	<PQL	0.	20	101.	102.	80 - 120
Total Selenium #2-4,6,7	DISS-2725-2	1.96	1.5	22.7	23.3	20.	20.	µg/L	<PQL	3.	20	104.	107.	80 - 120
Total Silver	TOTAL-2725-6	< 10.	< 10.	184.	189.	200.	200.	µg/L	<PQL	3.	20	94.	97.	80 - 120
Total Titanium	TOTAL-2725-6	165.	166.	393.	396.	200.	200.	µg/L	1.	1.	20	114.	116.	80 - 120
Total Thallium	TOTAL-2725-3	0.62	0.68	22.5	21.8	20.	20.	µg/L	<PQL	3.	20	110.	106.	80 - 120
Total Vanadium	TOTAL-2725-6	8.8	9.3	202.	205.	200.	200.	µg/L	<PQL	2.	20	97.	98.	80 - 120
Total Zinc	TOTAL-2725-6	34.5	35.1	232.	234.	200.	200.	µg/L	<PQL	1.	20	99.	100.	80 - 120

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

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

Quality Control Officer

Anthony Bonanno

4100 Atlas Ct. • Bakersfield, CA 9330 31) 327-4911 • FAX (661) 327-1918

BC LABORATORIES

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: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-4,
99-02725-6 - 99-02725-7

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Dissolved Aluminum	LFB#2-0129	423.	400.	µg/L	106.	85 - 115
Dissolved Antimony	LFB#2-0129	417.	400.	µg/L	104.	85 - 115
Dissolved Arsenic	LCSW1-03-1	9.99	10.	µg/L	100.	85 - 115
Dissolved Arsenic #2,3,4,6,7	LCSW2-03-1	10.3	10.	µg/L	103.	85 - 115
Dissolved Barium	LFB#2-0129	196.	200.	µg/L	98.	85 - 115
Dissolved Beryllium	LFB#2-0129	194.	200.	µg/L	97.	85 - 115
Dissolved Cadmium	LFB#2-0129	205.	200.	µg/L	103.	85 - 115
Dissolved Chromium	LFB#2-0129	202.	200.	µg/L	101.	85 - 115
Hexavalent Chromium	LCSW-3-5-9	1010.	1000.	µg/L	101.	85 - 115
Dissolved Cobalt	LFB#2-0129	213.	200.	µg/L	107.	85 - 115
Dissolved Copper	LFB#2-0129	203.	200.	µg/L	102.	85 - 115
Dissolved Iron	LFB#2-0129	406.	400.	µg/L	102.	85 - 115
Dissolved Lead	LFB-25-LCS	24.4	25.	µg/L	98.	85 - 115
Dissolved Mercury	LCSW1-03-1	0.955	1.0	µg/L	95.	85 - 115
Dissolved Molybdenum	LFB#2-0129	201.	200.	µg/L	101.	85 - 115
Dissolved Nickel	LFB#2-0129	431.	400.	µg/L	108.	85 - 115
Dissolved Selenium #1	LCSW1-03-1	10.6	10.	µg/L	106.	85 - 115
Dissolved Selenium #2,3,4,6,7	LCSW2-03-1	10.6	10.	µg/L	106.	85 - 115
Dissolved Silver	LFB#2-0129	182.	200.	µg/L	91.	85 - 115
Dissolved Titanium	LFB#2-0129	196.	200.	µg/L	98.	85 - 115
Dissolved Thallium	LFB-25-LCS	24.9	25.	µg/L	100.	85 - 115
Dissolved Vanadium	LFB#2-0129	196.	200.	µg/L	98.	85 - 115
Dissolved Zinc	LFB#2-0129	225.	200.	µg/L	113.	85 - 115
Total Aluminum	TOTAL-LCSW	410.	400.	µg/L	103.	80 - 120
Total Antimony	TOTAL-LCSW	436.	400.	µg/L	109.	80 - 120
Total Arsenic #1	LCSW1-03-1	9.99	10.	µg/L	100.	85 - 115
Total Arsenic #2,3,4,6,7	LCSW2-03-1	10.3	10.	µg/L	103.	85 - 115
Total Barium	TOTAL-LCSW	202.	200.	µg/L	101.	80 - 120
Total Beryllium	TOTAL-LCSW	193.	200.	µg/L	97.	80 - 120
Total Cadmium	TOTAL-LCSW	206.	200.	µg/L	103.	80 - 120

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BOE-C6-0234825

BC LABORATORIES

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: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-4,
99-02725-6 - 99-02725-7

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Total Chromium	TOTAL-LCSW	208.	200.	µg/L	104.	80 - 120
Total Cobalt	TOTAL-LCSW	216.	200.	µg/L	108.	80 - 120
Total Copper	TOTAL-LCSW	201.	200.	µg/L	101.	80 - 120
Total Iron	TOTAL-LCSW	406.	400.	µg/L	101.	80 - 120
Total Lead	TOTAL-LCSW	20.6	20.	µg/L	103.	80 - 120
Total Mercury	LCSW	0.95	1.00	µg/L	95.	70 - 130
Total Molybdenum	TOTAL-LCSW	208.	200.	µg/L	104.	80 - 120
Total Nickel	TOTAL-LCSW	410.	400.	µg/L	103.	80 - 120
Total Selenium	LCSW1-03-1	10.6	10.	µg/L	106.	85 - 115
Total Selenium	LCSW2-03-1	10.6	10.	µg/L	106.	85 - 115
Total Silver	TOTAL-LCSW	206.	200.	µg/L	103.	80 - 120
Total Titanium	TOTAL-LCSW	194.	200.	µg/L	97.	80 - 120
Total Thallium	TOTAL-LCSW	21.6	20.	µg/L	108.	80 - 120
Total Vanadium	TOTAL-LCSW	205.	200.	µg/L	102.	80 - 120
Total Zinc	TOTAL-LCSW	222.	200.	µg/L	111.	80 - 120

Quality Control Officer

Anthony Bonanno

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BOE-C6-0234826

BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Preparation & Analysis Information)
METHOD 8015M TPH FUEL FINGERPRINT

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

Date of Report: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-4,
99-02725-6 - 99-02725-7

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
Stoddard / White Spirits	3510	03/05/99	SEM	8015M	03/11/99	SPB
JP 4	3510	03/05/99	SEM	8015M	03/11/99	SPB
JP 5	3510	03/05/99	SEM	8015M	03/11/99	SPB
JP 6	3510	03/05/99	SEM	8015M	03/11/99	SPB
JP 8	3510	03/05/99	SEM	8015M	03/11/99	SPB
Kerosene / Jet Fuel	3510	03/05/99	SEM	8015M	03/11/99	SPB
Diesel	3510	03/05/99	SEM	8015M	03/11/99	SPB
Crude Oil	3510	03/05/99	SEM	8015M	03/11/99	SPB
Hydraulic Oil	3510	03/05/99	SEM	8015M	03/11/99	SPB
Waste Oil	3510	03/05/99	SEM	8015M	03/11/99	SPB
Motor Oil	3510	03/05/99	SEM	8015M	03/11/99	SPB

Quality Control Officer

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BOE-C6-0234827

BC LABORATORIES

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: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-4,
99-02725-6 - 99-02725-7

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	80.	%

Quality Control Officer

Anthony Bonanno

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BOE-C6-0234828

BC Laboratories Inc.

INITIAL CALIBRATION

TPH FUEL FINGERPRINT

EPA 8015 MODIFIED

Instr. ID: GC-2

Date Run / Analyst	FUEL	CF(1)	CF(2)	CF(3)	CF(4)	CF(5)	CF(AVG)	Limit: 20% %RSD
	DIESEL	5.45E+04	4.66E+04	4.76E+04	4.03E+04	4.62E+04	4.70E+04	10.77
	Conc.	40	400	500	800	1000		
12/16/98	Std Ref. #	EX-8-0144	EX-8-0140	EX-8-0141	EX-8-0142	EX-8-0143		
SBENNETT	Surrogate	4.70E+04	4.39E+04	4.58E+04	4.63E+04	4.68E+04	4.59E+04	2.70
	Conc.	2	10	20	30	50		
EXP:5/11/99								
	CRUDE OIL	2.43E+04	2.69E+04	2.71E+04	2.71E+04	2.64E+04	2.63E+04	4.50
	Conc.	500	800	1000	1500	2000		
12/16/98	Std Ref. #	EX-8-0047	EX-8-0048	EX-8-0231	EX-8-0050	EX-8-0051		
SBENNETT								
EXP:10/9//99								
12/22/98	MOTOR OIL	3.58E+04	3.66E+04	3.74E+04	4.26E+04	4.19E+04	3.89E+04	8.18
SBENNETT	Conc.	200	400	500	800	1000		
10/99	Std Ref. #	EX-8-0041	EX-8-0042	EX-8-0043	EX-8-0044	EX-8-0045		
	KEROSENE	5.72E+04	5.28E+04	5.25E+04	5.38E+04	5.30E+04	5.39E+04	3.58
	Conc.	40	400	500	800	1000		
12/18/98	Std Ref. #	EX-8-0099	EX-8-0100	EX-8-0101	EX-8-0102	EX-8-0103		
SBENNETT								
EXP:10/99								
11/20/98	GASOLINE	2.98E+04	2.96E+04	2.91E+04	2.91E+04	2.87E+04	2.92E+04	1.47
SBENNETT	Conc.	200	400	500	800	1000		
10/99	Std Ref. #	EX-8-0034	EX-8-0035	EX-8-0036	EX-8-0037	EX-8-0038		
	STODDARD	2.57E+04	2.65E+04	2.73E+04	2.70E+04	2.58E+04	2.64E+04	2.71
	Conc.	500	800	1000	1500	2000		
8/18/98	Std Ref. #	EX-6-0869	EX-6-0870	EX-6-0871	EX-6-0872	EX-6-0873		
RAJ MISTRY		4.13E+04	4.24E+04	4.49E+04	4.52E+04	4.50E+04	4.38E+04	4.14
	Conc.	10	20	30	40	50		
EXP:11/13/98								

INITIAL CALIBRATION VERIFICATION

TPH	Ref #	Conc.		CF ICV		CF AVE		Limit 15% %DIFF
DIESEL	EX-8-0145	500		4.70E+04		4.70E+04		0.05
Surrogate		30		5.02E+04		4.59E+04		9.34
CRUDE	EX-8-0052	1000		2.61E+04		2.63E+04		0.98
								#DIV/0!
MOTOR OIL	EX-8-0046	500		3.88E+04		3.89E+04		0.13
KEROSENE	EX-8-105	500		5.34E+04		5.39E+04		0.92
								#DIV/0!
GASOLINE	EX-8-0039	500		2.88E+04		2.92E+04		1.50
Stoddard Sol.	EX-6-0874	1000		2.90E+04		2.64E+04		9.83
								#DIV/0!

#DIV/0! represents Not Applicable

BC Laboratories Inc.

Continuing Calibration Verification

Analyst: SBennett

Instr. ID: GC-2

File Date: 3/10/99

Fuel Fingerprint

EPA 8015 Modified

CCV#	DATE	Run Time	Std Ref. #	conc PPM	FUEL	CF(Ave)		CF(Daily)	%DIFF (Limit 15%)
41	3/10/99	3:17PM	EX-8-0644	500	DIESEL	4.70E+04		4.86E+04	3.28
				30	Surrogate	4.59E+04		4.76E+04	3.63
42	3/11/99	8:42AM	EX-8-0644	500	DIESEL	4.70E+04		4.88E+04	3.69
				30	Surrogate	4.59E+04		5.07E+04	10.46
43	3/12/99	12:25AM	EX-8-0644	500	DIESEL	4.70E+04		5.10E+04	8.39
				30	Surrogate	4.59E+04		5.14E+04	11.81
			EX-8-0644	500	DIESEL	4.70E+04		0.00E+00	100.00
				30	Surrogate	4.59E+04		0.00E+00	100.00
13	3/10/99	5:46PM	EX-8-0479	1000	CRUDE	2.63E+04		2.56E+04	2.87
14	3/11/99	11:23AM	EX-8-0479	1000	CRUDE	2.63E+04		2.61E+04	0.99
15	3/12/99	2:29AM	EX-8-0479	1000	CRUDE	2.63E+04		2.56E+04	2.80
1			EX-8-0043	500	MOTOR OIL	3.89E+04		0.00E+00	100.00
			EX-8-0043	500	MOTOR OIL	3.89E+04		0.00E+00	100.00
			EX-8-0043	500	MOTOR OIL	3.89E+04		0.00E+00	100.00
5	3/10/99	4:32PM	EX-8-0101	500	KEROSENE	5.39E+04		5.24E+04	2.63
6	3/11/99	10:00AM	EX-8-0101	500	KEROSENE	5.39E+04		5.26E+04	2.41
7	3/12/99	1:26AM	EX-8-0101	500	KEROSENE	5.39E+04		5.26E+04	2.41
3			EX-8-0036	1000	GASOLINE	2.92E+04		0.00E+00	100.00
			EX-8-0036	1000	GASOLINE	2.92E+04		0.00E+00	100.00
7			EX-6-0871	1000	STODDARD	2.64E+04		0.00E+00	100.00
				30	Surrogate	4.38E+04		#DIV/0!	#DIV/0!
			EX-6-0871	1000	STODDARD	2.64E+04		0.00E+00	100.00
				30	Surrogate	4.38E+04		#DIV/0!	#DIV/0!
			EX-6-0871	1000	STODDARD	2.64E+04		0.00E+00	100.00
				30	Surrogate	4.38E+04		#DIV/0!	#DIV/0!

Surrogate is Tetracosane.
#DIV/0! represents not applicable

BC LABORATORIES

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: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-4,
99-02725-6 - 99-02725-7

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	SDI 3/5/99	<200.	2376.4	2548.7	2500.	2500.	µg/L	7.	30	92.	99.	57 - 132
Surrogate % Recovery	MS/MSD									77.	75.	32 - 143

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

Quality Control Officer

Anthony Bonanno

4100 Atlas Ct. · Bakersfield, CA 93308 · (661) 327-4911 · FAX (661) 327-1918

BC LABORATORIES

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: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-4,
99-02725-6 - 99-02725-7

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Diesel	LCSW	2198.66	2500.	µg/L	88.	55 - 128
Surrogate % Recovery	LCSW				72.	43 - 132

Quality Control Officer

Anthony Bonanno

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BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Preparation & Analysis Information)
Method 8260

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

Date of Report: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-5, 99-02725-7, 99-02725-8

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
Method 8260 compounds #1,2	EPA-5030	03/08/99	SNM	EPA-8260	03/08/99	SNM
Method 8260 compounds #1(dil), 2(dil), 3-8,	EPA-5030	03/09/99	SNM	EPA-8260	03/09/99	SNM

Quality Control Officer

Anthony Bonanno

4100 Atlas Ct. · Bakersfield, CA 93308 · (661) 327-4911 · FAX (661) 327-1918

BOE-C6-0234833

BC LABORATORIES

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: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-5, 99-02725-7, 99-02725-8

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

BOE-C6-0234834

BC LABORATORIES

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: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-5, 99-02725-7, 99-02725-8

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	105.	%

4100 Atlas Ct. • Bakersfield, CA 93308 • (661) 327-4911 • FAX (661) 327-1918

BOE-C6-0234835

BC LABORATORIES

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: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-5, 99-02725-7, 99-02725-8

Constituents	Method Blank Readings	Units
Toluene-d8	96.	%
4-Bromofluorobenzene	88.	%

Quality Control Officer

Anthony Bonanno

4100 Atlas Ct. · Bakersfield, CA 933(661) 327-4911 · FAX (661) 327-1918

BOE-C6-0234836

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\MAR99\MAR08\08MAR02.D Vial: 2
Acq On : 8 Mar 1999 8:34 am Operator: S MAURER
Sample : CCV 15 Inst : MS-V4
Misc : 25 ML 25UG\L V0-9-3275 Multiplr: 1.00
MS Integration Params: 82604.M

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Thu Feb 25 18:16:58 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	pentafluorobenzene	1.000	1.000	0.0	111	-0.02
2		dichlorodifluoromethane	0.656	0.704	-7.3	119	-0.02
3	P	chloromethane	0.531	0.588	-10.7	130	-0.02
4	C	vinyl chloride	0.537	0.608	-13.2	128	-0.02
5		bromomethane	0.449	0.427	4.9	107	0.00
6	M	chloroethane	0.362	0.412	-13.7	131	0.00
7		trichlorofluoromethane	0.912	0.892	2.2	109	0.00
8		1,1,2-trichloro-1,2,2-trifl	0.953	1.063	-11.5	126	-0.02
9	MC	1,1-dichloroethene	0.508	0.539	-6.2	121	-0.02
10		methylene chloride	0.481	0.521	-8.4	126	0.00
11		MTBE	0.805	0.841	-4.4	121	0.00
12		trans-1,2-dichloroethene	0.560	0.612	-9.3	125	-0.02
13	MP	1,1-dichloroethane	1.314	1.388	-5.6	121	-0.02
14		2,2-dichloropropane	0.991	0.993	-0.2	117	-0.02
15		cis-1,2-dichloroethene	0.648	0.701	-8.1	125	0.00
16	C	chloroform	1.158	1.175	-1.5	116	-0.02
17		bromochloromethane	0.294	0.296	-0.5	114	0.00
18		1,1,1-trichloroethane	1.073	1.055	1.6	113	-0.02
19		1,1-dichloropropene	0.994	1.043	-4.9	121	-0.02
20		carbon tetrachloride	1.005	0.973	3.2	108	-0.02
21	S	1,2-dichloroethane-d4	0.398	0.387	2.7	110	0.00
22		1,2-dichloroethane	0.520	0.511	1.7	111	-0.02
23	M	benzene	1.917	2.053	-7.1	123	-0.02
24	I	1,4-difluorobenzene	1.000	1.000	0.0	120	-0.02
25	M	trichloroethene	0.370	0.367	1.0	123	-0.02
26	C	1,2-dichloropropane	0.358	0.361	-0.7	125	-0.02
27	M	bromodichloromethane	0.470	0.446	5.2	115	-0.02
28		dibromomethane	0.165	0.151	8.3	114	-0.04
29		2-CEVE	0.103	0.097#	5.9	111	-0.02
30		cis-1,3-dichloropropene	0.431	0.423	1.9	120	-0.02
31	S	toluene-d8	0.905	0.866	4.4	115	0.00
32	MC	toluene	0.575	0.564	1.8	123	0.00
33		trans-1,3-dichloropene	0.290	0.284	2.3	118	-0.02
34		1,1,2-trichloroethane	0.154	0.150	2.6	121	-0.02
35		1,3-dichloropropane	0.310	0.304	2.1	122	-0.02
36		tetrachloroethene	0.405	0.398	1.7	123	-0.02
37		dibromochloromethane	0.291	0.283	2.9	115	-0.02
38		1,2-dibromoethane	0.226	0.223	1.2	120	-0.02
39	I	chlorobenzene-d5	1.000	1.000	0.0	116	0.00

(#) = Out of Range

BOE-C6-0234837

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\MAR99\MAR08\08MAR02.D Vial: 2
Acq On : 8 Mar 1999 8:34 am Operator: S MAURER
Sample : CCV 15 Inst : MS-V4
Misc : 25 ML 25UG\L V0-9-3275 Multiplr: 1.00
MS Integration Params: 82604.M

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Thu Feb 25 18:16:58 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	MP	chlorobenzene	2.807	2.819	-0.4	121	0.00
41		1,1,1,2-tetrachloroethane	1.304	1.292	0.9	118	0.00
42	C	ethylbenzene	4.229	4.205	0.6	122	0.00
43		m&p-xylene	1.666	1.652	0.8	120	0.00
44		o-xylene	3.244	3.194	1.5	120	0.00
45		styrene	2.392	2.439	-2.0	122	0.00
46	P	isopropylbenzene	4.574	4.495	1.7	118	0.00
47	P	bromoform	0.618	0.638	-3.2	117	0.00
48	P	1,1,2,2-tetrachloroethane	0.805	0.785	2.4	113	-0.02
49	S	4-bromofluorobenzene	1.881	1.869	0.7	115	0.00
50	P	1,2,3-trichloropropane	0.211	0.213	-1.0	116	0.00
51		n-propylbenzene	4.869	4.999	-2.7	121	0.00
52		bromobenzene	1.114	1.116	-0.2	119	0.00
53		1,3,5-trimethylbenzene	3.216	3.108	3.4	116	0.00
54		2-chlorotoluene	3.248	3.151	3.0	113	0.00
55		4-chlorotoluene	3.318	3.370	-1.6	124	0.00
56		tert-butylbenzene	3.672	3.633	1.1	117	0.00
57		1,2,4-trimethylbenzene	3.115	3.062	1.7	117	0.00
58		sec-butylbenzene	4.466	4.518	-1.2	118	-0.02
59		4-isopropyltoluene	3.805	3.819	-0.4	117	0.00
60		1,3-dichlorobenzene	1.907	1.918	-0.6	117	0.00
61	M	1,4-dichlorobenzene	1.860	1.843	0.9	117	0.00
62		n-butylbenzene	3.113	3.213	-3.2	120	0.00
63		1,2-dichlorobenzene	1.539	1.537	0.1	118	0.00
64		1,2-dibromo-3-chloropropane	0.121	0.124	-2.8	113	0.00
65		1,2,4-trichlorobenzene	1.169	1.207	-3.2	116	-0.02
66		hexachlorobutadiene	1.015	0.987	2.8	113	0.00
67		naphthalene	1.119	1.113	0.5	113	0.00
68		1,2,3-trichlorobenzene	0.884	0.931	-5.3	118	-0.02

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

BOE-C6-0234838

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\MAR99\MAR08\08MAR16.D
Acq On : 8 Mar 1999 6:49 pm
Sample : ccv 16
Misc : 25 ug/l; vo-9-3277
Integration Params: 82604.M

Vial: 15
Operator: m. chavez
Inst : MS-V4
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Thu Feb 25 18:16:58 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00
2		dichlorodifluoromethane	0.656	0.710	-8.2	114	0.00
3	P	chloromethane	0.531	0.615	-15.7	129	-0.01
4	C	vinyl chloride	0.537	0.620	-15.6	124	0.00
5		bromomethane	0.449	0.386	14.1	92	0.00
6	M	chloroethane	0.362	0.418	-15.6	126	0.00
7		trichlorofluoromethane	0.912	0.894	1.9	104	0.00
8		1,1,2-trichloro-1,2,2-trifl	0.953	1.054	-10.6	119	0.00
9	MC	1,1-dichloroethene	0.508	0.545	-7.4	116	0.00
10		methylene chloride	0.481	0.537	-11.6	124	0.00
11		MTBE	0.805	0.899	-11.7	123	0.00
12		trans-1,2-dichloroethene	0.560	0.620	-10.8	120	0.00
13	MP	1,1-dichloroethane	1.314	1.406	-6.9	116	-0.01
		2,2-dichloropropane	0.991	1.000	-0.9	111	-0.01
		cis-1,2-dichloroethene	0.648	0.714	-10.1	120	0.00
16	C	chloroform	1.158	1.209	-4.4	113	0.00
17		bromochloromethane	0.294	0.302	-2.7	110	0.00
18		1,1,1-trichloroethane	1.073	1.068	0.5	109	-0.01
19		1,1-dichloropropene	0.994	1.064	-7.1	117	0.00
20		carbon tetrachloride	1.005	0.985	2.0	104	0.00
21	S	1,2-dichloroethane-d4	0.398	0.402	-1.0	109	0.01
22		1,2-dichloroethane	0.520	0.536	-3.2	110	-0.01
23	M	benzene	1.917	2.109	-10.0	120	0.00
24	I	1,4-difluorobenzene	1.000	1.000	0.0	115	-0.01
25	M	trichloroethene	0.370	0.372	-0.5	120	0.00
26	C	1,2-dichloropropane	0.358	0.363	-1.3	121	-0.01
27	M	bromodichloromethane	0.470	0.450	4.3	111	-0.02
28		dibromomethane	0.165	0.154	6.5	112	-0.02
29		2-CEVE	0.103	0.102	1.3	113	-0.03
30		cis-1,3-dichloropropene	0.431	0.430	0.3	117	0.00
31	S	toluene-d8	0.905	0.867	4.2	111	0.00
32	MC	toluene	0.575	0.563	2.2	118	0.00
33		trans-1,3-dichloropene	0.290	0.293	-0.8	117	-0.01
34		1,1,2-trichloroethane	0.154	0.157	-1.9	122	-0.03
35		1,3-dichloropropane	0.310	0.310	0.1	119	-0.01
36		tetrachloroethene	0.405	0.401	0.8	119	-0.02
37		dibromochloromethane	0.291	0.288	0.9	113	-0.01
		1,2-dibromoethane	0.226	0.231	-2.4	120	-0.01
39	I	chlorobenzene-d5	1.000	1.000	0.0	114	0.00
40	MP	chlorobenzene	2.807	2.821	-0.5	118	0.00
41		1,1,1,2-tetrachloroethane	1.304	1.289	1.1	115	0.00
42	C	ethylbenzene	4.229	4.154	1.8	117	0.00
43		m&p-xylene	1.666	1.634	1.9	116	0.00

44		o-xylene	3.244	3.145	3.0	115	-0.01
45		styrene	2.392	2.410	-0.8	118	0.00
46	P	isopropylbenzene	4.574	4.455	2.6	114	0.00
47	P	bromoform	0.618	0.651	-5.2	117	0.00
48	P	1,1,2,2-tetrachloroethane	0.805	0.823	-2.3	116	-0.01
49	S	4-bromofluorobenzene	1.881	1.892	-0.5	114	-0.01
50	P	1,2,3-trichloropropane	0.211	0.224	-6.0	119	-0.01
51		n-propylbenzene	4.869	4.902	-0.7	116	0.00
52		bromobenzene	1.114	1.124	-0.9	117	0.00
53		1,3,5-trimethylbenzene	3.216	3.097	3.7	113	0.00
54		2-chlorotoluene	3.248	3.183	2.0	112	0.00
55		4-chlorotoluene	3.318	3.258	1.8	117	0.00
56		tert-butylbenzene	3.672	3.586	2.4	112	0.00
57		1,2,4-trimethylbenzene	3.115	3.063	1.7	114	0.00
58		sec-butylbenzene	4.466	4.507	-0.9	115	-0.01
59		4-isopropyltoluene	3.805	3.802	0.1	114	0.00
60		1,3-dichlorobenzene	1.907	1.944	-1.9	116	0.00
61	M	1,4-dichlorobenzene	1.860	1.863	-0.2	116	0.00
62		n-butylbenzene	3.113	3.185	-2.3	116	0.00
63		1,2-dichlorobenzene	1.539	1.574	-2.2	117	0.00
64		1,2-dibromo-3-chloropropane	0.121	0.133	-10.1	118	0.00
65		1,2,4-trichlorobenzene	1.169	1.245	-6.5	117	-0.01
66		hexachlorobutadiene	1.015	0.981	3.4	110	0.00
67		naphthalene	1.119	1.186	-5.9	117	0.00
68		1,2,3-trichlorobenzene	0.884	0.970	-9.7	120	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
25FEB29.D 82604.M Mon Mar 08 20:17:27 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\MAR99\MAR08\08MAR36.D
Acq On : 9 Mar 1999 6:34 am
Sample : ccv 17
Misc : 25 ug/l; vo-9-3277
S Integration Params: 82604.M

Vial: 35
Operator: m. chavez
Inst : MS-V4
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Thu Feb 25 18:16:58 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00
2		dichlorodifluoromethane	0.656	0.684	-4.2	110	0.00
3	P	chloromethane	0.531	0.602	-13.3	126	0.00
4	C	vinyl chloride	0.537	0.606	-12.9	121	0.00
5		bromomethane	0.449	0.423	5.9	101	0.00
6	M	chloroethane	0.362	0.406	-12.3	123	0.00
7		trichlorofluoromethane	0.912	0.869	4.7	101	0.02
8		1,1,2-trichloro-1,2,2-trifl	0.953	1.022	-7.2	115	0.00
9	MC	1,1-dichloroethene	0.508	0.528	-4.0	112	0.00
10		methylene chloride	0.481	0.525	-9.1	121	0.00
11		MTBE	0.805	0.843	-4.6	116	0.02
12		trans-1,2-dichloroethene	0.560	0.601	-7.3	117	0.00
13	MP	1,1-dichloroethane	1.314	1.374	-4.5	114	0.00
		2,2-dichloropropane	0.991	0.739	25.4#	82	0.00
		cis-1,2-dichloroethene	0.648	0.703	-8.3	119	0.00
16	C	chloroform	1.158	1.168	-0.9	109	0.00
17		bromochloromethane	0.294	0.294	0.0	108	0.02
18		1,1,1-trichloroethane	1.073	1.040	3.1	106	0.00
19		1,1-dichloropropene	0.994	1.031	-3.7	113	0.00
20		carbon tetrachloride	1.005	0.949	5.6	100	0.02
21	S	1,2-dichloroethane-d4	0.398	0.390	2.1	106	0.02
22		1,2-dichloroethane	0.520	0.515	1.0	106	0.00
23	M	benzene	1.917	2.047	-6.7	117	0.02
24	I	1,4-difluorobenzene	1.000	1.000	0.0	116	0.00
25	M	trichloroethene	0.370	0.415	-12.0	134	0.00
26	C	1,2-dichloropropane	0.358	0.352	1.7	117	0.00
27	M	bromodichloromethane	0.470	0.429	8.8	106	0.00
28		dibromomethane	0.165	0.147	10.5	108	0.00
29		2-CEVE	0.103	0.095#	7.6	106	0.00
30		cis-1,3-dichloropropene	0.431	0.396	8.1	108	0.02
31	S	toluene-d8	0.905	0.862	4.8	111	0.00
32	MC	toluene	0.575	0.549	4.5	115	0.02
33		trans-1,3-dichloropene	0.290	0.264	9.1	106	0.00
34		1,1,2-trichloroethane	0.154	0.150	2.9	117	0.00
35		1,3-dichloropropane	0.310	0.298	3.8	115	0.00
36		tetrachloroethene	0.405	0.391	3.4	116	0.00
37		dibromochloromethane	0.291	0.273	6.2	107	0.00
		1,2-dibromoethane	0.226	0.221	2.3	115	0.00
39	I	chlorobenzene-d5	1.000	1.000	0.0	115	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\MAR99\MAR08\08MAR36.D
Acq On : 9 Mar 1999 6:34 am
Sample : ccv 17
Misc : 25 ug/l; vo-9-3277
MS Integration Params: 82604.M

Vial: 35
Operator: m. chavez
Inst : MS-V4
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Thu Feb 25 18:16:58 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	MP	chlorobenzene	2.807	2.709	3.5	114	0.00
41		1,1,1,2-tetrachloroethane	1.304	1.240	4.9	112	0.02
42	C	ethylbenzene	4.229	3.998	5.5	114	0.00
43		m&p-xylene	1.666	1.548	7.1	111	0.00
44		o-xylene	3.244	2.992	7.8	110	0.00
45		styrene	2.392	2.286	4.4	113	0.00
46	P	isopropylbenzene	4.574	4.210	8.0	109	0.00
47	P	bromoform	0.618	0.606	2.0	110	0.00
48	P	1,1,2,2-tetrachloroethane	0.805	0.658	18.2	93	0.00
49	S	4-bromofluorobenzene	1.881	1.787	5.0	109	0.00
50	P	1,2,3-trichloropropane	0.211	0.207	2.2	111	0.00
51		n-propylbenzene	4.869	4.637	4.8	111	0.00
52		bromobenzene	1.114	1.060	4.8	111	0.00
53		1,3,5-trimethylbenzene	3.216	2.926	9.0	107	0.00
54		2-chlorotoluene	3.248	2.929	9.8	104	0.00
55		4-chlorotoluene	3.318	3.158	4.8	114	0.00
56		tert-butylbenzene	3.672	3.387	7.8	107	0.00
57		1,2,4-trimethylbenzene	3.115	2.901	6.9	109	0.00
58		sec-butylbenzene	4.466	4.226	5.4	109	0.00
59		4-isopropyltoluene	3.805	3.554	6.6	108	0.00
60		1,3-dichlorobenzene	1.907	1.797	5.8	109	0.00
61	M	1,4-dichlorobenzene	1.860	1.732	6.9	109	0.00
62		n-butylbenzene	3.113	2.956	5.0	109	0.00
63		1,2-dichlorobenzene	1.539	1.471	4.4	111	0.00
64		1,2-dibromo-3-chloropropane	0.121	0.119	1.6	107	0.00
65		1,2,4-trichlorobenzene	1.169	1.154	1.3	109	0.00
66		hexachlorobutadiene	1.015	0.905	10.9	102	0.00
67		naphthalene	1.119	1.075	4.0	107	0.00
68		1,2,3-trichlorobenzene	0.884	0.894	-1.1	111	-0.02

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

BOE-C6-0234842

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\MAR99\MAR09\09MAR16.D Vial: 16
Acq On : 9 Mar 1999 6:29 pm Operator: M. CHAVEZ
Sample : CCV 18 Inst : MS-V4
Misc : 25 UG/L; VO-9-3282 Multiplr: 1.00
MS Integration Params: 82604.M

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Thu Feb 25 18:16:58 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	pentafluorobenzene	1.000	1.000	0.0	101	-0.06
2		dichlorodifluoromethane	0.656	0.719	-9.6	111	-0.03
3	P	chloromethane	0.531	0.624	-17.5	126	-0.03
4	C	vinyl chloride	0.537	0.644	-19.9	124	-0.03
5		bromomethane	0.449	0.409	8.9	94	-0.03
6	M	chloroethane	0.362	0.434	-19.9	126	-0.03
7		trichlorofluoromethane	0.912	0.937	-2.7	105	-0.03
8		1,1,2-trichloro-1,2,2-trifl	0.953	1.127	-18.3	122	-0.03
9	MC	1,1-dichloroethene	0.508	0.572	-12.8	117	-0.04
10		methylene chloride	0.481	0.555	-15.4	123	-0.04
11		MTBE	0.805	0.921	-14.4	122	-0.04
12		trans-1,2-dichloroethene	0.560	0.655	-17.0	122	-0.05
13	MP	1,1-dichloroethane	1.314	1.472	-12.0	118	-0.06
		2,2-dichloropropane	0.991	1.045	-5.5	112	-0.07
		cis-1,2-dichloroethene	0.648	0.754	-16.2	122	-0.05
16	C	chloroform	1.158	1.254	-8.3	113	-0.05
17		bromochloromethane	0.294	0.309	-5.0	109	-0.05
18		1,1,1-trichloroethane	1.073	1.126	-4.9	110	-0.08
19		1,1-dichloropropene	0.994	1.116	-12.3	118	-0.07
20		carbon tetrachloride	1.005	1.027	-2.2	104	-0.06
21	S	1,2-dichloroethane-d4	0.398	0.391	1.8	102	-0.05
22		1,2-dichloroethane	0.520	0.552	-6.2	109	-0.07
23	M	benzene	1.917	2.236	-16.6	123	-0.07
24	I	1,4-difluorobenzene	1.000	1.000	0.0	111	-0.08
25	M	trichloroethene	0.370	0.391	-5.6	121	-0.08
26	C	1,2-dichloropropane	0.358	0.384	-7.1	122	-0.08
27	M	bromodichloromethane	0.470	0.469	0.2	112	-0.10
28		dibromomethane	0.165	0.159	3.3	111	-0.09
29		2-CEVE	0.103	0.106	-2.9	113	-0.11
30		cis-1,3-dichloropropene	0.431	0.451	-4.5	118	-0.09
31	S	toluene-d8	0.905	0.876	3.2	108	-0.09
32	MC	toluene	0.575	0.610	-6.0	123	-0.08
33		trans-1,3-dichloropene	0.290	0.302	-4.1	116	-0.09
34		1,1,2-trichloroethane	0.154	0.164	-6.1	122	-0.08
35		1,3-dichloropropane	0.310	0.323	-4.1	119	-0.08
36		tetrachloroethene	0.405	0.421	-4.0	120	-0.08
37		dibromochloromethane	0.291	0.293	-0.8	110	-0.07
		1,2-dibromoethane	0.226	0.237	-4.8	118	-0.07
39	I	chlorobenzene-d5	1.000	1.000	0.0	110	-0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\MAR99\MAR09\09MAR16.D Vial: 16
Acq On : 9 Mar 1999 6:29 pm Operator: M. CHAVEZ
Sample : CCV 18 Inst : MS-V4
Misc : 25 UG/L; VO-9-3282 Multiplr: 1.00
MS Integration Params: 82604.M

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Thu Feb 25 18:16:58 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	MP	chlorobenzene	2.807	2.997	-6.8	122	-0.05
41		1,1,1,2-tetrachloroethane	1.304	1.350	-3.5	117	-0.04
42	C	ethylbenzene	4.229	4.383	-3.6	120	-0.05
43		m&p-xylene	1.666	1.735	-4.2	120	-0.04
44		o-xylene	3.244	3.317	-2.2	118	-0.05
45		styrene	2.392	2.546	-6.4	121	-0.05
46	P	isopropylbenzene	4.574	4.723	-3.2	118	-0.04
47	P	bromoform	0.618	0.658	-6.4	115	-0.04
48	P	1,1,2,2-tetrachloroethane	0.805	0.840	-4.5	115	-0.05
49	S	4-bromofluorobenzene	1.881	1.837	2.4	108	-0.04
50	P	1,2,3-trichloropropane	0.211	0.226	-7.2	117	-0.04
51		n-propylbenzene	4.869	5.188	-6.5	120	-0.04
52		bromobenzene	1.114	1.168	-4.8	118	-0.04
53		1,3,5-trimethylbenzene	3.216	3.268	-1.6	115	-0.04
54		2-chlorotoluene	3.248	3.289	-1.3	112	-0.03
55		4-chlorotoluene	3.318	3.422	-3.1	119	-0.03
56		tert-butylbenzene	3.672	3.769	-2.7	115	-0.04
57		1,2,4-trimethylbenzene	3.115	3.208	-3.0	116	-0.03
58		sec-butylbenzene	4.466	4.751	-6.4	118	-0.04
59		4-isopropyltoluene	3.805	3.984	-4.7	116	-0.04
60		1,3-dichlorobenzene	1.907	2.007	-5.2	117	-0.03
61	M	1,4-dichlorobenzene	1.860	1.898	-2.1	115	-0.03
62		n-butylbenzene	3.113	3.360	-7.9	119	-0.03
63		1,2-dichlorobenzene	1.539	1.620	-5.2	118	-0.03
64		1,2-dibromo-3-chloropropane	0.121	0.127	-5.4	110	-0.03
65		1,2,4-trichlorobenzene	1.169	1.287	-10.1	117	-0.05
66		hexachlorobutadiene	1.015	1.028	-1.3	112	-0.03
67		naphthalene	1.119	1.206	-7.8	116	-0.03
68		1,2,3-trichlorobenzene	0.884	0.998	-12.9	120	-0.07

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

BOE-C6-0234844

Response Factor Report MS-V4

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Thu Feb 25 18:16:58 1999
Response via : Initial Calibration

Calibration Files
1 =25FEB27.D 2 =25FEB28.D 3 =25FEB29.D
4 =25FEB30.D 5 =25FEB31.D

		Compound	1	2	3	4	5	Avg	%RSD
1)	I	pentafluorobenzene	----------ISTD----------						
2)		dichlorodifluorometha	0.693	0.692	0.655	0.665	0.577	0.656	7.22
3)	P	chloromethane	0.610	0.543	0.500	0.510	0.492	0.531	9.08
4)	C	vinyl chloride	0.591	0.569	0.527	0.530	0.467	0.537	8.83
5)		bromomethane	0.463	0.478	0.440	0.450	0.415	0.449	5.32
6)	M	chloroethane	0.399	0.381	0.349	0.351	0.330	0.362	7.65
7)		trichlorofluoromethan	1.002	0.965	0.906	0.910	0.775	0.912	9.46
8)		1,1,2-trichloro-1,2,2	1.063	1.007	0.933	0.951	0.811	0.953	9.92
9)	MC	1,1-dichloroethene	0.551	0.528	0.495	0.508	0.456	0.508	7.02
10)		methylene chloride	0.551	0.495	0.456	0.463	0.439	0.481	9.17
11)		MTBE	0.931	0.828	0.766	0.774	0.728	0.805	9.80
12)		trans-1,2-dichloroeth	0.600	0.576	0.542	0.558	0.523	0.560	5.30
13)	MP	1,1-dichloroethane	1.477	1.360	1.267	1.276	1.192	1.314	8.28
14)		2,2-dichloropropane	1.148	1.025	0.943	0.958	0.879	0.991	10.33
15)		cis-1,2-dichloroethen	0.704	0.662	0.622	0.644	0.609	0.648	5.77
16)	C	chloroform	1.234	1.200	1.125	1.152	1.077	1.158	5.32
17)		bromochloromethane	0.313	0.309	0.287	0.290	0.271	0.294	5.88
		1,1,1-trichloroethane	1.195	1.111	1.032	1.060	0.968	1.073	7.99
		1,1-dichloropropene	1.132	1.027	0.955	0.976	0.882	0.994	9.37
20)		carbon tetrachloride	1.047	1.048	0.997	1.020	0.912	1.005	5.58
21)	S	1,2-dichloroethane-d4	0.434	0.411	0.388	0.383	0.375	0.398	6.02
22)		1,2-dichloroethane	0.554	0.546	0.511	0.514	0.475	0.520	6.03
23)	M	benzene	2.135	1.951	1.842	1.885	1.772	1.917	7.21
24)	I	1,4-difluorobenzene	----------ISTD----------						
25)	M	trichloroethene	0.421	0.384	0.358	0.356	0.333	0.370	9.08
26)	C	1,2-dichloropropane	0.398	0.376	0.347	0.344	0.326	0.358	8.02
27)	M	bromodichloromethane	0.491	0.493	0.466	0.467	0.435	0.470	5.04
28)		dibromomethane	0.187	0.171	0.158	0.158	0.149	0.165	8.99
29)		2-CEVE	0.099	0.105	0.104	0.106	0.101	0.103	2.83
30)		cis-1,3-dichloroprope	0.459	0.451	0.424	0.424	0.400	0.431	5.47
31)	S	toluene-d8	0.909	0.909	0.900	0.903	0.905	0.905	0.43
32)	MC	toluene	0.641	0.588	0.551	0.558	0.537	0.575	7.20
33)		trans-1,3-dichloropen	0.292	0.305	0.289	0.291	0.275	0.290	3.70
34)		1,1,2-trichloroethane	0.179	0.161	0.148	0.147	0.137	0.154	10.50
35)		1,3-dichloropropane	0.356	0.324	0.299	0.296	0.277	0.310	9.74
36)		tetrachloroethene	0.462	0.419	0.389	0.392	0.361	0.404	9.42
37)		dibromochloromethane	0.284	0.306	0.294	0.295	0.276	0.291	3.93
38)		1,2-dibromoethane	0.244	0.239	0.222	0.221	0.205	0.226	6.95
39)	I	chlorobenzene-d5	----------ISTD----------						
40)	MP	chlorobenzene	3.060	2.883	2.719	2.799	2.574	2.807	6.47
		1,1,1,2-tetrachloroet	1.333	1.336	1.274	1.334	1.243	1.304	3.32
	C	ethylbenzene	4.893	4.369	4.024	4.144	3.716	4.229	10.40
43)		m&p-xylene	1.839	1.657	1.599	1.691	1.545	1.666	6.68
44)		o-xylene	3.662	3.363	3.109	3.187	2.899	3.244	8.85
45)		styrene	2.556	2.438	2.324	2.414	2.227	2.392	5.18
46)	P	isopropylbenzene	5.144	4.749	4.430	4.534	4.015	4.574	9.09
47)	P	bromoform	0.551	0.625	0.632	0.664	0.619	0.618	6.68

48)	P	1,1,2,2-tetrachloroet	0.848	0.855	0.808	0.801	0.711	0.805	7.12
49)	S	4-bromofluorobenzene	1.853	1.870	1.884	1.933	1.867	1.881	1.65
50)	P	1,2,3-trichloropropan	0.205	0.222	0.214	0.219	0.196	0.211	4.98
51)		n-propylbenzene	5.272	5.088	4.786	4.904	4.296	4.869	7.59
52)		bromobenzene	1.227	1.141	1.091	1.110	1.001	1.114	7.34
53)		1,3,5-trimethylbenzen	3.687	3.354	3.125	3.147	2.767	3.216	10.49
54)		2-chlorotoluene	3.712	3.316	3.240	3.058	2.917	3.248	9.31
55)		4-chlorotoluene	3.649	3.477	3.164	3.452	2.847	3.318	9.50
56)		tert-butylbenzene	4.016	3.833	3.625	3.688	3.198	3.672	8.30
57)		1,2,4-trimethylbenzen	3.522	3.246	3.055	3.064	2.689	3.115	9.77
58)		sec-butylbenzene	4.770	4.667	4.455	4.556	3.879	4.466	7.81
59)		4-isopropyltoluene	4.064	4.010	3.790	3.840	3.322	3.805	7.70
60)		1,3-dichlorobenzene	2.092	1.978	1.899	1.907	1.659	1.907	8.32
61)	M	1,4-dichlorobenzene	2.087	1.950	1.827	1.838	1.598	1.860	9.69
62)		n-butylbenzene	3.279	3.309	3.118	3.163	2.693	3.113	7.95
63)		1,2-dichlorobenzene	1.679	1.649	1.522	1.523	1.322	1.539	9.16
64)		1,2-dibromo-3-chlorop	0.101	0.124	0.128	0.131	0.119	0.121	9.97
65)		1,2,4-trichlorobenzen	1.065	1.257	1.213	1.224	1.085	1.169	7.47
66)		hexachlorobutadiene	1.059	1.054	1.016	1.061	0.887	1.015	7.29
67)		naphthalene	1.042	1.199	1.150	1.162	1.044	1.119	6.43
68)		1,2,3-trichlorobenzen	0.787	0.950	0.921	0.939	0.824	0.884	8.32

(#) = Out of Range

82604.M Fri Feb 26 15:42:03 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\FEB99\FEB25\25FEB33.D Vial: 33
Acq On : 26 Feb 1999 5:21 am Operator: M. CHAVEZ
Sample : 524.2/8260 ICV A Inst : MS-V4
Misc : 25 ML;25 UG/L; VO-8-3219 Multiplr: 1.00
Integration Params: 82604.M

Method : C:\HPCHEM\1\METHODS\82604.M (RTE Integrator)
Title : EPA 8260\524.2
Last Update : Thu Feb 25 18:16:58 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	pentafluorobenzene	1.000	1.000	0.0	100	0.00
2		dichlorodifluoromethane	0.656	0.598	8.8	91	0.00
3	P	chloromethane	0.531	0.502	5.5	100	0.00
4	C	vinyl chloride	0.537	0.552	-2.8	104	0.00
5		bromomethane	0.449	0.445	0.9	101	0.00
6	M	chloroethane	0.362	0.361	0.3	103	0.00
7		trichlorofluoromethane	0.912	1.008	-10.5	111	0.00
8		1,1,2-trichloro-1,2,2-trifl	0.953	0.996	-4.5	106	0.00
9	MC	1,1-dichloroethene	0.508	0.533	-4.9	107	0.00
10		methylene chloride	0.481	0.478	0.6	104	0.00
11		MTBE	0.805	0.780	3.1	101	0.00
12		trans-1,2-dichloroethene	0.560	0.640	-14.3	118	0.00
13	MP	1,1-dichloroethane	1.314	1.322	-0.6	104	0.00
1[illegible]		2,2-dichloropropane	0.991	0.950	4.1	100	0.00
1[illegible]		cis-1,2-dichloroethene	0.648	0.626	3.4	100	0.02
16	C	chloroform	1.158	1.173	-1.3	104	0.00
17		bromochloromethane	0.294	0.300	-2.0	104	0.02
18		1,1,1-trichloroethane	1.073	1.085	-1.1	105	0.00
19		1,1-dichloropropene	0.994	1.026	-3.2	107	0.00
20		carbon tetrachloride	1.005	1.039	-3.4	104	0.01
21	S	1,2-dichloroethane-d4	0.398	0.382	4.0	98	0.00
22		1,2-dichloroethane	0.520	0.517	0.6	101	0.00
23	M	benzene	1.917	2.005	-4.6	108	0.00
24	I	1,4-difluorobenzene	1.000	1.000	0.0	102	0.00
25	M	trichloroethene	0.370	0.381	-3.0	109	0.00
26	C	1,2-dichloropropane	0.358	0.350	2.2	103	0.00
27	M	bromodichloromethane	0.470	0.463	1.5	101	0.00
28		dibromomethane	0.165	0.157	4.8	101	0.00
29		2-CEVE	0.103	0.096	6.8	94	0.00
30		cis-1,3-dichloropropene	0.431	0.415	3.7	100	0.02
31	S	toluene-d8	0.905	0.893	1.3	101	0.02
32	MC	toluene	0.575	0.592	-3.0	109	0.03
33		trans-1,3-dichloropene	0.290	0.284	2.1	100	0.00
34		1,1,2-trichloroethane	0.154	0.148	3.9	102	-0.01
35		1,3-dichloropropane	0.310	0.298	3.9	101	0.00
36		tetrachloroethene	0.404	0.409	-1.2	107	0.00
37		dibromochloromethane	0.291	0.297	-2.1	103	0.00
3[illegible]		1,2-dibromoethane	0.226	0.222	1.8	102	0.00
39	I	chlorobenzene-d5	1.000	1.000	0.0	97	0.01
40	MP	chlorobenzene	2.807	2.972	-5.9	106	0.00
41		1,1,1,2-tetrachloroethane	1.304	1.354	-3.8	103	0.00
42	C	ethylbenzene	4.229	4.495	-6.3	108	0.00
43		m&p-xylene	1.666	1.763	-5.8	107	0.00

BC LABORATORIES

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: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-5, 99-02725-7, 99-02725-8

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	2507-6	< 0.5	28.95	28.56	25.00	25.00	µg/L	1.	20	116.	114.	80 - 120
Bromodichloromethane	2507-6	< 0.5	24.81	24.42	25.00	25.00	µg/L	2.	20	99.	98.	80 - 120
Chlorobenzene	2507-6	< 0.5	26.60	25.64	25.00	25.00	µg/L	4.	20	106.	103.	80 - 120
Chloroethane	2507-6	< 0.5	29.92	29.89	25.00	25.00	µg/L	0.	20	120.	120.	80 - 120
1,4-Dichlorobenzene	2507-6	< 0.5	25.70	24.45	25.00	25.00	µg/L	5.	20	103.	98.	80 - 120
1,1-Dichloroethane	2507-6	< 0.5	27.78	27.67	25.00	25.00	µg/L	0.	20	111.	111.	80 - 120
1,1-Dichloroethene	2507-6	< 0.5	28.67	28.34	25.00	25.00	µg/L	1.	20	115.	113.	80 - 120
Toluene	2507-6	< 0.5	25.87	25.88	25.00	25.00	µg/L	0.	20	103.	104.	80 - 120
Trichloroethene	2507-6	< 0.5	26.36	25.84	25.00	25.00	µg/L	2.	20	105.	103.	80 - 120
1,2-Dichloroethane-d4	MS/MSD									99.	96.	76 - 114
Toluene-d8	MS/MSD									96.	97.	88 - 110
4-Bromofluorobenzene	MS/MSD									101.	95.	86 - 115

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

Quality Control Officer

Anthony Bonanno

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BOE-C6-0234848

BC LABORATORIES

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: 04/14/99
Sample Matrix: Groundwater

Samples Affected: 99-02725-1 - 99-02725-5, 99-02725-7, 99-02725-8

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Benzene	LCSW	26.77	25.00	µg/L	107.	80 - 120
Bromodichloromethane	LCSW	23.72	25.00	µg/L	95.	80 - 120
Chlorobenzene	LCSW	25.11	25.00	µg/L	100.	80 - 120
Chloroethane	LCSW	28.45	25.00	µg/L	114.	80 - 120
1,4-Dichlorobenzene	LCSW	24.77	25.00	µg/L	99.	80 - 120
1,1-Dichloroethane	LCSW	26.41	25.00	µg/L	106.	80 - 120
1,1-Dichloroethene	LCSW	26.53	25.00	µg/L	106.	80 - 120
Toluene	LCSW	24.52	25.00	µg/L	98.	80 - 120
Trichloroethene	LCSW	24.80	25.00	µg/L	99.	80 - 120
1,2-Dichloroethane-d4	LCSW				97.	76 - 114
Toluene-d8	LCSW				96.	88 - 110
4-Bromofluorobenzene	LCSW				99.	86 - 115

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