ARCADIS Geraghty Miller
BC Laboratory Number: 99-02580
Client Reference: ILM Groundwater

CASE NARRATIVE
Date: 05/11/99
Page 1

SAMPLE RECEIPT:

BC Laboratories, Inc (BCL) received a total of 5 samples, and 1 trip blank on 03-02-99 at 1945. The samples were collected by Harding Lawson on 03-02-99 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 3.8 °C and was recorded on the cooler receipt form. No discrepancies were found on the chain of custody (COC) or the samples.

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 except for the following:

EPA 8260

The method calibration standard associated with samples 99-2580-1-6 did not meet established criteria for Bromomethane by EPA 8260. Because this noncompliant compound was not detected in the associated sample, re-analysis was not required and not performed. The reports have been flagged accordingly.

ARCADIS Geraghty Miller
BC Laboratory Number: 99-02580
Client Reference: ILM Groundwater

CASE NARRATIVE
Date: 05/11/99
Page 2

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: C Gray 5-11-99
Date

CHAIN OF CUSTODY

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

Re To: IES & AGM

Name: IES
Address: 3990 WESTERLY PL STE. 210
City: NEWPORT BEACH
State: CA Zip: 92660
Attn: JOANN ORNELAS
Phone: (949) 795-5035

Project: ILM GROUNDWATER
Project #: 280.02
Sampler Name: BRYAN J. HAWES
Submission #: 99-2580

Analysis Requested

Lab #	Sample Description	Date & Time Sampled	8260 (ILM List)	17 Metals + Al + Ti + Fe	17 Mtls + Al + Ti + Fe (Filtered)*	Hexa-Chrom	Hexa-Chrom (Filtered)**	8015M (TPH-GF)	Matrix (DW - Drinking Water, GW - Ground Water, WW - Waste Water, S - Soil, O - Oil, SL - Sludge, M - Miscellaneous)	Turn Around Time Requested	Number and Container Type
-1	BL-7	3-2-99 @ 0915	X	X	X	X	X		GW	5D	6
-2	BL-4	3-2-99 @ 1315	X	X	X	X	X				6
-3	BL-8	3-2-99 @ 1600	X	X	X	X	X				6
-4TB	TB-7 BJH	2-25-99	X						M		1
	~~TB-7B~~	~~3-1-99~~	~~X~~		BA					BA	~~1~~
-5	RB-7	3-2-99 @ 1015	X	X		X		X			6
-6	FB-7	3-2-99 @ 1030	X	X		X		X			6

DISTRIBUTION MA RP TC CS SB

NUMBERING CHECKED BY

Billing Information:

Name: ARCADIS GERAGHTY & MILLER
Address: 1400 N HARBOR BLVD. STE. 700
City FULLERTON State CA Zip 92835
Attention: DERRICK WILLIS
PO # 280.02

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: SEND EDDs TO:
IES: JOANN ORNELAS E-MAIL; JP052263@AOL.COM
AGM: DERRICK WILLIS E-MAIL: (ON FILE)
* FIELD FILTERED ** FILTER IN LAB

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
3-2-99		3-2-99	1700
		3-2-99	1945
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

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

BOE-C6-0234553

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

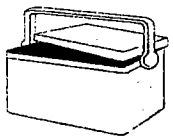
Submission #: 99-2580 **Project Code:**

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☒ None ☐
BC 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 Blue/Wht Date/Time 3/2/99 2025
Temperature: 3.8 °C
Thermometer ID: 17 Analyst Init CFORD
Emissivity .90
Container QT PE

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

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4TB	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
QT GENERAL MINERAL/ GENERAL PHYSICAL	1	1	1		1	1																		
PT PE UNPRESERVED																								
QT INORGANIC CHEMICAL METALS	2	2	2		~~2~~	~~2~~																		
PT INORGANIC CHEMICAL METALS					1	1																		
PT CYANIDE																								
PT NITROGEN FORMS																								
PT TOTAL SULFIDE																								
2oz. NITRATE / NITRITE																								
100ml TOTAL ORGANIC CARBON																								
QT TOX																								
PT CHEMICAL OXYGEN DEMAND																								
100ml PHENOLICS																								
40ml VOA VIAL TRAVEL BLANK				1																				
40ml VOA VIAL	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																		
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: 3/2/99 2223 [F:\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

BC LABORATORIES

WATER ANALYSIS
(METALS)

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

Date Reported: 03/16/99
Date Received: 03/02/99
Laboratory No.: 99-02580-1

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: BL-7
Sampling Date/Time: 03/02/99 @ 09:15AM
Sample Collected By: BRYAN J. HAWES

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Dissolved Aluminum	None Detected	µg/L	50.	EPA-6010	03/02/99	03/06/99	1
Dissolved Antimony	None Detected	µg/L	100.	EPA-6010	03/02/99	03/05/99	1
Dissolved Arsenic	4.8	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Dissolved Barium	None Detected	µg/L	100.	EPA-6010	03/02/99	03/05/99	1
Dissolved Beryllium	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Cadmium	None Detected	µg/L	5.	EPA-6010	03/02/99	03/05/99	1
Dissolved Chromium	16.	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Hexavalent Chromium	16.	µg/L	2.	EPA-7196	03/03/99	03/03/99	1
Dissolved Cobalt	None Detected	µg/L	50.	EPA-6010	03/02/99	03/05/99	1
Dissolved Copper	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Iron	None Detected	µg/L	50.	EPA-6010	03/02/99	03/05/99	1
Dissolved Lead	None Detected	µg/L	5.	EPA-7421	03/02/99	03/03/99	1
Dissolved Mercury	None Detected	µg/L	0.2	EPA-7470	03/11/99	03/11/99	1
Dissolved Molybdenum	None Detected	µg/L	50.	EPA-6010	03/02/99	03/05/99	1
Dissolved Nickel	None Detected	µg/L	50.	EPA-6010	03/02/99	03/05/99	1
Dissolved Selenium	None Detected	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Dissolved Silver	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Titanium	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Thallium	None Detected	µg/L	1.	EPA-7841	03/02/99	03/04/99	1
Dissolved Vanadium	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Zinc	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Total Aluminum	62300.	µg/L	50.	EPA-6010	03/03/99	03/05/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	03/03/99	03/05/99	1
Total Arsenic	86.	µg/L	10.	SM-3114B	03/03/99	03/04/99	5
Total Barium	203.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Cadmium	None Detected	µg/L	5.	EPA-6010	03/03/99	03/05/99	1
Total Chromium	255.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Cobalt	31.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Copper	29.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Iron	106000.	µg/L	50.	EPA-6010	03/03/99	03/05/99	1
Total Lead	23.	µg/L	5.	EPA-7421	03/03/99	03/03/99	4
Total Mercury	None Detected	µg/L	0.2	EPA-7470	03/10/99	03/10/99	1
Total Molybdenum	11.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Nickel	99.	µg/L	50.	EPA-6010	03/03/99	03/05/99	1
Total Selenium	None Detected	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Total Silver	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Titanium	3740.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Thallium	None Detected	µg/L	5.0	EPA-7841	03/03/99	03/04/99	1
Total Vanadium	188.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Zinc	256.	µg/L	50.	EPA-6010	03/03/99	03/05/99	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: DERRICK WILLIS 714-278-0992

Date Reported: 03/16/99
Date Received: 03/02/99
Laboratory No.: 99-02580-1

Sample Description: 280.02, ILM GROUNDWATER, BL-7, 03/02/99 @ 09:15AM, BRYAN J. HAWES

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

For Dan Schultz
Laboratory Director

cc: INTEGRATED ENVIRONMENTAL SERVICES, INC. - JO ANN ORNALES

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(METALS)

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

Date Reported: 03/16/99
Date Received: 03/02/99
Laboratory No.: 99-02580-2

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: BL-4
Sampling Date/Time: 03/02/99 @ 01:15PM
Sample Collected By: BRYAN J. HAWES

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Dissolved Aluminum	None Detected	µg/L	50.	EPA-6010	03/02/99	03/06/99	1
Dissolved Antimony	None Detected	µg/L	100.	EPA-6010	03/02/99	03/05/99	1
Dissolved Arsenic	2.1	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Dissolved Barium	None Detected	µg/L	100.	EPA-6010	03/02/99	03/05/99	1
Dissolved Beryllium	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Cadmium	None Detected	µg/L	5.	EPA-6010	03/02/99	03/05/99	1
Dissolved Chromium	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Hexavalent Chromium	4.3	µg/L	2.	EPA-7196	03/03/99	03/03/99	1
Dissolved Cobalt	None Detected	µg/L	50.	EPA-6010	03/02/99	03/05/99	1
Dissolved Copper	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Iron	None Detected	µg/L	50.	EPA-6010	03/02/99	03/05/99	1
Dissolved Lead	None Detected	µg/L	5.	EPA-7421	03/02/99	03/03/99	1
Dissolved Mercury	None Detected	µg/L	0.2	EPA-7470	03/11/99	03/11/99	1
Dissolved Molybdenum	None Detected	µg/L	50.	EPA-6010	03/02/99	03/05/99	1
Dissolved Nickel	None Detected	µg/L	50.	EPA-6010	03/02/99	03/05/99	1
Dissolved Selenium	None Detected	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Dissolved Silver	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Titanium	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Thallium	None Detected	µg/L	1.	EPA-7841	03/02/99	03/04/99	1
Dissolved Vanadium	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Zinc	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Total Aluminum	36600.	µg/L	50.	EPA-6010	03/03/99	03/05/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	03/03/99	03/05/99	1
Total Arsenic	12.	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Total Barium	168.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Cadmium	None Detected	µg/L	5.	EPA-6010	03/03/99	03/05/99	1
Total Chromium	114.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Cobalt	17.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Copper	33.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Iron	49300.	µg/L	50.	EPA-6010	03/03/99	03/05/99	1
Total Lead	15.	µg/L	5.	EPA-7421	03/03/99	03/03/99	4
Total Mercury	None Detected	µg/L	0.2	EPA-7470	03/10/99	03/10/99	1
Total Molybdenum	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Nickel	54.	µg/L	50.	EPA-6010	03/03/99	03/05/99	1
Total Selenium	None Detected	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Total Silver	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Titanium	2240.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Thallium	None Detected	µg/L	5.0	EPA-7841	03/03/99	03/04/99	1
Total Vanadium	118.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Zinc	119.	µg/L	50.	EPA-6010	03/03/99	03/05/99	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: DERRICK WILLIS 714-278-0992

Date Reported: 03/16/99
Date Received: 03/02/99
Laboratory No.: 99-02580-2

Sample Description: 280.02, ILM GROUNDWATER, BL-4, 03/02/99 @ 01:15PM, BRYAN J. HAWES

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 through and acidified in the field.

For Dan Schultz
Laboratory Director

cc: INTEGRATED ENVIRONMENTAL SERVICES, INC. - JO ANN ORNALES

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BC LABORATORIES

WATER ANALYSIS
(METALS)

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

Date Reported: 03/16/99
Date Received: 03/02/99
Laboratory No.: 99-02580-3

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: BL-8
Sampling Date/Time: 03/02/99 @ 04:00PM
Sample Collected By: BRYAN J. HAWES

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Dissolved Aluminum	None Detected	µg/L	50.	EPA-6010	03/02/99	03/06/99	1
Dissolved Antimony	None Detected	µg/L	100.	EPA-6010	03/02/99	03/05/99	1
Dissolved Arsenic	2.4	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Dissolved Barium	122.	µg/L	100.	EPA-6010	03/02/99	03/05/99	1
Dissolved Beryllium	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Cadmium	None Detected	µg/L	5.	EPA-6010	03/02/99	03/05/99	1
Dissolved Chromium	11.	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Hexavalent Chromium	14.	µg/L	2.	EPA-7196	03/03/99	03/03/99	1
Dissolved Cobalt	None Detected	µg/L	50.	EPA-6010	03/02/99	03/05/99	1
issolved Copper	22.	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
ssolved Iron	None Detected	µg/L	50.	EPA-6010	03/02/99	03/05/99	1
ssolved Lead	None Detected	µg/L	5.	EPA-7421	03/02/99	03/03/99	1
Dissolved Mercury	None Detected	µg/L	0.2	EPA-7470	03/11/99	03/11/99	1
Dissolved Molybdenum	None Detected	µg/L	50.	EPA-6010	03/02/99	03/05/99	1
Dissolved Nickel	None Detected	µg/L	50.	EPA-6010	03/02/99	03/05/99	1
Dissolved Selenium	None Detected	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Dissolved Silver	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Titanium	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Thallium	None Detected	µg/L	1.	EPA-7841	03/02/99	03/04/99	1
Dissolved Vanadium	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Dissolved Zinc	None Detected	µg/L	10.	EPA-6010	03/02/99	03/05/99	1
Total Aluminum	22100.	µg/L	50.	EPA-6010	03/03/99	03/05/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	03/03/99	03/05/99	1
Total Arsenic	25.	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Total Barium	188.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Cadmium	None Detected	µg/L	5.	EPA-6010	03/03/99	03/05/99	1
Total Chromium	95.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Cobalt	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Copper	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Iron	32900.	µg/L	50.	EPA-6010	03/03/99	03/05/99	1
Total Lead	8.2	µg/L	5.	EPA-7421	03/03/99	03/03/99	4
Total Mercury	None Detected	µg/L	0.2	EPA-7470	03/10/99	03/10/99	1
Total Molybdenum	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Nickel	None Detected	µg/L	50.	EPA-6010	03/03/99	03/05/99	1
Total Selenium	None Detected	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Total Silver	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Titanium	1420.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
tal Thallium	None Detected	µg/L	5.0	EPA-7841	03/03/99	03/04/99	1
al Vanadium	62.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
tal Zinc	74.	µg/L	50.	EPA-6010	03/03/99	03/05/99	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: DERRICK WILLIS 714-278-0992

Date Reported: 03/16/99
Date Received: 03/02/99
Laboratory No.: 99-02580-3

Sample Description: 280.02, ILM GROUNDWATER, BL-8, 03/02/99 @ 04:00PM, BRYAN J. HAWES

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

For Dan Schultz
Laboratory Director

cc: INTEGRATED ENVIRONMENTAL SERVICES, INC. - JO ANN ORNALES

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BC LABORATORIES

WATER ANALYSIS
(METALS)

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

Date Reported: 03/16/99
Date Received: 03/02/99
Laboratory No.: 99-02580-5

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: RB-7
Sampling Date/Time: 03/02/99 @ 10:15AM
Sample Collected By: BRYAN J. HAWES

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Hexavalent Chromium	None Detected	µg/L	2.	EPA-7196	03/03/99	03/03/99	1
Total Aluminum	None Detected	µg/L	50.	EPA-6010	03/03/99	03/05/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	03/03/99	03/05/99	1
Total Arsenic	None Detected	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Total Barium	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Cadmium	None Detected	µg/L	5.	EPA-6010	03/03/99	03/05/99	1
Total Chromium	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Cobalt	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Copper	53.	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
tal Lead	None Detected	µg/L	5.	EPA-7421	03/03/99	03/03/99	1
otal Mercury	None Detected	µg/L	0.2	EPA-7470	03/10/99	03/10/99	1
Total Molybdenum	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Nickel	None Detected	µg/L	50.	EPA-6010	03/03/99	03/05/99	1
Total Selenium	None Detected	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Total Silver	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Titanium	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Thallium	None Detected	µg/L	5.0	EPA-7841	03/03/99	03/04/99	1
Total Vanadium	None Detected	µg/L	10.	EPA-6010	03/03/99	03/05/99	1
Total Zinc	None Detected	µg/L	50.	EPA-6010	03/03/99	03/05/99	1

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

Dan Schultz
Laboratory Director

cc: INTEGRATED ENVIRONMENTAL SERVICES, INC. - JO ANN ORNALES

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WATER ANALYSIS
(METALS)

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

Date Reported: 03/16/99
Date Received: 03/02/99
Laboratory No.: 99-02580-6

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: FB-7
Sampling Date/Time: 03/02/99 @ 10:30AM
Sample Collected By: BRYAN J. HAWES

Constituents	Results	Units	P.Q.L.	Method	Date Prepared	Date Analyzed	Dilution Factor
Hexavalent Chromium	None Detected	µg/L	2.	EPA-7196	03/03/99	03/03/99	1
Total Aluminum	None Detected	µg/L	50.	EPA-6010	03/04/99	03/05/99	1
Total Antimony	None Detected	µg/L	100.	EPA-6010	03/04/99	03/05/99	1
Total Arsenic	None Detected	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Total Barium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/05/99	1
Total Beryllium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/05/99	1
Total Cadmium	None Detected	µg/L	5.	EPA-6010	03/04/99	03/05/99	1
Total Chromium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/05/99	1
Total Cobalt	None Detected	µg/L	10.	EPA-6010	03/04/99	03/05/99	1
Total Copper	64.	µg/L	10.	EPA-6010	03/04/99	03/05/99	1
Total Lead	None Detected	µg/L	5.	EPA-7421	03/04/99	03/04/99	2
Total Mercury	None Detected	µg/L	0.2	EPA-7470	03/10/99	03/10/99	1
Total Molybdenum	None Detected	µg/L	10.	EPA-6010	03/04/99	03/05/99	1
Total Nickel	None Detected	µg/L	50.	EPA-6010	03/04/99	03/05/99	1
Total Selenium	None Detected	µg/L	2.	SM-3114B	03/03/99	03/04/99	1
Total Silver	None Detected	µg/L	10.	EPA-6010	03/04/99	03/05/99	1
Total Titanium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/05/99	1
Total Thallium	None Detected	µg/L	5.0	EPA-7841	03/04/99	03/04/99	1
Total Vanadium	None Detected	µg/L	10.	EPA-6010	03/04/99	03/05/99	1
Total Zinc	None Detected	µg/L	50.	EPA-6010	03/04/99	03/05/99	1

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

For Dan Schultz
Laboratory Director

cc: INTEGRATED ENVIRONMENTAL SERVICES, INC. - JO ANN ORNALES

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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: DERRICK WILLIS 714-278-0992

Date Reported: 03/11/99
Date Received: 03/02/99
Laboratory No.: 99-02580-5

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: RB-7
Sample Matrix: Groundwater
Sample Collected By: BRYAN J. HAWES

Date Collected: 03/02/99 @ 10:15AM
Date Extracted: 03/05/99
Date Analyzed: 03/07/99
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	1500.	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	54.	%	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.

LCS recovery not within established limits.

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: DERRICK WILLIS 714-278-0992

Date Reported: 03/11/99
Date Received: 03/02/99
Laboratory No.: 99-02580-6

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: FB-7
Sample Matrix: Groundwater
Sample Collected By: BRYAN J. HAWES

Date Collected: 03/02/99 @ 10:30AM
Date Extracted: 03/05/99
Date Analyzed: 03/07/99
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	33.	%	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.

LCS recovery not within established limits.

California D.O.H.S. Cert. #1186, AZ License: AZ0345

Stuart G. Buttram
Department Supervisor

cc: INTEGRATED ENVIRONMENTAL SERVICES, INC. - JO ANN ORNALES

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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: DERRICK WILLIS 714-278-0992

Date Reported: 03/10/99
Date Received: 03/02/99
Laboratory No.: 99-02580-1

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: BL-7
Sample Matrix: Groundwater
Sample Collected By: BRYAN J. HAWES

Date Collected: 03/02/99 @ 09:15AM
Date Extracted: 03/04/99
Date Analyzed: 03/04/99
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	*1
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	0.67	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-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: DERRICK WILLIS 714-278-0992

Date Reported: 03/10/99
Date Received: 03/02/99
Laboratory No.: 99-02580-1

Sample Description: 280.02, ILM GROUNDWATER, BL-7, 03/02/99 @ 09:15AM, BRYAN J. HAWES

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	5.2	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	32.	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	105.	76-114
Toluene-d8	90.	88-110
4-Bromofluorobenzene	90.	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

cc: INTEGRATED ENVIRONMENTAL SERVICES, INC. - JO ANN ORNALES

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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: DERRICK WILLIS 714-278-0992

Date Reported: 03/10/99
Date Received: 03/02/99
Laboratory No.: 99-02580-2

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: BL-4
Sample Matrix: Groundwater
Sample Collected By: BRYAN J. HAWES

Date Collected: 03/02/99 @ 01:15PM
Date Extracted: 03/04/99
Date Analyzed: 03/04/99
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	*1
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	0.62	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	None Detected	µg/L	0.5	
Chloromethane	None Detected	µg/L	0.5	
2-Chlorotoluene	None Detected	µg/L	0.5	
4-Chlorotoluene	None Detected	µg/L	0.5	
Dibromochloromethane	None Detected	µg/L	0.5	
1,2-Dibromo-3-Chloropropane	None Detected	µg/L	0.5	
1,2-Dibromoethane	None Detected	µg/L	0.5	
Dibromomethane	None Detected	µg/L	0.5	
1,2-Dichlorobenzene	None Detected	µg/L	0.5	
1,3-Dichlorobenzene	None Detected	µg/L	0.5	
1,4-Dichlorobenzene	None Detected	µg/L	0.5	
Dichlorodifluoromethane	None Detected	µg/L	0.5	
1,1-Dichloroethane	None Detected	µg/L	0.5	
1,2-Dichloroethane	None Detected	µg/L	0.5	
1,1-Dichloroethene	None Detected	µg/L	0.5	
cis-1,2-Dichloroethene	None Detected	µg/L	0.5	
trans-1,2-Dichloroethene	None Detected	µg/L	0.5	
1,2-Dichloropropane	None Detected	µg/L	0.5	
1,3-Dichloropropane	None Detected	µg/L	0.5	
2,2-Dichloropropane	None Detected	µg/L	0.5	
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: DERRICK WILLIS 714-278-0992

Date Reported: 03/10/99
Date Received: 03/02/99
Laboratory No.: 99-02580-2

Sample Description: 280.02, ILM GROUNDWATER, BL-4, 03/02/99 @ 01:15PM, BRYAN J. HAWES

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	8.4	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	58.	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	107.	76-114
Toluene-d8	92.	88-110
4-Bromofluorobenzene	93.	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

Volatile Organic Analysis
(EPA Method 8260)

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

Date Reported: 03/10/99
Date Received: 03/02/99
Laboratory No.: 99-02580-3

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: BL-8
Sample Matrix: Groundwater
Sample Collected By: BRYAN J. HAWES

Date Collected: 03/02/99 @ 04:00PM
Date Extracted: 03/04/99
Date Analyzed: 03/04/99
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	*1
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	1.2	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-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: DERRICK WILLIS 714-278-0992

Date Reported: 03/10/99
Date Received: 03/02/99
Laboratory No.: 99-02580-3

Sample Description: 280.02, ILM GROUNDWATER, BL-8, 03/02/99 @ 04:00PM, BRYAN J. HAWES

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	5.0	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	23.	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	108.	76-114
Toluene-d8	93.	88-110
4-Bromofluorobenzene	94.	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

cc: INTEGRATED ENVIRONMENTAL SERVICES, INC. - JO ANN ORNALES

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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: DERRICK WILLIS 714-278-0992

Date Reported: 03/10/99
Date Received: 03/02/99
Laboratory No.: 99-02580-4TB

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: TB-7
Sample Matrix: Groundwater
Sample Collected By: BRYAN J. HAWES

Date Collected: 02/25/99
Date Extracted: 03/04/99
Date Analyzed: 03/04/99
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	*1
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	None Detected	µg/L	0.5	
Chloromethane	None Detected	µg/L	0.5	
2-Chlorotoluene	None Detected	µg/L	0.5	
4-Chlorotoluene	None Detected	µg/L	0.5	
Dibromochloromethane	None Detected	µg/L	0.5	
1,2-Dibromo-3-Chloropropane	None Detected	µg/L	0.5	
1,2-Dibromoethane	None Detected	µg/L	0.5	
Dibromomethane	None Detected	µg/L	0.5	
1,2-Dichlorobenzene	None Detected	µg/L	0.5	
1,3-Dichlorobenzene	None Detected	µg/L	0.5	
1,4-Dichlorobenzene	None Detected	µg/L	0.5	
Dichlorodifluoromethane	None Detected	µg/L	0.5	
1,1-Dichloroethane	None Detected	µg/L	0.5	
1,2-Dichloroethane	None Detected	µg/L	0.5	
1,1-Dichloroethene	None Detected	µg/L	0.5	
cis-1,2-Dichloroethene	None Detected	µg/L	0.5	
trans-1,2-Dichloroethene	None Detected	µg/L	0.5	
1,2-Dichloropropane	None Detected	µg/L	0.5	
1,3-Dichloropropane	None Detected	µg/L	0.5	
2,2-Dichloropropane	None Detected	µg/L	0.5	
1,1-Dichloropropene	None Detected	µg/L	0.5	
cis-1,3-Dichloropropene	None Detected	µg/L	0.5	
trans-1,3-Dichloropropene	None Detected	µg/L	0.5	
Ethyl Benzene	None Detected	µg/L	0.5	
Hexachlorobutadiene	None Detected	µg/L	0.5	
Isopropylbenzene	None Detected	µg/L	0.5	
p-Isopropyltoluene	None Detected	µg/L	0.5	
Methylene Chloride	2.9	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: DERRICK WILLIS 714-278-0992

Date Reported: 03/10/99
Date Received: 03/02/99
Laboratory No.: 99-02580-4TB

Sample Description: 280.02, ILM GROUNDWATER, TB-7, 02/25/99, BRYAN J. HAWES

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	105.	76-114
Toluene-d8	94.	88-110
4-Bromofluorobenzene	91.	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

cc: INTEGRATED ENVIRONMENTAL SERVICES, INC. - JO ANN ORNALES

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Volatile Organic Analysis
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ARCADIS GERAGHTY & MILLER, INC.
1400 N. HARBOR BLVD., SUITE 700
FULLERTON, CA 92835-4127
Attn: DERRICK WILLIS 714-278-0992

Date Reported: 03/10/99
Date Received: 03/02/99
Laboratory No.: 99-02580-5

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: RB-7
Sample Matrix: Groundwater
Sample Collected By: BRYAN J. HAWES

Date Collected: 03/02/99 @ 10:15AM
Date Extracted: 03/04/99
Date Analyzed: 03/04/99
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	*1
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	None Detected	µg/L	0.5	
Chloromethane	None Detected	µg/L	0.5	
2-Chlorotoluene	None Detected	µg/L	0.5	
4-Chlorotoluene	None Detected	µg/L	0.5	
Dibromochloromethane	None Detected	µg/L	0.5	
1,2-Dibromo-3-Chloropropane	None Detected	µg/L	0.5	
1,2-Dibromoethane	None Detected	µg/L	0.5	
Dibromomethane	None Detected	µg/L	0.5	
1,2-Dichlorobenzene	None Detected	µg/L	0.5	
1,3-Dichlorobenzene	None Detected	µg/L	0.5	
1,4-Dichlorobenzene	None Detected	µg/L	0.5	
Dichlorodifluoromethane	None Detected	µg/L	0.5	
1,1-Dichloroethane	None Detected	µg/L	0.5	
1,2-Dichloroethane	None Detected	µg/L	0.5	
1,1-Dichloroethene	None Detected	µg/L	0.5	
cis-1,2-Dichloroethene	None Detected	µg/L	0.5	
trans-1,2-Dichloroethene	None Detected	µg/L	0.5	
1,2-Dichloropropane	None Detected	µg/L	0.5	
1,3-Dichloropropane	None Detected	µg/L	0.5	
2,2-Dichloropropane	None Detected	µg/L	0.5	
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: DERRICK WILLIS 714-278-0992

Date Reported: 03/10/99
Date Received: 03/02/99
Laboratory No.: 99-02580-5

Sample Description: 280.02, ILM GROUNDWATER, RB-7, 03/02/99 @ 10:15AM, BRYAN J. HAWES

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	105.	76-114
Toluene-d8	95.	88-110
4-Bromofluorobenzene	90.	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

cc: INTEGRATED ENVIRONMENTAL SERVICES, INC. - JO ANN ORNALES

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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: DERRICK WILLIS 714-278-0992

Date Reported: 03/10/99
Date Received: 03/02/99
Laboratory No.: 99-02580-6

Project Number: 280.02
Sampling Location: ILM GROUNDWATER
Sample ID: FB-7
Sample Matrix: Groundwater
Sample Collected By: BRYAN J. HAWES

Date Collected: 03/02/99 @ 10:30AM
Date Extracted: 03/04/99
Date Analyzed: 03/04/99
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	*1
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	None Detected	µg/L	0.5	
Chloromethane	None Detected	µg/L	0.5	
2-Chlorotoluene	None Detected	µg/L	0.5	
4-Chlorotoluene	None Detected	µg/L	0.5	
Dibromochloromethane	None Detected	µg/L	0.5	
1,2-Dibromo-3-Chloropropane	None Detected	µg/L	0.5	
1,2-Dibromoethane	None Detected	µg/L	0.5	
Dibromomethane	None Detected	µg/L	0.5	
1,2-Dichlorobenzene	None Detected	µg/L	0.5	
1,3-Dichlorobenzene	None Detected	µg/L	0.5	
1,4-Dichlorobenzene	None Detected	µg/L	0.5	
Dichlorodifluoromethane	None Detected	µg/L	0.5	
1,1-Dichloroethane	None Detected	µg/L	0.5	
1,2-Dichloroethane	None Detected	µg/L	0.5	
1,1-Dichloroethene	None Detected	µg/L	0.5	
cis-1,2-Dichloroethene	None Detected	µg/L	0.5	
trans-1,2-Dichloroethene	None Detected	µg/L	0.5	
1,2-Dichloropropane	None Detected	µg/L	0.5	
1,3-Dichloropropane	None Detected	µg/L	0.5	
2,2-Dichloropropane	None Detected	µg/L	0.5	
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: DERRICK WILLIS 714-278-0992

Date Reported: 03/10/99
Date Received: 03/02/99
Laboratory No.: 99-02580-6

Sample Description: 280.02, ILM GROUNDWATER, FB-7, 03/02/99 @ 10:30AM, BRYAN J. HAWES

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	96.	88-110
4-Bromofluorobenzene	91.	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

cc: INTEGRATED ENVIRONMENTAL SERVICES, INC. - JO ANN ORNALES

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QUALITY CONTROL REPORT
(Preparation & Analysis Information)

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6

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

BOE-C6-0234577

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
DERRICK WILLIS

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
Total Iron	EPA-3010	03/03/99	PAP	EPA-6010	03/05/99	MTM
Total Lead	EPA-3020	03/03/99	PAP	EPA-7421	03/03/99	KAS
Total Mercury	EPA-7470	03/10/99	JSL	EPA-7470	03/10/99	DIW
Total Molybdenum	EPA-3010	03/03/99	PAP	EPA-6010	03/05/99	MTM
Total Nickel	EPA-3010	03/03/99	PAP	EPA-6010	03/05/99	MTM
Total Selenium	SM-3114B	03/03/99	KSV	SM-3114B	03/04/99	TMS
Total Silver	EPA-3010	03/03/99	PAP	EPA-6010	03/05/99	MTM
Total Titanium	EPA-3010	03/03/99	PAP	EPA-6010	03/05/99	MTM
Total Thallium	EPA-3010	03/03/99	PAP	EPA-7841	03/04/99	KAS
Total Vanadium	EPA-3010	03/03/99	PAP	EPA-6010	03/05/99	MTM
Total Zinc	EPA-3010	03/03/99	PAP	EPA-6010	03/05/99	MTM

Quality Control Officer

Anthony Bonanno

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BOE-C6-0234578

BC LABORATORIES

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

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6

Constituents	ICV % Found	ICV %Found Control Limits	CCV % Found Before	CCV % Found After	% Found Control Limits	CCB Readings Before	Units	CCB Readings After	Units	Method Blank Readings	Units
Dissolved Aluminum	99.	90 - 110	100.	101.	90 - 110	<50.	µg/L	<50.	µg/L	<50.	µg/L
Dissolved Antimony	102.	90 - 110	105.	108.	90 - 110	<100.	µg/L	<100.	µg/L	<100.	µg/L
Dissolved Arsenic	101.	90 - 110	105.	105.	90 - 110	< 1.	µg/L	< 1.	µg/L	< 2.	µg/L
Dissolved Barium	99.	90 - 110	102.	103.	90 - 110	<100.	µg/L	<100.	µg/L	<100.	µg/L
Dissolved Beryllium	102.	90 - 110	103.	99.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Dissolved Cadmium	101.	90 - 110	102.	104.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Dissolved Chromium	102.	90 - 110	105.	102.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Hexavalent Chromium	99.	90 - 110	99.	103.	90 - 110	< 0.002	mg/L	< 0.002	mg/L	< 2.	µg/L
Dissolved Cobalt	102.	90 - 110	104.	106.	90 - 110	<50.	µg/L	<50.	µg/L	<50.	µg/L
Dissolved Copper	102.	90 - 110	106.	108.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Dissolved Iron	103.	90 - 110	104.	101.	90 - 110	<50.	µg/L	<50.	µg/L	<50.	µg/L
Dissolved Lead	100.	90 - 110	98.	98.	90 - 110	< 5.	µg/L	< 5.	µg/L	< 5.	µg/L
Dissolved Mercury	99.	90 - 110	99.	93.	90 - 110	< 0.2	µg/L	< 0.2	µg/L	< 0.2	µg/L
Dissolved Molybdenum	103.	90 - 110	110.	108.	90 - 110	<50.	µg/L	<50.	µg/L	<50.	µg/L
Dissolved Nickel	103.	90 - 110	104.	101.	90 - 110	<50.	µg/L	<50.	µg/L	<50.	µg/L
Dissolved Selenium	97.	90 - 110	97.	99.	90 - 110	< 1.	µg/L	< 1.	µg/L	< 2.	µg/L
Dissolved Silver	98.	90 - 110	99.	105.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Dissolved Titanium	100.	90 - 110	102.	98.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Dissolved Thallium	99.	90 - 110	102.	106.	90 - 110	< 1.	µg/L	< 1.	µg/L	< 1.	µg/L
Dissolved Vanadium	100.	90 - 110	102.	104.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Dissolved Zinc	104.	90 - 110	106.	109.	90 - 110	<50.	µg/L	<50.	µg/L	<50.	µg/L
Total Aluminum	105.	90 - 110	104.	104.	90 - 110	<50.	µg/L	<50.	µg/L	<50.	µg/L
Total Antimony	102.	90 - 110	103.	104.	90 - 110	<100.	µg/L	<100.	µg/L	<100.	µg/L
Total Arsenic	101.	90 - 110	106.	109.	90 - 110	< 1.	µg/L	< 1.	µg/L	< 2.	µg/L
Total Barium	99.	90 - 110	102.	102.	90 - 110	<100.	µg/L	<100.	µg/L	<100.	µg/L
Total Beryllium	102.	90 - 110	102.	103.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Total Cadmium	101.	90 - 110	101.	102.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Total Chromium	102.	90 - 110	103.	104.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Total Cobalt	102.	90 - 110	103.	104.	90 - 110	<50.	µg/L	<50.	µg/L	<50.	µg/L
Total Copper	102.	90 - 110	104.	105.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L

BOE-C6-0234579

BC LABORATORIES

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

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6

Constituents	ICV % Found	ICV %Found Control Limits	CCV % Found Before	CCV % Found After	% Found Control Limits	CCB Readings Before	Units	CCB Readings After	Units	Method Blank Readings	Units
Total Iron	103.	90 - 110	103.	104.	90 - 110	<50.	µg/L	<50.	µg/L	<50.	µg/L
Total Lead	100.	90 - 110	105.	106.	90 - 110	< 5.	µg/L	< 5.	µg/L	< 5.	µg/L
Total Mercury	105.	90 - 110	105.	106.	90 - 110	< 0.2	µg/L	< 0.2	µg/L	< 0.2	µg/L
Total Molybdenum	103.	90 - 110	104.	107.	90 - 110	<50.	µg/L	<50.	µg/L	<50.	µg/L
Total Nickel	103.	90 - 110	103.	104.	90 - 110	<50.	µg/L	<50.	µg/L	<50.	µg/L
Total Selenium	97.	90 - 110	99.	97.	90 - 110	< 1.	µg/L	< 1.	µg/L	< 2.	µg/L
Total Silver	98.	90 - 110	95.	98.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Total Titanium	100.	90 - 110	101.	102.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Total Thallium	99.	90 - 110	102.	106.	90 - 110	< 1.	µg/L	< 1.	µg/L	< 1.	µg/L
Total Vanadium	100.	90 - 110	102.	102.	90 - 110	<10.	µg/L	<10.	µg/L	<10.	µg/L
Total Zinc	104.	90 - 110	104.	106.	90 - 110	<50.	µg/L	<50.	µg/L	<50.	µg/L

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

Quality Control Officer

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BOE-C6-0234580

B C LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Precision & Accuracy)

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6

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	2580-2-	< 50.	< 50.	427.1	411.4	408.2	408.2	µg/L	<PQL	4.	20	108.	104.	85 - 115
Dissolved Antimony	2580-2	<100.	<100.	432.4	439.7	408.2	408.2	µg/L	<PQL	2.	20	108.	110.	85 - 115
Dissolved Arsenic	2580-1	4.78	4.52	25.44	24.82	20.00	20.00	µg/L	<PQL	2.	20	103.	100.	80 - 120
Dissolved Barium	2580-2	<100.	<100.	227.7	228.8	204.1	204.1	µg/L	<PQL	0.	20	102.	103.	85 - 115
Dissolved Beryllium	2580-2	< 10.	< 10.	204.9	206.2	204.1	204.1	µg/L	<PQL	1.	20	101.	101.	85 - 115
Dissolved Cadmium	2580-2	< 10.	< 10.	207.	212.7	204.1	204.1	µg/L	<PQL	3.	20	101.	104.	85 - 115
Dissolved Chromium	2580-2	< 10.	< 10.	219.6	222.	204.1	204.1	µg/L	<PQL	1.	20	107.	108.	85 - 115
Hexavalent Chromium	2580-1	15.93	15.93	70.18	70.90	52.60	52.60	µg/L	0.	1.	10	103.	104.	85 - 115
Dissolved Cobalt	2580-2	< 50.	< 50.	214.2	218.6	204.1	204.1	µg/L	<PQL	2.	20	106.	108.	85 - 115
Dissolved Copper	2580-2	< 10.	< 10.	225.8	226.3	204.1	204.1	µg/L	<PQL	0.	20	109.	109.	85 - 115
Dissolved Iron	2580-2	< 50.	< 50.	414.3	421.8	408.2	408.2	µg/L	<PQL	2.	20	100.	102.	85 - 115
Dissolved Lead	2580-1	< 5.	< 5.	26.88	26.94	25.00	25.00	µg/L	<PQL	0.	20	108.	108.	85 - 115
Dissolved Mercury	02580-1	< 0.2	< 0.2	0.8626	0.8909	1.000	1.000	µg/L	<PQL	3.	20	85.	88.	70 - 130
Dissolved Molybdenum	2580-2	< 50.	< 50.	211.5	222.1	204.1	204.1	µg/L	<PQL	5.	20	102.	107.	85 - 115
Dissolved Nickel	2580-2	< 50.	< 50.	413.9	420.9	408.2	408.2	µg/L	<PQL	2.	20	101.	103.	85 - 115
Dissolved Selenium	2580-1	< 2.	< 2.	19.18	17.98	20.00	20.00	µg/L	<PQL	6.	20	92.	86.	80 - 120
Dissolved Silver	2580-2	< 10.	< 10.	201.4	204.3	204.1	204.1	µg/L	<PQL	1.	20	100.	102.	85 - 115
Dissolved Titanium	2580-2	< 10.	< 10.	201.1	204.3	204.1	204.1	µg/L	<PQL	2.	20	99.	101.	85 - 115
Dissolved Thallium	02580-1	< 1.	< 1.	22.96	21.95	25.00	25.00	µg/L	<PQL	5.	20	91.	87.	85 - 115
Dissolved Vanadium	2580-2	< 10.	< 10.	212.9	215.2	204.1	204.1	µg/L	<PQL	1.	20	102.	103.	85 - 115
Dissolved Zinc	2580-2	< 50.	< 50.	222.8	225.4	204.1	204.1	µg/L	<PQL	1.	20	109.	110.	85 - 115
Total Aluminum	TOTAL-2497-2	< 50.	< 50.	448.	458.2	400.0	400.0	µg/L	<PQL	2.	20	109.	111.	80 - 120
Total Antimony	TOTAL-2497-2	<100.	<100.	406.4	413.3	400.0	400.0	µg/L	<PQL	2.	20	103.	105.	80 - 120
Total Arsenic	DISS-2580-1	4.78	4.52	25.44	24.82	20.00	20.00	µg/L	<PQL	2.	20	103.	100.	80 - 120
Total Barium	TOTAL-2497-2	<100.	<100.	201.4	203.2	200.0	200.0	µg/L	<PQL	1.	20	101.	102.	80 - 120
Total Beryllium	TOTAL-2497-2	< 10.	< 10.	197.3	200.	200.0	200.0	µg/L	<PQL	1.	20	99.	100.	80 - 120
Total Cadmium	TOTAL-2497-2	< 10.	< 10.	197.3	199.9	200.0	200.0	µg/L	<PQL	1.	20	98.	100.	80 - 120
Total Chromium	TOTAL-2497-2	< 10.	< 10.	210.7	207.3	200.0	200.0	µg/L	<PQL	2.	20	104.	102.	80 - 120
Total Cobalt	TOTAL-2497-2	< 50.	< 50.	209.9	212.9	200.0	200.0	µg/L	<PQL	1.	20	106.	107.	80 - 120
Total Copper	TOTAL-2497-2	25.7	22.1	221.6	223.6	200.0	200.0	µg/L	<PQL	1.	20	98.	99.	80 - 120

BOE-C6-0234581

BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Precision & Accuracy)

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6

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 Iron	TOTAL-2497-2	< 50.	< 50.	419.7	422.5	400.0	400.0	µg/L	<PQL	1.	20	102.	102.	80 - 120
Total Lead	TOTAL-2580-5	< 5.	< 5.	20.35	19.35	20.00	20.00	µg/L	<PQL	5.	20	98.	93.	80 - 120
Total Mercury	TOTAL-02580-1	0.1165	0.1057	1.156	1.2	1.000	1.000	µg/L	<PQL	4.	20	104.	108.	70 - 130
Total Molybdenum	TOTAL-2497-2	< 50.	< 50.	216.2	218.1	200.0	200.0	µg/L	<PQL	1.	20	107.	108.	80 - 120
Total Nickel	TOTAL-2497-2	< 50.	< 50.	406.7	410.4	400.0	400.0	µg/L	<PQL	1.	20	101.	102.	80 - 120
Total Selenium	DISS-2580-1	< 2.	< 2.	19.18	17.98	20.00	20.00	µg/L	<PQL	6.	20	92.	86.	80 - 120
Total Silver	TOTAL-2497-2	< 10.	< 10.	195.3	196.2	200.0	200.0	µg/L	<PQL	0.	20	98.	99.	80 - 120
Total Titanium	TOTAL-2497-2	< 10.	< 10.	197.9	201.3	200.0	200.0	µg/L	<PQL	2.	20	99.	100.	80 - 120
Total Thallium	TOTAL-02580-5	< 1.	< 1.	22.02	22.71	20.00	20.00	µg/L	<PQL	3.	20	110.	114.	80 - 120
Total Vanadium	TOTAL-2497-2	< 10.	< 10.	201.7	201.2	200.0	200.0	µg/L	<PQL	0.	20	100.	100.	80 - 120
Total Zinc	TOTAL-2497-2	< 50.	< 50.	211.	214.	200.0	200.0	µg/L	<PQL	1.	20	104.	106.	80 - 120

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

Quality Control Officer

Anthony Bonanno

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BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Laboratory Control Sample)

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Dissolved Aluminum	LFB#1-0129	433.	400.	µg/L	108.	85 - 115
Dissolved Antimony	LFB#1-0129	428.	400.	µg/L	107.	85 - 115
Dissolved Arsenic	LCSW2-03-0	10.35	10.	µg/L	104.	85 - 115
Dissolved Barium	LFB#1-0129	199.8	200.	µg/L	100.	85 - 115
Dissolved Beryllium	LFB#1-0129	196.5	200.	µg/L	98.	85 - 115
Dissolved Cadmium	LFB#1-0129	204.	200.	µg/L	102.	85 - 115
Dissolved Chromium	LFB#1-0129	214.8	200.	µg/L	107.	85 - 115
Hexavalent Chromium	LCSW-3-3-9	1004.	1000.	µg/L	100.	85 - 115
Dissolved Cobalt	LFB#1-0129	212.7	200.	µg/L	106.	85 - 115
Dissolved Copper	LFB#1-0129	213.5	200.	µg/L	107.	85 - 115
Dissolved Iron	LFB#1-0129	404.6	400.	µg/L	101.	85 - 115
Dissolved Lead	LFB-25-LCS	25.64	25.	µg/L	103.	85 - 115
Dissolved Mercury	LCSW1-03-1	0.9306	1.0	µg/L	93.	85 - 115
Dissolved Molybdenum	LFB#1-0129	214.9	200.	µg/L	107.	85 - 115
Dissolved Nickel	LFB#1-0129	412.6	400.	µg/L	103.	85 - 115
Dissolved Selenium	LCSW2-03-0	9.32	10.	µg/L	93.	85 - 115
Dissolved Silver	LFB#1-0129	202.9	200.	µg/L	101.	85 - 115
Dissolved Titanium	LFB#1-0129	198.4	200.	µg/L	99.	85 - 115
Dissolved Thallium	LFB-25-LCS	28.58	25.	µg/L	114.	85 - 115
Dissolved Vanadium	LFB#1-0129	203.7	200.	µg/L	102.	85 - 115
Dissolved Zinc	LFB#1-0129	216.8	200.	µg/L	108.	85 - 115
Total Aluminum	TOTAL-LCSW	448.	400.	µg/L	112.	80 - 120
Total Antimony	TOTAL-LCSW	414.	400.	µg/L	104.	80 - 120
Total Arsenic	LCSW2-03-0	10.35	10.	µg/L	104.	85 - 115
Total Barium	TOTAL-LCSW	203.2	200.	µg/L	102.	80 - 120
Total Beryllium	TOTAL-LCSW	199.9	200.	µg/L	100.	80 - 120
Total Cadmium	TOTAL-LCSW	200.9	200.	µg/L	100.	80 - 120
Total Chromium	TOTAL-LCSW	204.7	200.	µg/L	102.	80 - 120
Total Cobalt	TOTAL-LCSW	211.7	200.	µg/L	106.	80 - 120
Total Copper	TOTAL-LCSW	196.5	200.	µg/L	98.	80 - 120

BOE-C6-0234583

BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Laboratory Control Sample)

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Total Iron	TOTAL-LCSW	417.3	400.	µg/L	104.	80 - 120
Total Lead	TOTAL-LCSW	19.27	20.	µg/L	96.	80 - 120
Total Mercury	LCSW1-03-1	0.9938	1.0	µg/L	99.	85 - 115
Total Molybdenum	TOTAL-LCSW	216.1	200.	µg/L	108.	80 - 120
Total Nickel	TOTAL-LCSW	410.6	400.	µg/L	103.	80 - 120
Total Selenium	LCSW2-03-0	9.32	10.	µg/L	93.	85 - 115
Total Silver	TOTAL-LCSW	192.7	200.	µg/L	96.	80 - 120
Total Titanium	TOTAL-LCSW	201.6	200.	µg/L	101.	80 - 120
Total Thallium	TOTAL-LCSW	20.81	20.	µg/L	104.	80 - 120
Total Vanadium	TOTAL-LCSW	199.6	200.	µg/L	100.	80 - 120
Total Zinc	TOTAL-LCSW	211.7	200.	µg/L	106.	80 - 120

Quality Control Officer

Anthony Bonanno

4100 Atlas Ct. • Bakersfield, CA 933 (805) 327-4911 • FAX (805) 327-1918

LABORATORIES

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

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-5, 99-02580-6

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
Stoddard / White Spirits	3510	03/05/99	YMP	8015M	03/07/99	DDS
JP 4	3510	03/05/99	YMP	8015M	03/07/99	DDS
JP 5	3510	03/05/99	YMP	8015M	03/07/99	DDS
JP 6	3510	03/05/99	YMP	8015M	03/07/99	DDS
JP 8	3510	03/05/99	YMP	8015M	03/07/99	DDS
Kerosene / Jet Fuel	3510	03/05/99	YMP	8015M	03/07/99	DDS
Diesel	3510	03/05/99	YMP	8015M	03/07/99	DDS
Crude Oil	3510	03/05/99	YMP	8015M	03/07/99	DDS
Hydraulic Oil	3510	03/05/99	YMP	8015M	03/07/99	DDS
Waste Oil	3510	03/05/99	YMP	8015M	03/07/99	DDS
Motor Oil	3510	03/05/99	YMP	8015M	03/07/99	DDS

Quality Control Officer

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BOE-C6-0234585

BC LABORATORIES

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QUALITY CONTROL REPORT
(Instrumental & Blank Parameters)
METHOD 8015M TPH FUEL FINGER PRINT

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-5, 99-02580-6

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	36.	%

Quality Control Officer

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BOE-C6-0234586

BC LABORATORIES

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QUALITY CONTROL REPORT
(Precision & Accuracy)
METHOD 8015M TPH FUEL FINGER PRINT

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-5, 99-02580-6

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.	2220.	2175.	2500.	2500.	µg/L	2.	30	89.	87.	47 - 129
Surrogate % Recovery	MS/MSD									44.	36.	32 - 143

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

Quality Control Officer

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BC LABORATORIES

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QUALITY CONTROL REPORT
(Laboratory Control Sample)
METHOD 8015M TPH FUEL FINGER PRINT

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-5, 99-02580-6

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Diesel	LCSW	2165.	2500.	µg/L	87.	55 - 128
Surrogate % Recovery	LCSW				47.	32 - 143

Quality Control Officer

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BOE-C6-0234588

LABORATORIES

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QUALITY CONTROL REPORT
(Preparation & Analysis Information)
Method 8260

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6, 99-02580-4TB

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
Method 8260 compounds	EPA-5030	03/04/99	SNM	EPA-8260	03/04/99	SNM

Quality Control Officer

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BC LABORATORIES

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QUALITY CONTROL REPORT
(Instrumental & Blank Parameters)
Method 8260

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6, 99-02580-4TB

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

BOE-C6-0234590

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
DERRICK WILLIS

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6, 99-02580-4TB

Constituents	Method Blank Readings	Units
trans-1,2-Dichloroethene	< 0.5	µg/L
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

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BC LABORATORIES

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(Instrumental & Blank Parameters)
Method 8260

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6, 99-02580-4TB

Constituents	Method Blank Readings	Units
Total Xylenes	< 1.	µg/L
1,2-Dichloroethane-d4	103.	%
Toluene-d8	95.	%
4-Bromofluorobenzene	92.	%

Quality Control Officer

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BC LABORATORIES

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QUALITY CONTROL REPORT
(Precision & Accuracy)
Method 8260

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6, 99-02580-4TB

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	2582-1	< 0.5	28.17	27.72	25.00	25.00	µg/L	2.	20	113.	111.	80 - 120
Bromodichloromethane	2582-1	< 0.5	23.92	23.46	25.00	25.00	µg/L	2.	20	96.	94.	80 - 120
Chlorobenzene	2582-1	< 0.5	26.91	25.77	25.00	25.00	µg/L	4.	20	108.	103.	80 - 120
Chloroethane	2582-1	< 0.5	29.60	28.73	25.00	25.00	µg/L	3.	20	118.	115.	80 - 120
1,1-Dichloroethane	2582-1	< 0.5	27.63	27.27	25.00	25.00	µg/L	1.	20	110.	109.	80 - 120
1,1-Dichloroethene	2582-1	< 0.5	29.34	28.60	25.00	25.00	µg/L	3.	20	117.	114.	80 - 120
Toluene	2582-1	< 0.5	26.05	25.63	25.00	25.00	µg/L	2.	20	104.	103.	80 - 120
Trichloroethene	2582-1	< 3.7	29.22	28.40	25.00	25.00	µg/L	3.	20	102.	99.	80 - 120

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

Quality Control Officer

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BOE-C6-0234593

BC LABORATORIES

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QUALITY CONTROL REPORT
(Laboratory Control Sample)
Method 8260

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

Date of Report: 03/25/99
Sample Matrix: Groundwater

Samples Affected: 99-02580-1 - 99-02580-3
99-02580-5 - 99-02580-6, 99-02580-4TB

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Benzene	LCSW	26.64	25.00	µg/L	107.	80 - 120
Bromodichloromethane	LCSW	23.51	25.00	µg/L	94.	80 - 120
Chlorobenzene	LCSW	24.56	25.00	µg/L	98.	80 - 120
Chloroethane	LCSW	27.69	25.00	µg/L	111.	80 - 120
1,1-Dichloroethane	LCSW	26.35	25.00	µg/L	105.	80 - 120
1,1-Dichloroethene	LCSW	26.67	25.00	µg/L	107.	80 - 120
Toluene	LCSW	23.87	25.00	µg/L	95.	80 - 120
Trichloroethene	LCSW	24.27	25.00	µg/L	97.	80 - 120

Quality Control Officer

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