Los Alamos
NATIONAL LABORATORY

Risk Reduction & Environmental Stewardship Division
Water Quality & Hydrology Group (RRES-WQH)
PO Box 1663, MS K497
Los Alamos, New Mexico 87545
(505) 665-1859/Fax: (505) 665-9344

Date: February 6, 2003
Refer to: RRES-WQH: 03-032

Mr. Curt Frischkorn
Ground Water Protection Bureau
New Mexico Environment Department
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, New Mexico 87502

Mr. Bret Lucas
Surface Water Quality Bureau
New Mexico Environment Department
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, New Mexico 87502

SUBJECT: NOTICE OF INTENT TO DISCHARGE (NOI) GROUNDWATER FROM PERMEABLE REACTIVE BARRIER (PRB) INSTALLATION

Dear Messrs. Frischkorn and Lucas:

Enclosed is a Notice of Intent to Discharge (NOI) that has been prepared for submittal to the New Mexico Environmental Department (NMED) pursuant to 20 NMAC 6.2.1201 of the New Mexico Water Quality Control Commission (NMWQCC) Regulations. This NOI is being submitted to provide coverage for the discharge of groundwater from construction dewatering activities during the installation of the Permeable Reactive Barrier (PRB) in Mortandad Canyon.

Please contact Mark Haagenstad (505) 665-2014 or Mike Saladen (505) 665-6085 should you have questions or require additional information.

Sincerely,

Steven R. Rae
Group Leader
Water Quality & Hydrology Group

SR:MH/tml

TA-03 John

COPY

Enclosures: a/s

Cy: J. Young, NMED/HWB, Santa Fe, New Mexico, w/enc.
S. Yanicak, NMED/DOE/OB, w/enc., MS J993
J. Vozella, DOE/OLASO, w/o enc., MS A316
G. Turner, DOE/OLASO, w/enc., MS A316
B. Ramsey, RRES-DO, w/o enc., MS J591
K. Hargis, RRES-DO, w/o enc., MS J591
D. Stavert, RRES-EP, w/o enc., MS J591
A. Pratt, RRES-DO, w/o enc., MS J591
M. Saladen, RRES-WQH, w/o enc., MS K497
M. Haagenstad, RRES-WQH, w/enc., MS K497
S. Veenis, RRES-WQH, w/enc., MS K497
RRES-WQH File, w/enc., MS K497
IM-5, w/enc., MS A150

FEB 2003

NOTICE OF INTENT

1. **Name and address of facility making the discharge.**

Los Alamos National Laboratory
Risk Reduction and Environmental Stewardship – Environmental Characterization and Remediation Group (RRES-ECR)
P.O. Box 1663
Los Alamos, New Mexico 87545

2. **Location of the discharge (In Township, Range and Section, if available).**

The location for the discharge of groundwater from construction de-watering activities during installation of the Permeable Reactive Barrier (PRB) in Mortandad Canyon is:
Latitude: 35°51'49"
Longitude: 106°16'39"

3. **The means of discharge. (To lagoon, Flowing stream, Water course, Arroyo, Septic tank, other).**

Groundwater will be discharged less than 200 feet directly upstream from the PRB in Mortandad Canyon after the PRB has been installed and is operational. Existing Best Management Practices (BMPs) will be utilized to minimize/eliminate erosion impacts.

4. **The estimated concentration of contaminants (if any) in the discharge.**

Groundwater from the dewatering activities at the PRB construction site is characterized by the following analytical data (See ENCLOSURE 1, ENCLOSURE 2, and ENCLOSURE 3):

- ENCLOSURE 1: Analytical data from groundwater samples collected at the PRB (06/2001).
- ENCLOSURE 2: Analytical data from the TA-50 RLWTF, See Discharge Monitoring Report (DMR) for NPDES Outfall 051 (12/2002).
- ENCLOSURE 3: Analytical data (03/2002) from sampling of MCO-5 alluvial groundwater monitoring well (approximately 150 feet downstream from the PRB in Mortandad Canyon).

5. **The type of operation from which the discharge is derived.**

The discharge is derived from trench de-watering activities during the Mortandad Canyon PRB construction site. The Mortandad Canyon PRB is an in-situ bioremediation permeable reactive barrier for treatment of alluvial groundwater.

6. **The estimated flow to be discharged per day.**

Approximately 40,000 gallons

7. **The estimated depth to Ground-Water (if available)**

Approximately 30 feet.

Signed: Steven Rae Date: Feb. 6, 2003

Steven Rae, Group Leader
Risk Reduction and Environmental Stewardship Division
Water Quality and Hydrology Group

ENCLOSURE 1

Analytical Summary:

RANGE OF RESULTS FOR WATER SAMPLING:

Suite	Ind Test Name	Matrix	Report Units	Max Result	Min Result	Flag	Field ID
RADCHEM-AS	Americium-241	water	pCi/L	9.7	3.2		PRB-2-W1
RADCHEM-LS	Tritium	water	pCi/L	6500	6100		PRB-2-W2
RADCHEM-AS	Plutonium-238	water	pCi/L	3.41	0.87		PRB-2-W1
RADCHEM-AS	Plutonium-239	water	pCi/L	10.6	2.52		PRB-2-W1
RADCHEM-06	Strontium-90	water	pCi/L	81	50.1		PRB-2-W1

PCi/L = picoCuries per liter

Sr-90 ANALYSIS RESULTS SUMMARY

Method ASTM D5811-95

Lab Name: Paragon Analytics, Inc.

Date Collected: 06/05/2001

Client Name: IT Corporation

Date Analyzed : 06/17/2001

Client Project ID: PRB PHASE1

Sample Matrix : Water

Lab Sample ID Series: 01-06-031

Count Duration: 1000 Min.

Analyzed by: JE

Client Sample ID	Lab Sample ID	Sr-90 (pCi/l)
PRB-3-W3	01-06-031-04	50.1 ± 9.1
PRB-2-W1	01-06-031-06	81 ± 15
PRB 3-W3	01-06-031-D1	51.0 ± 9.2

Reported Uncertainties are the Estimated Total Propagated Uncertainties (2σ) See PAI SOP743R3 for details of TPU determinations.

Reported activities are the calculated net activities, not truncated or censored by an *a priori* detection limit estimate. Sample results should be compared to the decision level calculated from the appropriate blank.

These samples were prepared using PAI SOP707R4 and analyzed using PAI SOP724R5.

Remarks:

Sample 01-06-031-D1 is a duplicate of 01-06-031-04.

Sr-90 ANALYSIS MDA SUMMARY

Method ASTM D5811-95

Lab Name: Paragon Analytics, Inc.

Date Collected: 06/05/2001

Client Name: IT Corporation

Date Analyzed : 06/17/2001

Client Project ID: PRB PHASE1

Sample Matrix : Water

Lab Sample ID Series: 01-06-031

Count Duration: 1000 Min.

Analyzed by: JE

Client Sample ID	Lab Sample ID	Sr-90 MDA (pCi/l)
PRB-3-W3	01-06-031-04	0.65
PRB-2-W1	01-06-031-06	0.70
PRB 3-W3	01-06-031-D1	0.67

Remarks:

Sample 01-06-031-D1 is a duplicate of 01-06-031-04.

Sample Results Summary

Client Name: IT Corporation
Client Project Name: PRB PHASE1
Client Project Number:

Laboratory Name: Paragon Analytics, Inc.
PAI Work Order: 0106031

Reported on: Tuesday, June 19, 2001 14:25:45

Lab Sample ID	Client Sample ID	Test	Nuclide	Result +/- 2 s TPU	MDC	Units	Matrix	Prep Batch	Date Analyzed	Flags
0106031-4	PRB-3-W3	PU-ISO	Pu-238	0.87 +/- 0.16	0.041	pCi/L	Water	AS04858	6/14/2001	
0106031-4	PRB-3-W3	PU-ISO	Pu-239	2.52 +/- 0.38	0.033	pCi/L	Water	AS04858	6/14/2001	
0106031-6	PRB-2-W1	PU-ISO	Pu-238	3.41 +/- 0.49	0.035	pCi/L	Water	AS04858	6/14/2001	
0106031-6	PRB-2-W1	PU-ISO	Pu-239	10.6 +/- 1.4	0.015	pCi/L	Water	AS04858	6/14/2001	

Comments:

Data Package ID: *PUW0106031-1*

Qualifiers/Flags:

U - Result is less than the sample specific MDC.
B - Result is less than Requested MDC, greater than sample specific MDC.
W - Chemical Yield outside default limits.

Abbreviations:

TPU - Total Propagated Uncertainty (see PAI SOP 743)
MDC - Minimum Detectable Concentration (see PAI SOP 769)

Sample Results Summary

Client Name: IT Corporation
Client Project Name: PRB PHASE1
Client Project Number:

Laboratory Name: Paragon Analytics, Inc.
PAI Work Order: 0106031

Page: 1 of 1
Reported on: Wednesday, June 20, 2001 10:51:28

Lab Sample ID	Client Sample ID	Test	Nuclide	Result +/- 2 s TPU	MDC	Units	Matrix	Prep Batch	Date Analyzed	Flags
0106031-4	PRB-3-W3	AM-241	Am-241	3.20 +/- 0.48	0.037	pCi/L	Water	AS04858	6/18/2001	
0106031-6	PRB-2-W1	AM-241	Am-241	9.7 +/- 1.6	0.11	pCi/L	Water	AS04858	6/19/2001	

Comments:

Data Package ID: *AMW0106031-1*

Qualifiers/Flags:

U - Result is less than the sample specific MDC.
LT - Result is less than Requested MDC, greater than sample specific MDC.
Y2 - Chemical Yield outside default limits.

Abbreviations:

TPU - Total Propagated Uncertainty (see PAI SOP 743)
MDC - Minimum Detectable Concentration (see PAI SOP 709)

Sample Results Summary

Client Name: IT Corporation
Client Project Name: PRB PHASE1
Client Project Number:

Laboratory Name: Paragon Analytics, Inc.
PAI Work Order: 0106031

Page: 1 of 1
Reported on: Tuesday, June 19, 2001 10:01:29

Lab Sample ID	Client Sample ID	Test	Nuclide	Result +/- 2 s TPU	MDC	Units	Matrix	Prep Batch	Date Analyzed	Flags
0106031-5	PRB-3-W4	TRITIUM	H-3	6100 +/- 840	340	pCi/l	Water	LS00859	6/13/2001	
0106031-7	PRB-2-W2	TRITIUM	H-3	6500 +/- 890	340	pCi/l	Water	LS00859	6/13/2001	

Comments:

Data Package ID: *H3W0106031-1*

Qualifiers/Flags:

U - Result is less than the sample specific MDC.
LT - Result is less than Requested MDC, greater than sample specific MDC.
Y2 - Chemical Yield outside default limits.

Abbreviations:

TPU - Total Propagated Uncertainty (see PAI SOP 743)
MDC - Minimum Detectable Concentration (see PAI SOP 709)

Gamma Spectroscopy Results

Method PAI SOP 713R5

Sample Results

Client Name: IT Corporation
Client Project Name: PRB PHASE1
Client Project Number:

Reported on: Friday, June 15, 2001 15:37:08
Laboratory Name: Paragon Analytics, Inc.
PAI Work Order: 0106031

Field ID: PRB-3-W3
Lab ID: 0106031-4

Sample Matrix: Water
Date Prepared: 08-Jun-01
Prep SOP: PAI 739R4
Prep Batch: GS00937

Date Collected: 05-Jun-01
Date Analyzed: 11-Jun-01
Analytical SOP: PAI 713R5
Spectrum Code: 010068D03A

Final Aliquot: 1.000
Aliquot Units: L
Report Basis: As Received
Count Time (min.): 266.67

Target Nuclide	Result +/- 2 s TPU	MDC	Reporting Units	Lab Qualifier
Ac-228	20 +/- 18	28	pCi/L	U
Ag-110m	-2.6 +/- 4.6	8.3	pCi/L	U
Al-26	-0.3 +/- 6.0	11	pCi/L	U
Am-241	-6 +/- 26	44	pCi/L	U
Be-7	10 +/- 40	68	pCi/L	U
Bi-212	0 +/- 60	100	pCi/L	U
Bi-214	20 +/- 15	24	pCi/L	U
Cd-109	79 +/- 96	160	pCi/L	U
Ce-139	1.4 +/- 3.4	5.7	pCi/L	U
Ce-144	-13 +/- 24	42	pCi/L	U
Co-56	7.9 +/- 8.6	14	pCi/L	U
Co-57	0.1 +/- 2.7	4.7	pCi/L	U
Co-58	4.1 +/- 4.5	7.3	pCi/L	U
Co-60	-3.4 +/- 5.9	11	pCi/L	U
Cr-51	-8 +/- 38	67	pCi/L	U
Cs-134	-0.9 +/- 5.2	9.1	pCi/L	U
Cs-137	1.5 +/- 5.1	8.7	pCi/L	U
Eu-152	-16 +/- 36	67	pCi/L	U
Eu-154	7 +/- 29	49	pCi/L	U
Eu-155	-1 +/- 12	21	pCi/L	U
Fe-59	5 +/- 10	17	pCi/L	U
I-131	-2.1 +/- 7.7	13	pCi/L	U
K-40	-12 +/- 93	160	pCi/L	U
Mn-54	-3.2 +/- 4.9	9.0	pCi/L	U
Na-22	1.5 +/- 5.9	10	pCi/L	U
Nb-94	0.5 +/- 4.5	7.8	pCi/L	U

Data Package ID: *GSW0106031-1*

Gamma Spectroscopy Results

Method PAI SOP 713R5

Sample Results

Reported on: Friday, June 15, 2001 15:37:08

Client Name: IT Corporation

Client Project Name: PRB PHASE1

Client Project Number:

Laboratory Name: Paragon Analytics, Inc.

PAI Work Order: 0106031

Field ID: PRB-3-W3

Lab ID: 0106031-4

Sample Matrix: Water

Date Prepared: 08-Jun-01

Prep SOP: PAI 739R4

Prep Batch: GS00937

Date Collected: 05-Jun-01

Date Analyzed: 11-Jun-01

Analytical SOP: PAI 713R5

Spectrum Code: 010068D03A

Final Aliquot: 1.000

Aliquot Units: L

Report Basis: As Received

Count Time (min.): 266.67

Target Nuclide	Result +/- 2 s TPU	MDC	Reporting Units	Lab Qualifier
Nb-95	-1.9 +/- 5.0	9.0	pCi/L	U
Pa-234m	290 +/- 820	1400	pCi/L	U
Pb-212	11.3 +/- 9.3	15	pCi/L	U
Pb-214	25 +/- 13	22	pCi/L	
Ru-106	-32 +/- 45	81	pCi/L	U
Sb-124	7.2 +/- 5.2	7.9	pCi/L	U
Sb-125	-4 +/- 12	22	pCi/L	U
Sc-46	0.7 +/- 4.9	8.4	pCi/L	U
Sr-85	-25 +/- 10	18	pCi/L	U
Th-227	8 +/- 40	66	pCi/L	U
Th-234	-7 +/- 97	160	pCi/L	U
Tl-208	4.6 +/- 6.1	9.9	pCi/L	U
U-235	-1 +/- 39	66	pCi/L	U
Zn-65	-13 +/- 11	22	pCi/L	U

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC or less than the associated TPU.

Y2 - Chemical Yield outside default limits.

* - Duplicate DER not within control limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

SQ - Spectral quality prevents accurate quantitation.

SI - Nuclide identification and/or quantitation is tentative.

TI - Nuclide identification is tentative.

Abbreviations:

TPU - Total Propagated Uncertainty (see PAI SOP 743)

MDC - Minimum Detectable Concentration (see PAI SOP 709)

Data Package ID: *GSW0106031-1*

Gamma Spectroscopy Results

Method PAI SOP 713R5

Sample Duplicate Results

Reported on: Friday, June 15, 2001 15:37:08

Client Name: IT Corporation
Client Project Name: PRB PHASE1
Client Project Number:

Laboratory Name: Paragon Analytics, Inc.
PAI Work Order: 0106031

Field ID: PRB-3-W3
Lab ID: 0106031-4-D1

Sample Matrix: Water
Date Prepared: 08-Jun-01
Prep SOP: PAI 739R4
Prep Batch: GS00937

Date Collected: 05-Jun-01
Date Analyzed: 12-Jun-01
Analytical SOP: PAI 713R5
Spectrum Code: 010208d02a

Final Aliquot: 1.000
Aliquot Units: L
Report Basis: As Received
Count Time (min.): 266.67

Target Nuclide	Result +/- 2 s TPU	MDC	Reporting Units	Lab Qualifier
Ac-228	27 +/- 19	28	pCi/L	U
Ag-110m	1.0 +/- 5.0	8.5	pCi/L	U
Al-26	2.3 +/- 4.9	8.5	pCi/L	U
Am-241	9 +/- 36	60	pCi/L	U
Be-7	-15 +/- 37	65	pCi/L	U
Bi-212	21 +/- 59	100	pCi/L	U
Bi-214	20 +/- 18	29	pCi/L	U
Cd-109	-60 +/- 130	220	pCi/L	U
Ce-139	0.9 +/- 3.3	5.5	pCi/L	U
Ce-144	9 +/- 24	40	pCi/L	U
Co-56	5.7 +/- 8.1	13	pCi/L	U
Co-57	-2.2 +/- 3.1	5.4	pCi/L	U
Co-58	-0.9 +/- 4.3	7.8	pCi/L	U
Co-60	-2.8 +/- 5.1	9.6	pCi/L	U
Cr-51	8 +/- 41	70	pCi/L	U
Cs-134	-3.1 +/- 4.6	8.2	pCi/L	U
Cs-137	1.6 +/- 5.0	8.6	pCi/L	U
Eu-152	26 +/- 31	50	pCi/L	U
Eu-154	-5 +/- 27	48	pCi/L	U
Eu-155	-1 +/- 14	24	pCi/L	U
Fe-59	-1.0 +/- 9.2	17	pCi/L	U
I-131	1.4 +/- 7.2	12	pCi/L	U
K-40	32 +/- 86	150	pCi/L	U
Mn-54	2.9 +/- 4.7	7.9	pCi/L	U
Na-22	5.5 +/- 5.7	9.1	pCi/L	U

Data Package ID: *GSW0106031-1*

Gamma Spectroscopy Results

Method PAI SOP 713R5

Sample Duplicate Results

Reported on: Friday, June 15, 2001 15:37:08

Client Name: IT Corporation
Client Project Name: PRB PHASE1
Client Project Number:

Laboratory Name: Paragon Analytics, Inc.
PAI Work Order: 0106031

Field ID: PRB-3-W3
Lab ID: 0106031-4-D1

Sample Matrix: Water
Date Prepared: 08-Jun-01
Prep SOP: PAI 739R4
Prep Batch: GS00937

Date Collected: 05-Jun-01
Date Analyzed: 12-Jun-01
Analytical SOP: PAI 713R5
Spectrum Code: 010208d02a

Final Aliquot: 1.000
Aliquot Units: L
Report Basis: As Received
Count Time (min.): 266.67

Target Nuclide	Result +/- 2 s TPU	MDC	Reporting Units	Lab Qualifier
Nb-94	-2.2 +/- 4.8	8.7	pCi/L	U
Nb-95	-5.3 +/- 5.0	9.4	pCi/L	U
Pa-234m	-150 +/- 810	1500	pCi/L	U
Pb-212	10.1 +/- 9.9	16	pCi/L	U
Pb-214	18 +/- 12	19	pCi/L	U
Ru-106	-32 +/- 40	73	pCi/L	U
Sb-124	1.8 +/- 6.9	12	pCi/L	U
Sb-125	-2 +/- 13	22	pCi/L	U
Sc-46	-1.0 +/- 4.4	8.0	pCi/L	U
Sr-85	-15.6 +/- 7.8	14	pCi/L	U
Th-227	-10 +/- 45	76	pCi/L	U
Th-234	0 +/- 100	170	pCi/L	U
Tl-208	3.1 +/- 7.8	13	pCi/L	U
U-235	0 +/- 35	59	pCi/L	U
Zn-65	-10 +/- 11	21	pCi/L	U

Data Package ID: *GSW0106031-1*

Gamma Spectroscopy Results

Method PAI SOP 713R5

Sample Duplicate Results

Reported on: Friday, June 15, 2001 15:37:08

Client Name: IT Corporation
Client Project Name: PRB PHASE1
Client Project Number:

Laboratory Name: Paragon Analytics, Inc.
PAI Work Order: 0106031

Field ID: PRB-3-W3	Sample Matrix: Water	Date Collected: 05-Jun-01	Final Aliquot: 1.000
Lab ID: 0106031-4-D1	Date Prepared: 08-Jun-01	Date Analyzed: 12-Jun-01	Aliquot Units: L
	Prep SOP: PAI 739R4	Analytical SOP: PAI 713R5	Report Basis: As Received
	Prep Batch: GS00937	Spectrum Code: 010208d02a	Count Time (min.): 266.67

Target Nuclide	Result +/- 2 s TPU	MDC	Reporting Units	Lab Qualifier

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC or less than the associated TPU.
Y2 - Chemical Yield outside default limits.
* - Duplicate DER not within control limits.
LT - Result is less than Requested MDC, greater than sample specific MDC.
SQ - Spectral quality prevents accurate quantitation.
SI - Nuclide identification and/or quantitation is tentative.
TI - Nuclide identification is tentative.

Abbreviations:

TPU - Total Propagated Uncertainty (see PAI SOP 743)
MDC - Minimum Detectable Concentration (see PAI SOP 709)

Data Package ID: *GSW0106031-1*

Gamma Spectroscopy Results

Method PAI SOP 713R5

Sample Results

Client Name: IT Corporation
Client Project Name: PRB PHASE1
Client Project Number:

Reported on: Friday, June 15, 2001 15:37:09
Laboratory Name: Paragon Analytics, Inc.
PAI Work Order: 0106031

Field ID: PRB-2-W1
Lab ID: 0106031-6

Sample Matrix: Water
Date Prepared: 08-Jun-01
Prep SOP: PAI 739R4
Prep Batch: GS00937

Date Collected: 05-Jun-01
Date Analyzed: 11-Jun-01
Analytical SOP: PAI 713R5
Spectrum Code: 010300D07A

Final Aliquot: 1.000
Aliquot Units: L
Report Basis: As Received
Count Time (min.): 266.67

Target Nuclide	Result +/- 2 s TPU	MDC	Reporting Units	Lab Qualifier
Ac-228	22 +/- 19	29	pCi/L	U
Ag-110m	-0.2 +/- 5.7	12	pCi/L	U
Al-26	-5.8 +/- 8.7	17	pCi/L	U
Am-241	6.3 +/- 7.1	11	pCi/L	U
Be-7	10 +/- 38	64	pCi/L	U
Bi-212	14 +/- 62	110	pCi/L	U
Bi-214	40 +/- 17	26	pCi/L	
Cd-109	21 +/- 54	91	pCi/L	U
Ce-139	-1.9 +/- 2.8	4.9	pCi/L	U
Ce-144	-6 +/- 19	33	pCi/L	U
Co-56	2 +/- 10	18	pCi/L	U
Co-57	-0.7 +/- 2.3	4.1	pCi/L	U
Co-58	6.1 +/- 5.4	8.4	pCi/L	U
Co-60	-0.4 +/- 6.5	12	pCi/L	U
Cr-51	10 +/- 36	61	pCi/L	U
Cs-134	-3.2 +/- 5.3	9.5	pCi/L	U
Cs-137	5.6 +/- 5.6	8.9	pCi/L	U
Eu-152	10 +/- 41	72	pCi/L	U
Eu-154	-2 +/- 34	60	pCi/L	U
Eu-155	-0.4 +/- 9.5	16	pCi/L	U
Fe-59	2 +/- 11	20	pCi/L	U
I-131	3.5 +/- 7.7	13	pCi/L	U
K-40	90 +/- 120	190	pCi/L	U
Mn-54	1.6 +/- 6.1	10	pCi/L	U
Na-22	7.4 +/- 7.3	11	pCi/L	U
Nb-94	-1.0 +/- 4.9	8.8	pCi/L	U

Data Package ID: *GSW0106031-1*

Gamma Spectroscopy Results

Method PAI SOP 713R5

Sample Results

Reported on: Friday, June 15, 2001 15:37:08

Client Name: IT Corporation
Client Project Name: PRB PHASE1
Client Project Number:

Laboratory Name: Paragon Analytics, Inc.
PAI Work Order: 0106031

Field ID: PRB-2-W1
Lab ID: 0106031-6

Sample Matrix: Water
Date Prepared: 08-Jun-01
Prep SOP: PAI 739R4
Prep Batch: GS00937

Date Collected: 05-Jun-01
Date Analyzed: 11-Jun-01
Analytical SOP: PAI 713R5
Spectrum Code: 010300D07A

Final Aliquot: 1.000
Aliquot Units: L
Report Basis: As Received
Count Time (min.): 266.67

Target Nuclide	Result +/- 2 s TPU	MDC	Reporting Units	Lab Qualifier
Nb-95	4.7 +/- 5.6	9.1	pCi/L	U
Pa-234m	560 +/- 960	1600	pCi/L	U
Pb-212	15.8 +/- 10.0	15	pCi/L	
Pb-214	29 +/- 12	20	pCi/L	
Ru-106	-5 +/- 46	82	pCi/L	U
Sb-124	1.5 +/- 5.6	9.5	pCi/L	U
Sb-125	1 +/- 12	21	pCi/L	U
Sc-46	-2.6 +/- 5.1	9.5	pCi/L	U
Sr-85	-18.0 +/- 8.7	16	pCi/L	U
Th-227	10 +/- 37	61	pCi/L	U
Th-234	11 +/- 58	97	pCi/L	U
Tl-208	4.3 +/- 6.7	11	pCi/L	U
U-235	0 +/- 24	46	pCi/L	U
Zn-65	-4 +/- 23	40	pCi/L	U

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC or less than the associated TPU.
Y2 - Chemical Yield outside default limits.
* - Duplicate DER not within control limits.
LT - Result is less than Requested MDC, greater than sample specific MDC.
SQ - Spectral quality prevents accurate quantitation.
SI - Nuclide identification and/or quantitation is tentative.
TI - Nuclide identification is tentative.

Abbreviations:

TPU - Total Propagated Uncertainty (see PAI SOP 743)
MDC - Minimum Detectable Concentration (see PAI SOP 706)

Data Package ID: *GSW0106031-1*

GC/MS Volatiles

Method SW8260

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 0106031
Client Name: IT Corporation
ClientProject ID: PRB PHASE1

Field ID: PRB-3-W1
Lab ID: 0106031-2

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 05-Jun-01
Date Extracted: 11-Jun-01
Date Analyzed: 11-Jun-01

Prep Batch: VL010611-1
QCBatchID: VL010611-1-2
Run ID: VL010611-1A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
CleanupDF: 1
File Name: A15001

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
75-71-8	DICHLORODIFLUOROMETHANE	1	10	10	0.81	U	
74-87-3	CHLOROMETHANE	1	10	10	0.54	U	
75-01-4	VINYL CHLORIDE	1	10	10	0.86	U	
74-83-9	BROMOMETHANE	1	10	10	1.7	U	
75-00-3	CHLOROETHANE	1	10	10	1.2	U	
75-69-4	TRICHLOROFLUOROMETHANE	1	5	5	1.2	U	
75-35-4	1,1-DICHLOROETHENE	1	5	5	0.92	U	
76-13-1	TRICHLOROTRIFLUOROETHANE	1	5	5	1.2	U	
67-64-1	ACETONE	1	30	30	7.7	U	
74-88-4	IODOMETHANE	1	5	5	2.8	U	
75-15-0	CARBON DISULFIDE	1	5	5	0.85	U	
75-09-2	METHYLENE CHLORIDE	1	5	5	0.6	U	
156-60-5	TRANS-1,2-DICHLOROETHENE	1	5	5	0.78	U	
75-34-3	1,1-DICHLOROETHANE	1	5	5	0.45	U	
156-59-2	CIS-1,2-DICHLOROETHENE	1	5	5	0.54	U	
78-93-3	2-BUTANONE	1	20	20	5.2	U	
74-97-5	BROMOCHLOROMETHANE	1	5	5	0.69	U	
67-66-3	CHLOROFORM	1	5	5	0.68	U	
71-55-6	1,1,1-TRICHLOROETHANE	1	5	5	0.74	U	
594-20-7	2,2-DICHLOROPROPANE	1	5	5	0.78	U	
56-23-5	CARBON TETRACHLORIDE	1	5	5	0.7	U	
563-58-6	1,1-DICHLOROPROPENE	1	5	5	0.56	U	
107-06-2	1,2-DICHLOROETHANE	1	5	5	0.47	U	
71-43-2	BENZENE	1	5	5	0.44	U	
79-01-6	TRICHLOROETHENE	1	5	5	0.8	U	
78-87-5	1,2-DICHLOROPROPANE	1	5	5	0.69	U	
74-95-3	DIBROMOMETHANE	1	5	5	0.75	U	
75-27-4	BROMODICHLOROMETHANE	1	5	5	0.65	U	
10061-01-5	CIS-1,3-DICHLOROPROPENE	1	5	5	0.66	U	

Data Package ID: *VL0106031-1*

GC/MS Volatiles

Method SW8260

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 0106031
Client Name: IT Corporation
ClientProject ID: PRB PHASE1

Field ID: PRB-3-W1
Lab ID: 0106031-2

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 05-Jun-01
Date Extracted: 11-Jun-01
Date Analyzed: 11-Jun-01

Prep Batch: VL010611-1
QCBatchID: VL010611-1-2
Run ID: VL010611-1A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
CleanupDF: 1
File Name: A15001

108-10-1	4-METHYL-2-PENTANONE	1	20	20	4.3	U	
108-88-3	TOLUENE	1	5	5	0.47	U	
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	5	5	0.45	U	
79-00-5	1,1,2-TRICHLOROETHANE	1	5	5	1	U	
591-78-6	2-HEXANONE	1	20	20	4.9	U	
127-18-4	TETRACHLOROETHENE	1	5	5	0.8	U	
142-28-9	1,3-DICHLOROPROPANE	1	5	5	0.73	U	
124-48-1	DIBROMOCHLOROMETHANE	1	5	5	0.82	U	
106-93-4	1,2-DIBROMOETHANE	1	5	5	1	U	
108-90-7	CHLOROBENZENE	1	5	5	0.64	U	
630-20-6	1,1,1,2-TETRACHLOROETHANE	1	5	5	0.58	U	
100-41-4	ETHYLBENZENE	1	5	5	0.57	U	
136777-61-	M+P-XYLENE	1	5	5	1.4	U	
95-47-6	O-XYLENE	1	5	5	0.67	U	
100-42-5	STYRENE	1	5	5	0.67	U	
75-25-2	BROMOFORM	1	5	5	0.45	U	
98-82-8	ISOPROPYLBENZENE	1	5	5	0.84	U	
96-18-4	1,2,3-TRICHLOROPROPANE	1	5	5	1.1	U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	1	5	5	0.92	U	
108-86-1	BROMOBENZENE	1	5	5	0.95	U	
103-65-1	N-PROPYLBENZENE	1	5	5	0.84	U	
95-49-8	2-CHLOROTOLUENE	1	5	5	0.77	U	
108-67-8	1,3,5-TRIMETHYLBENZENE	1	5	5	0.92	U	
106-43-4	4-CHLOROTOLUENE	1	5	5	0.81	U	
98-06-6	TERT-BUTYLBENZENE	1	5	5	0.85	U	
95-63-6	1,2,4-TRIMETHYLBENZENE	1	5	5	0.87	U	
135-98-8	SEC-BUTYLBENZENE	1	5	5	0.75	U	
541-73-1	1,3-DICHLOROBENZENE	1	5	5	0.89	U	
99-87-6	P-ISOPROPYLTOLUENE	1	5	5	0.85	U	
106-46-7	1,4-DICHLOROBENZENE	1	5	5	0.81	U	
104-51-8	N-BUTYLBENZENE	1	5	5	0.88	U	
95-50-1	1,2-DICHLOROBENZENE	1	5	5	0.87	U	

Data Package ID: *VL0106031-1*

GC/MS Volatiles

Method SW8260
Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 0106031
Client Name: IT Corporation
ClientProject ID: PRB PHASE1

Field ID: PRB-3-W1
Lab ID: 0106031-2

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 05-Jun-01
Date Extracted: 11-Jun-01
Date Analyzed: 11-Jun-01

Prep Batch: VL010611-1
QCBatchID: VL010611-1-2
Run ID: VL010611-1A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 5 ML
Final Volume: 5 ML
Result Units: UG/L
CleanupDF: 1
File Name: A15001

96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	1	10	10	1.3	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	5	5	0.86	U	
87-68-3	HEXACHLOROBUTADIENE	1	5	5	0.88	U	
91-20-3	NAPHTHALENE	1	5	5	0.86	U	
87-61-6	1,2,3-TRICHLOROBENZENE	1	5	5	1	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	50.5		50	101	86 - 115
1868-53-7	DIBROMOFLUOROMETHANE	51		50	102	86 - 118
2037-26-5	TOLUENE-D8	51.8		50	104	88 - 110

Data Package ID: *VL0106031-1*

GC/MS Semi-volatiles

Method SW8270
Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 0106031
Client Name: IT Corporation
ClientProject ID: PRB PHASE1

Field ID: PRB-3-W2
Lab ID: 0106031-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 05-Jun-01
Date Extracted: 11-Jun-01
Date Analyzed: 13-Jun-01

Prep Batch: EX010611-2
QCBatchID: EX010611-2-2
Run ID: SV010613-4
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1040 ML
Final Volume: 1 ML
Result Units: UG/L
CleanupDF: 1
File Name: N3225

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	MDL	Result Qualifier	EPA Qualifier
110-86-1	PYRIDINE	1	9.6	9.6	6	U	
62-75-9	N-NITROSODIMETHYLAMINE	1	9.6	9.6	1.3	U	
62-53-3	ANILINE	1	19	19	6.4	U	
108-95-2	PHENOL	1	9.6	9.6	1.9	U	
111-44-4	BIS(2-CHLOROETHYL)ETHER	1	9.6	9.6	1.3	U	
95-57-8	2-CHLOROPHENOL	1	9.6	9.6	1.3	U	
541-73-1	1,3-DICHLOROBENZENE	1	9.6	9.6	1.9	U	
106-46-7	1,4-DICHLOROBENZENE	1	9.6	9.6	1.8	U	
95-50-1	1,2-DICHLOROBENZENE	1	9.6	9.6	1.8	U	
100-51-6	BENZYL ALCOHOL	1	19	19	1.3	U	
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	1	9.6	9.6	1.3	U	
95-48-7	2-METHYLPHENOL	1	9.6	9.6	1.3	U	
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	1	9.6	9.6	1.3	U	
106-44-5	4-METHYLPHENOL	1	9.6	9.6	1.3	U	
67-72-1	HEXACHLOROETHANE	1	9.6	9.6	2.7	U	
98-95-3	NITROBENZENE	1	9.6	9.6	1.6	U	
78-59-1	ISOPHORONE	1	9.6	9.6	1.5	U	
88-75-5	2-NITROPHENOL	1	9.6	9.6	1.5	U	
105-67-9	2,4-DIMETHYLPHENOL	1	9.6	9.6	2.4	U	
111-91-1	BIS(2-CHLOROETHOXY)METHANE	1	9.6	9.6	1.4	U	
120-83-2	2,4-DICHLOROPHENOL	1	9.6	9.6	1.4	U	
65-85-0	BENZOIC ACID	1	48	48	2.3	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	9.6	9.6	1.8	U	
91-20-3	NAPHTHALENE	1	9.6	9.6	1.1	U	
106-47-8	4-CHLOROANILINE	1	19	19	4.6	U	
87-68-3	HEXACHLOROBUTADIENE	1	9.6	9.6	3.3	U	
59-50-7	4-CHLORO-3-METHYLPHENOL	1	19	19	1.5	U	
91-57-6	2-METHYLNAPHTHALENE	1	9.6	9.6	1.2	U	
77-47-4	HEXACHLOROCYCLOPENTADIENE	1	9.6	9.6	1.2	U	

Data Package ID: *SV0106031-1*

GC/MS Semi-volatiles

Method SW8270
Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 0106031
Client Name: IT Corporation
ClientProject ID: PRB PHASE1

Field ID: PRB-3-W2
Lab ID: 0106031-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 05-Jun-01
Date Extracted: 11-Jun-01
Date Analyzed: 13-Jun-01

Prep Batch: EX010611-2
QCBatchID: EX010611-2-2
Run ID: SV010613-4
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1040 ML
Final Volume: 1 ML
Result Units: UG/L
CleanupDF: 1
File Name: N3225

88-06-2	2,4,6-TRICHLOROPHENOL	1	9.6	9.6	1.4	U	
95-95-4	2,4,5-TRICHLOROPHENOL	1	48	48	1.8	U	
91-58-7	2-CHLORONAPHTHALENE	1	9.6	9.6	1.2	U	
88-74-4	2-NITROANILINE	1	48	48	1.1	U	
131-11-3	DIMETHYL PHTHALATE	1	9.6	9.6	1.3	U	
606-20-2	2,6-DINITROTOLUENE	1	9.6	9.6	1.3	U	
208-96-8	ACENAPHTHYLENE	1	9.6	9.6	1.1	U	
99-09-2	3-NITROANILINE	1	48	48	0.87	U	
83-32-9	ACENAPHTHENE	1	9.6	9.6	1.2	U	
51-28-5	2,4-DINITROPHENOL	1	48	48	1.3	U	
100-02-7	4-NITROPHENOL	1	48	48	1.8	U	
132-64-9	DIBENZOFURAN	1	9.6	9.6	1.2	U	
121-14-2	2,4-DINITROTOLUENE	1	9.6	9.6	1.3	U	
84-66-2	DIETHYL PHTHALATE	1	9.6	9.6	1.3	U	
86-73-7	FLUORENE	1	9.6	9.6	1.1	U	
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	1	9.6	9.6	1.3	U	
100-01-6	4-NITROANILINE	1	19	19	0.87	U	
103-33-3	AZOBENZENE	1	19	19	0.77	U	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	1	48	48	1.5	U	
86-30-6	N-NITROSODIPHENYLAMINE	1	9.6	9.6	1.7	U	
101-55-3	4-BROMOPHENYL PHENYL ETHER	1	9.6	9.6	1.6	U	
118-74-1	HEXACHLOROBENZENE	1	9.6	9.6	1.5	U	
87-86-5	PENTACHLOROPHENOL	1	48	48	1.3	U	
85-01-8	PHENANTHRENE	1	9.6	9.6	1.4	U	
120-12-7	ANTHRACENE	1	9.6	9.6	1.4	U	
86-74-8	CARBAZOLE	1	9.6	9.6	0.96	U	
84-74-2	DI-N-BUTYL PHTHALATE	1	9.6	9.6	1.6	U	
206-44-0	FLUORANTHENE	1	9.6	9.6	1.3	U	
92-87-5	BENZIDINE	1	9.6	9.6	1.3	U	
129-00-0	PYRENE	1	9.6	9.6	1.5	U	
85-68-7	BUTYL BENZYL PHTHALATE	1	9.6	9.6	1.3	U	
56-55-3	BENZO(A)ANTHRACENE	1	9.6	9.6	1.3	U	

Data Package ID: *SV0106031-1*

GC/MS Semi-volatiles

Method SW8270

Sample Results

Lab Name: Paragon Analytics, Inc.
Work Order Number: 0106031
Client Name: IT Corporation
ClientProject ID: PRB PHASE1

Field ID: PRB-3-W2
Lab ID: 0106031-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 05-Jun-01
Date Extracted: 11-Jun-01
Date Analyzed: 13-Jun-01

Prep Batch: EX010611-2
QCBatchID: EX010611-2-2
Run ID: SV010613-4
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1040 ML
Final Volume: 1 ML
Result Units: UG/L
CleanupDF: 1
File Name: N3225

91-94-1	3,3'-DICHLOROBENZIDINE	1	19	19	2.6	U	
218-01-9	CHRYSENE	1	9.6	9.6	1.4	U	
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1	9.6	9.6	2.7	U	
117-84-0	DI-N-OCTYL PHTHALATE	1	9.6	9.6	1.5	U	
205-99-2	BENZO(B)FLUORANTHENE	1	9.6	9.6	1.5	U	
207-08-9	BENZO(K)FLUORANTHENE	1	9.6	9.6	1.5	U	
50-32-8	BENZO(A)PYRENE	1	9.6	9.6	1.1	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	9.6	9.6	1.5	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	9.6	9.6	1.7	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	9.6	9.6	1.7	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	58.7		72.1	81	0 - 123
321-60-8	2-FLUOROBIPHENYL	37		48.1	77	43 - 116
367-12-4	2-FLUOROPHENOL	49.5		72.1	69	21 - 100
4165-60-0	NITROBENZENE-D5	33.8		48.1	70	35 - 114
4165-62-2	PHENOL-D5	54.7		72.1	76	10 - 94
1718-51-0	TERPHENYL-D14	31.9		48.1	66	33 - 141

Data Package ID: *SV0106031-1*

ENCLOSURE 2

Analytical Data From The TA-50 RLWTF
Discharge Monitoring Report (DMR)
For NPDES Outfall 051
December 2003

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNIVERSITY OF CALIFORNIA
LOS ALAMOS NATIONAL LABORATORY

ADDRESS PO BOX 1663; MAIL STOP K497
LOS ALAMOS, NM 87545

FACILITY UNIVERSITY OF CALIFORNIA
LOCATION LOS ALAMOS, NM 87545
ATTN: STEVEN RAE, RRES-WQH Grp. Ldr.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

NM0028355
PERMIT NUMBER

051 A
DISCHARGE NUMBER

MAJOR

F - FINAL
TREATED RADIOACTIVE LIQUID

*** NO DISCHARGE _____ ***

NOTE: Read instructions before completing this form.

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	02	12	01	TO	02	12	31

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	QUALITY OR CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
OXYGEN DEMAND, CHEM. (HIGH LEVEL) (COD) 00340 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	18	32	(19)	0	03/30	GRAB
	PERMIT REQUIREMENT			***** *****				MG/L		WEEKLY	GRAB
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		7.1	*****	7.5	(12)	0	03/30	GRAB
	PERMIT REQUIREMENT			***** *****				SU		WEEKLY	GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	6	10	(19)	0	03/30	GRAB
	PERMIT REQUIREMENT			***** *****				MG/L		WEEKLY	GRAB
CADMIUM, TOTAL (AS CD) 01027 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	0	0	(28)	0	03/30	GRAB
	PERMIT REQUIREMENT			***** *****				UG/L		WEEKLY	GRAB
CHROMIUM, TOTAL (AS CR) 01034 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	0.00	0.00	(19)	0	03/30	GRAB
	PERMIT REQUIREMENT			***** *****				MG/L		WEEKLY	GRAB
COPPER, TOTAL (AS CU) 01042 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	0.078	0.088	(19)	0	03/30	GRAB
	PERMIT REQUIREMENT			***** *****				MG/L		WEEKLY	GRAB
LEAD, TOTAL (AS PB) 01051 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	0	0	(28)	0	03/30	GRAB
	PERMIT REQUIREMENT			***** *****				UG/L		WEEKLY	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Steven R. Rae
RRES-WQH GROUP LEADER

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
505 665-0453		03	01	28
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NOTE: SAMPLE NOT COLLECTED DEC 22 - DEC 28 DUE TO NO DISCHARGE DURING LABORATORY CLOSURE. PERMIT MODIFICATION DATED 2/26/01 - REPORTING DATE CHANGED TO BE DUE 28TH OF MONTH.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNIVERSITY OF CALIFORNIA
LOS ALAMOS NATIONAL LABORATORY

ADDRESS PO BOX 1663; MAIL STOP K497
LOS ALAMOS, NM 87545

FACILITY UNIVERSITY OF CALIFORNIA
LOCATION LOS ALAMOS, NM 87545
ATTN: STEVEN RAE, RRES-WQH Grp. Ldr.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

NM0028355	051 A
PERMIT NUMBER	DISCHARGE NUMBER

MAJOR

F - FINAL
TREATED RADIOACTIVE LIQUID

*** NO DISCHARGE _____ ***

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	02	12	01	TO	02	12	31

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	QUALITY OR CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
NICKEL, TOTAL (AS NI)	SAMPLE MEASUREMENT	*****	*****		*****	0.0203	0.0203	(19)	0	01/30	GRAB
01067 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			***** *****		REPORT MO AVG	REPORT DAILY MX	MG/L		ONCE/MONTH	GRAB
ZINC, TOTAL (AS ZN)	SAMPLE MEASUREMENT	*****	*****		*****	0.02	0.06	(19)	0	03/30	GRAB
01092 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			***** *****		4.37 MO AVG	8.75 DAILY MX	MG/L		WEEKLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.0219	0.0405	(03)	*****	*****	*****			99/99	RCORDR
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG	REPORT DAILY MX	MGD				***** *****		CONTIN	RCORDR
MERCURY, TOTAL (AS HG)	SAMPLE MEASUREMENT	*****	*****		*****	0.00	0.00	(28)	0	03/30	GRAB
71900 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			***** *****		0.77 MO AVG	0.77 DAILY MX	UG/L		WEEKLY	GRAB
ORGANICS, TOTAL TOXIC (TTO)	SAMPLE MEASUREMENT	*****	*****		*****	0.0	0.0	(19)	0	01/30	GRAB
78141 1 0 0 * EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			***** *****		1.70 MO AVG	1.70 DAILY MX	MG/L		ONCE/MONTH	GRAB

NOTE: OUTFALL 051 - PARAMETERS QUALIFIED BY GEL & ANALYTICAL QUALITY ASSOCIATES (AQA) QA/QC

QUALIFIERS: ESTIMATED (J) (J-) (J+) UNDETECTED ESTIMATED (UJ) REJECTED (R)

	COD	TSS	Cd(t)	Cr(t)	Cu(t)	Pb(t)	Zn(t)	Hg(t)	TTOs
12/2/02			J	U		J	J	U	82 TTO compounds qualified (U); 1 TTO compound qualified (J) and 1 TTO compound (Acrolein) qualified (UJ). Chloroform was not qualified.
12/9/02	J		J		J			J-	
12/16/02	U		J	U		J		NJ-	

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Steven R. Rae
RRES-WQH GROUP LEADER

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
505 665-0453		03	01	28
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NOTE: SAMPLE NOT COLLECTED DEC 22 - DEC 28 DUE TO NO DISCHARGE DURING LABORATORY CLOSURE.PERMIT MODIFICATION DATED 2/26/01 - REPORTING DATE CHANGED T O BE DUE 28TH OF MONTH. *THE LIMITS AND MONITORING FOR TOTAL TOXIC ORGANICS DO NOT INCLUDE 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (TCDD), PESTICIDES, O R POLYCHLORINATED BIPHENYLS.

ENCLOSURE 3

Analytical Data From Sampling of MCO-5 Alluvial Groundwater Monitoring Well (150 ft Downstream From The PRB In Mortandad Canyon)

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	03/18/02	UF	CS	EQB	SVOA	Bis(2-ethylhexyl)phthalate		0.59	ug/L				J	J	SW-846:8270C
MCO-5	03/18/02	UF	CS	EQB	VOA	Toluene	<	0.69	ug/L				BJ	U	SW-846:8260B
MCO-5	03/18/02	UF	CS	EQB	VOA	Acetone	<	4.1	ug/L				BJ	U	SW-846:8260B
MCO-5	05/30/02	F	CS		GENINORG	pH		7.18			0.01		H	J	EPA:150.1
MCO-5	05/30/02	F	CS		GENINORG	pH		7.26			0.01		H	J-	EPA:150.1
MCO-5	05/30/02	F	CS		GENINORG	pH		7.36			0.01		H	J-	EPA:150.1
MCO-5	05/30/02	F	CS		GENINORG	pH		7.3			0.01		H	J-	EPA:150.1
MCO-5	05/30/02	F	CS		GENINORG	Total Dissolved Solids		354	mg/L		3.07				EPA:160.1
MCO-5	05/30/02	F	CS		GENINORG	Total Dissolved Solids		357	mg/L		3.07				EPA:160.1
MCO-5	05/30/02	F	CS		GENINORG	Total Dissolved Solids		356	mg/L		3.07				EPA:160.1
MCO-5	05/30/02	F	DUP		GENINORG	Total Dissolved Solids		348	mg/L		3.07				EPA:160.1
MCO-5	05/30/02	F	CS		GENINORG	Total Dissolved Solids		355	mg/L		3.07				EPA:160.1
MCO-5	05/30/02	UF	CS		GENINORG	Total Suspended Solids	<	0.721	mg/L		0.721		U		EPA:160.2
MCO-5	05/30/02	F	CS		GENINORG	Hardness		120	mg/L		0.00554				EPA:200.7
MCO-5	05/30/02	F	CS		GENINORG	Hardness		123	mg/L		0.00554				EPA:200.7
MCO-5	05/30/02	F	CS		GENINORG	Hardness		121	mg/L		0.00554				EPA:200.7
MCO-5	05/30/02	F	CS		GENINORG	Hardness		123	mg/L		0.00554				EPA:200.7
MCO-5	05/30/02	F	CS		GENINORG	Chloride		19.1	mg/L		0.0644				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Chloride		19.5	mg/L		0.0644				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Chloride		19.2	mg/L		0.0644				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Chloride		18.9	mg/L		0.0644				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Fluoride		0.934	mg/L		0.0553				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Fluoride		0.965	mg/L		0.0553				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Fluoride		0.949	mg/L		0.0553				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Fluoride		0.96	mg/L		0.0553				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Sulfate		56.8	mg/L		0.386				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Sulfate		56.4	mg/L		0.386				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Sulfate		56.4	mg/L		0.386				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Sulfate		56.2	mg/L		0.386				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3	<	1.45	mg/L		1.45		U		EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3	<	1.45	mg/L		1.45		U		EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3	<	1.45	mg/L		1.45		U		EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3	<	1.45	mg/L		1.45		U		EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3+HCO3		187	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3+HCO3		192	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3+HCO3		178	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3+HCO3		171	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-HCO3		187	mg/L		1.45				EPA:310.1

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-HCO3		191	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-HCO3		177	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-HCO3		170	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	UF	CS		GENINORG	Perchlorate		99.8	ug/L		1.45				EPA:314.0
MCO-5	05/30/02	F	CS		GENINORG	Nitrate-Nitrite as N		3.3	mg/L		0.05				EPA:353.1
MCO-5	05/30/02	F	CS		GENINORG	Nitrate-Nitrite as N		3.4	mg/L		0.05				EPA:353.1
MCO-5	05/30/02	F	CS		GENINORG	Nitrate-Nitrite as N		3.69	mg/L		0.03				EPA:353.1
MCO-5	05/30/02	F	DUP		GENINORG	Nitrate-Nitrite as N		3.63	mg/L		0.03				EPA:353.1
MCO-5	05/30/02	F	CS		GENINORG	Nitrate-Nitrite as N		3.4	mg/L		0.05				EPA:353.1
MCO-5	05/30/02	F	CS		GENINORG	Total Phosphorus	<	0.011	mg/L		0.011		U		EPA:365.4
MCO-5	05/30/02	F	CS		GENINORG	Total Phosphorus		0.03	mg/L		0.011		J		EPA:365.4
MCO-5	05/30/02	F	CS		GENINORG	Total Phosphorus		0.02	mg/L		0.011		J		EPA:365.4
MCO-5	05/30/02	F	CS		GENINORG	Total Phosphorus		0.02	mg/L		0.011		J		EPA:365.4
MCO-5	05/30/02	UF	CS		GENINORG	Calcium		42.4	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Calcium		42.1	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Calcium		43.2	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Calcium		42.2	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Calcium		43.1	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Calcium		42.4	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Calcium		44.3	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Potassium		14.7	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Potassium		15	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Potassium		15	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Potassium		15	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Potassium		14.8	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Potassium		14.7	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Potassium		15.2	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Magnesium		3.69	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Magnesium		3.64	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Magnesium		3.63	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Magnesium		3.65	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Magnesium		3.75	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Magnesium		3.68	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Magnesium		3.83	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Sodium		66.4	mg/L		14.4				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Sodium		67.9	mg/L		14.4				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Sodium		66	mg/L		14.4				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Sodium		66.6	mg/L		14.4				SW-846:6010B

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	UF	CS		GENINORG	Silicon Dioxide		36.5	mg/L		0.0212			J	SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Silicon Dioxide		36.3	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Silicon Dioxide		36.9	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Silicon Dioxide		36.5	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Silicon Dioxide		37.1	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Silicon Dioxide		38.1	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Silicon Dioxide		36.6	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Silicon Dioxide		37.4	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Cyanide (Total)	<	0.00172	mg/L		1.72		U		SW-846:9012A
MCO-5	05/30/02	F	CS		GENINORG	Specific Conductance		417	uS/cm		1				SW-846:9050A
MCO-5	05/30/02	F	CS		GENINORG	Specific Conductance		435	uS/cm		1				SW-846:9050A
MCO-5	05/30/02	F	CS		GENINORG	Specific Conductance		426	uS/cm		1				SW-846:9050A
MCO-5	05/30/02	F	CS		GENINORG	Specific Conductance		426	uS/cm		1				SW-846:9050A
MCO-5	05/30/02	F	DUP		GENINORG	Specific Conductance		435	uS/cm		1				SW-846:9050A
MCO-5	05/30/02	UF	CS		METALS	Mercury	<	0.0472	ug/L		0.0472		U		EPA:245.1
MCO-5	05/30/02	UF	CS		METALS	Silver	<	0.835	ug/L		0.835		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Silver	<	0.835	ug/L		0.835		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Silver	<	0.835	ug/L		0.835		U		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Silver	<	0.835	ug/L		0.835		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Silver	<	0.835	ug/L		0.835		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Aluminum		77.3	ug/L		14.7		N*	J+	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Aluminum		81.1	ug/L		14.7		N*	J+	SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Aluminum	<	32.8	ug/L		14.7		B	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Aluminum	<	36	ug/L		14.7		B	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Aluminum		207	ug/L		14.7		N*	J+	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Arsenic	<	2.24	ug/L		2.24		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Arsenic	<	2.24	ug/L		2.24		U		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Arsenic	<	2.24	ug/L		2.24		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Arsenic	<	2.31	ug/L		2.24		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Arsenic	<	2.24	ug/L		2.24		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Boron		98.1	ug/L		4.88			UJ	SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Boron		102	ug/L		4.88			UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Boron		105	ug/L		4.88				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Boron		101	ug/L		4.88				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Boron		99.7	ug/L		4.88				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Barium		103	ug/L		0.222				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Barium		106	ug/L		0.222				SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Barium		102	ug/L		0.222				SW-846:6010B

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	UF	CS		METALS	Barium		107	ug/L		0.222				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Barium		103	ug/L		0.222			J	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Beryllium	<	0.158	ug/L		0.158		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Beryllium	<	0.158	ug/L		0.158		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Beryllium	<	0.158	ug/L		0.158		U		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Beryllium	<	0.158	ug/L		0.158		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Beryllium	<	0.158	ug/L		0.158		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Cobalt	<	0.541	ug/L		0.541		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Cobalt	<	0.541	ug/L		0.541		U		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Cobalt	<	0.541	ug/L		0.541		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Cobalt	<	2.46	ug/L		0.541		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Cobalt	<	0.541	ug/L		0.541		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Chromium	<	1.06	ug/L		0.503		B	U	SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Chromium	<	0.998	ug/L		0.503		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Chromium	<	1.24	ug/L		0.503		B	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Chromium	<	1.2	ug/L		0.503		B	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Chromium	<	1.49	ug/L		0.503		B	J	SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Copper	<	2.13	ug/L		1.39		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Copper	<	2.41	ug/L		1.39		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Copper	<	1.75	ug/L		1.39		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Copper	<	1.46	ug/L		1.39		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Copper	<	2.01	ug/L		1.39		B	J	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Iron	<	23.8	ug/L		12.6		B	J	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Iron		100	ug/L		12.6		*		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Iron	<	14	ug/L		12.6		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Iron	<	38.4	ug/L		12.6		B*	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Iron	<	33.3	ug/L		12.6		B*	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Manganese	<	0.296	ug/L		0.296		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Manganese	<	1.71	ug/L		0.296		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Manganese	<	0.526	ug/L		0.296		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Manganese	<	0.374	ug/L		0.296		B		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Manganese	<	0.296	ug/L		0.296		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Molybdenum		83.1	ug/L		1.43				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Molybdenum		80.3	ug/L		1.43				SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Molybdenum		81.3	ug/L		1.43				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Molybdenum		78.5	ug/L		1.43				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Molybdenum		81.2	ug/L		1.43			J	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Nickel	<	4.84	ug/L		0.69		B	J	SW-846:6010B

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	F	CS		METALS	Nickel		5.08	ug/L		0.69				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Nickel		5.6	ug/L		0.69				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Nickel		5.27	ug/L		0.69				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Nickel		5.34	ug/L		0.69				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Selenium	<	2.81	ug/L		2.81		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Selenium	<	2.81	ug/L		2.81		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Selenium	<	2.81	ug/L		2.81		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Selenium	<	3.8	ug/L		2.81		B	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Tin	<	3.26	ug/L		3.26		U		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Tin	<	3.26	ug/L		3.26		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Tin	<	3.26	ug/L		3.26		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Tin	<	3.26	ug/L		3.26		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Tin	<	3.26	ug/L		3.26		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Strontium		156	ug/L		0.178			J	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Strontium		163	ug/L		0.178				SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Strontium		156	ug/L		0.178				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Strontium		158	ug/L		0.178				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Strontium		155	ug/L		0.178				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Vanadium	<	0.923	ug/L		0.606		B	J	SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Vanadium	<	0.606	ug/L		0.606		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Vanadium	<	0.867	ug/L		0.606		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Vanadium	<	0.77	ug/L		0.606		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Vanadium	<	0.606	ug/L		0.606		U		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Zinc		5.17	ug/L		0.883			UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Zinc		5.24	ug/L		0.883			UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Zinc	<	4.03	ug/L		0.883		B	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Zinc	<	4.16	ug/L		0.883		B	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Zinc	<	4.37	ug/L		0.883		B	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Cadmium	<	0.04	ug/L		0.04		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Cadmium	<	0.04	ug/L		0.04		U		SW-846:6020
MCO-5	05/30/02	F	CS		METALS	Cadmium	<	0.04	ug/L		0.04		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Cadmium	<	0.04	ug/L		0.04		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Cadmium	<	0.04	ug/L		0.04		U	UJ	SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Lead	<	0.05	ug/L		0.05		U	UJ	SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Lead	<	0.077	ug/L		0.05		B		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Lead	<	0.054	ug/L		0.05		B		SW-846:6020
MCO-5	05/30/02	F	CS		METALS	Lead	<	0.05	ug/L		0.05		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Lead	<	0.067	ug/L		0.05		B		SW-846:6020

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	F	CS		METALS	Antimony	<	0.28	ug/L		0.28		U	UJ	SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Antimony	<	0.28	ug/L		0.28		U	UJ	SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Antimony	<	0.28	ug/L		0.28		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Antimony	<	0.28	ug/L		0.28		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Antimony	<	0.28	ug/L		0.28		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Thallium	<	0.02	ug/L		0.02		U		SW-846:6020
MCO-5	05/30/02	F	CS		METALS	Thallium	<	0.02	ug/L		0.02		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Thallium	<	0.02	ug/L		0.02		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Thallium	<	0.023	ug/L		0.02		B	UJ	SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Thallium	<	0.02	ug/L		0.02		B	U	SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Uranium		1.82	ug/L		0.02			J	SW-846:6020
MCO-5	05/30/02	UF	CS		RAD	Gross alpha		5.1	pCi/L	0.954		1.51			EPA:900
MCO-5	05/30/02	UF	CS		RAD	Gross beta		173	pCi/L	3.1		2.54			EPA:900
MCO-5	05/30/02	UF	CS		RAD	Actinium-228	<	4.06	pCi/L	5.01		18.6	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Americium-241	<	-1.06	pCi/L	4.42		8.92	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Barium-133	<	0.994	pCi/L	2.03		6.25	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Beryllium-7	<	0.978	pCi/L	12.7		43.6	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Bismuth-211	<	0	pCi/L	16.8		28.5	U	R	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Bismuth-212	<	8.96	pCi/L	11		40.7	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Bismuth-214		41.3	pCi/L	5.73		9.66			EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cadmium-109	<	-126	pCi/L	27.4		85.9	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cerium-139	<	-1.18	pCi/L	1.22		4.1	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cerium-141	<	-4.23	pCi/L	2.26		7.47	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cerium-144	<	2.5	pCi/L	8.18		28.4	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cobalt-57	<	-0.437	pCi/L	1.02		3.49	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cobalt-60	<	-1.25	pCi/L	1.23		4.19	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Chromium-51	<	-10.2	pCi/L	13.3		44.7	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cesium-134	<	0.42	pCi/L	1.56		4.66	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cesium-137		1.02	pCi/L	1.44		5.12	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Europium-152	<	-0.483	pCi/L	3.76		12.9	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Europium-154	<	15.1	pCi/L	8.46		21.7	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Iron-59	<	2.81	pCi/L	3.23		12	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Gross gamma	<	204	pCi/L	3.66		682	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Mercury-203	<	0.128	pCi/L	1.52		5.22	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Iodine-133	<	-12400	pCi/L	7280			U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Potassium-40		68	pCi/L	37		45.9		J	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Manganese-54	<	-1.02	pCi/L	1.23		4.28	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Sodium-22	<	0	pCi/L	3.02		4.94	U	R	EPA:901.1

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	UF	CS		RAD	Niobium-95	<	3.79	pCi/L	1.65		6.4	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Neptunium-237	<	4.83	pCi/L	7.19		25	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Neptunium-239	<	-4.65	pCi/L	7.55		25.8	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Protactinium-231	<	19.1	pCi/L	61.7		213	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Protactinium-233	<	5.07	pCi/L	2.81		8.94	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Protactinium-234M	<	20.7	pCi/L	172		623	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Lead-211	<	2.6	pCi/L	36.1		124	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Lead-212	<	0	pCi/L	5.28		9.19	U	R	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Lead-214		38.6	pCi/L	5.93		10.2			EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Radium-223	<	33.5	pCi/L	26.7		94	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Radium-224	<	0	pCi/L	59.4		85.6	U	R	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Radium-226		41.3	pCi/L	5.73		9.66			EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Radium-228	<	4.06	pCi/L	5.01		18.6	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Rhodium-106	<	8.92	pCi/L	12.6		44.5	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Radon-219	<	20.4	pCi/L	16.5		58.5	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Ruthenium-103	<	1.44	pCi/L	1.46		5.2	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Ruthenium-106	<	10.6	pCi/L	12.5		44.3	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Antimony-124	<	-2.54	pCi/L	1.62		5.2	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Antimony-125	<	1.13	pCi/L	3.72		12.9	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Selenium-75	<	0.963	pCi/L	1.65		5.77	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Tin-113	<	-1.78	pCi/L	1.69		5.59	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Strontium-85	<	0	pCi/L	2		7	U	R	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Thorium-227	<	35.3	pCi/L	16.1		56.9	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Thorium-231	<	0.503	pCi/L	7.1		24.4	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Thorium-234	<	74.7	pCi/L	49.5		114	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Thallium-208	<	6.44	pCi/L	1.72		6.45	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Uranium-235	<	-0.739	pCi/L				U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Uranium-238	<	74.7	pCi/L	49.5		85.3	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Yttrium-88	<	-0.203	pCi/L	1.16		4.36	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Zinc-65	<	-1.22	pCi/L	3.38		10.2	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Zirconium-95	<	0.2	pCi/L	2.44		8.83	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Tritium		3910	pCi/L	123		172			EPA:906.0
MCO-5	05/30/02	UF	CS		RAD	Americium-241		0.532	pCi/L	0.0496		0.021			Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Plutonium-238		0.0426	pCi/L	0.0109		0.0208		J	Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Plutonium-239/240		0.0224	pCi/L	0.00902		0.0241	U	U	Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Thorium-228		0.018	pCi/L	0.0111		0.0357	U	U	Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Thorium-230		0.0528	pCi/L	0.0121		0.0204		J	Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Thorium-232		0.0066	pCi/L	0.00494		0.0162	U	U	Generic:Alpha-Spec

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte	Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	UF	CS		RAD	Uranium-234	1.83	pCi/L	0.165		0.0144			Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Uranium-235/236	0.144	pCi/L	0.0303		0.0495		J	Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Uranium-238	0.428	pCi/L	0.0571		0.0392			Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Strontium-90	62.1	pCi/L	8.55		0.259			Gas Flw Propr Count
MCO-5	05/30/02	UF	CS		VOA	Dichlorobenzene[1,4-]	0.34	ug/L				J	U	SW-846:8260B
MCO-5	05/30/02	UF	CS	FTB	VOA	Dichlorobenzene[1,4-]	0.47	ug/L				J		SW-846:8260B

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	03/18/02	UF	CS	EQB	SVOA	Bis(2-ethylhexyl)phthalate		0.59	ug/L				J	J	SW-846:8270C
MCO-5	03/18/02	UF	CS	EQB	VOA	Toluene	<	0.69	ug/L				BJ	U	SW-846:8260B
MCO-5	03/18/02	UF	CS	EQB	VOA	Acetone	<	4.1	ug/L				BJ	U	SW-846:8260B
MCO-5	05/30/02	F	CS		GENINORG	pH		7.18			0.01		H	J	EPA:150.1
MCO-5	05/30/02	F	CS		GENINORG	pH		7.26			0.01		H	J-	EPA:150.1
MCO-5	05/30/02	F	CS		GENINORG	pH		7.36			0.01		H	J-	EPA:150.1
MCO-5	05/30/02	F	CS		GENINORG	pH		7.3			0.01		H	J-	EPA:150.1
MCO-5	05/30/02	F	CS		GENINORG	Total Dissolved Solids		354	mg/L		3.07				EPA:160.1
MCO-5	05/30/02	F	CS		GENINORG	Total Dissolved Solids		357	mg/L		3.07				EPA:160.1
MCO-5	05/30/02	F	CS		GENINORG	Total Dissolved Solids		356	mg/L		3.07				EPA:160.1
MCO-5	05/30/02	F	DUP		GENINORG	Total Dissolved Solids		348	mg/L		3.07				EPA:160.1
MCO-5	05/30/02	F	CS		GENINORG	Total Dissolved Solids		355	mg/L		3.07				EPA:160.1
MCO-5	05/30/02	UF	CS		GENINORG	Total Suspended Solids	<	0.721	mg/L		0.721		U		EPA:160.2
MCO-5	05/30/02	F	CS		GENINORG	Hardness		120	mg/L		0.00554				EPA:200.7
MCO-5	05/30/02	F	CS		GENINORG	Hardness		123	mg/L		0.00554				EPA:200.7
MCO-5	05/30/02	F	CS		GENINORG	Hardness		121	mg/L		0.00554				EPA:200.7
MCO-5	05/30/02	F	CS		GENINORG	Hardness		123	mg/L		0.00554				EPA:200.7
MCO-5	05/30/02	F	CS		GENINORG	Chloride		19.1	mg/L		0.0644				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Chloride		19.5	mg/L		0.0644				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Chloride		19.2	mg/L		0.0644				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Chloride		18.9	mg/L		0.0644				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Fluoride		0.934	mg/L		0.0553				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Fluoride		0.965	mg/L		0.0553				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Fluoride		0.949	mg/L		0.0553				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Fluoride		0.96	mg/L		0.0553				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Sulfate		56.8	mg/L		0.386				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Sulfate		56.4	mg/L		0.386				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Sulfate		56.4	mg/L		0.386				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Sulfate		56.2	mg/L		0.386				EPA:300
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3	<	1.45	mg/L		1.45		U		EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3	<	1.45	mg/L		1.45		U		EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3	<	1.45	mg/L		1.45		U		EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3	<	1.45	mg/L		1.45		U		EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3+HCO3		187	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3+HCO3		192	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3+HCO3		178	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-CO3+HCO3		171	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-HCO3		187	mg/L		1.45				EPA:310.1

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-HCO3		191	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-HCO3		177	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	F	CS		GENINORG	Alkalinity-HCO3		170	mg/L		1.45				EPA:310.1
MCO-5	05/30/02	UF	CS		GENINORG	Perchlorate		99.8	ug/L		1.45				EPA:314.0
MCO-5	05/30/02	F	CS		GENINORG	Nitrate-Nitrite as N		3.3	mg/L		0.05				EPA:353.1
MCO-5	05/30/02	F	CS		GENINORG	Nitrate-Nitrite as N		3.4	mg/L		0.05				EPA:353.1
MCO-5	05/30/02	F	CS		GENINORG	Nitrate-Nitrite as N		3.69	mg/L		0.03				EPA:353.1
MCO-5	05/30/02	F	DUP		GENINORG	Nitrate-Nitrite as N		3.63	mg/L		0.03				EPA:353.1
MCO-5	05/30/02	F	CS		GENINORG	Nitrate-Nitrite as N		3.4	mg/L		0.05				EPA:353.1
MCO-5	05/30/02	F	CS		GENINORG	Total Phosphorus	<	0.011	mg/L		0.011		U		EPA:365.4
MCO-5	05/30/02	F	CS		GENINORG	Total Phosphorus		0.03	mg/L		0.011		J		EPA:365.4
MCO-5	05/30/02	F	CS		GENINORG	Total Phosphorus		0.02	mg/L		0.011		J		EPA:365.4
MCO-5	05/30/02	F	CS		GENINORG	Total Phosphorus		0.02	mg/L		0.011		J		EPA:365.4
MCO-5	05/30/02	UF	CS		GENINORG	Calcium		42.4	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Calcium		42.1	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Calcium		43.2	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Calcium		42.2	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Calcium		43.1	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Calcium		42.4	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Calcium		44.3	mg/L		5.54				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Potassium		14.7	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Potassium		15	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Potassium		15	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Potassium		15	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Potassium		14.8	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Potassium		14.7	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Potassium		15.2	mg/L		16.5				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Magnesium		3.69	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Magnesium		3.64	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Magnesium		3.63	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Magnesium		3.65	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Magnesium		3.75	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Magnesium		3.68	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Magnesium		3.83	mg/L		5.18				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Sodium		66.4	mg/L		14.4				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Sodium		67.9	mg/L		14.4				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Sodium		66	mg/L		14.4				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Sodium		66.6	mg/L		14.4				SW-846:6010B

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	UF	CS		GENINORG	Silicon Dioxide		36.5	mg/L		0.0212			J	SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Silicon Dioxide		36.3	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Silicon Dioxide		36.9	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Silicon Dioxide		36.5	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Silicon Dioxide		37.1	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Silicon Dioxide		38.1	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	F	CS		GENINORG	Silicon Dioxide		36.6	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Silicon Dioxide		37.4	mg/L		0.0212				SW-846:6010B
MCO-5	05/30/02	UF	CS		GENINORG	Cyanide (Total)	<	0.00172	mg/L		1.72		U		SW-846:9012A
MCO-5	05/30/02	F	CS		GENINORG	Specific Conductance		417	uS/cm		1				SW-846:9050A
MCO-5	05/30/02	F	CS		GENINORG	Specific Conductance		435	uS/cm		1				SW-846:9050A
MCO-5	05/30/02	F	CS		GENINORG	Specific Conductance		426	uS/cm		1				SW-846:9050A
MCO-5	05/30/02	F	CS		GENINORG	Specific Conductance		426	uS/cm		1				SW-846:9050A
MCO-5	05/30/02	F	DUP		GENINORG	Specific Conductance		435	uS/cm		1				SW-846:9050A
MCO-5	05/30/02	UF	CS		METALS	Mercury	<	0.0472	ug/L		0.0472		U		EPA:245.1
MCO-5	05/30/02	UF	CS		METALS	Silver	<	0.835	ug/L		0.835		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Silver	<	0.835	ug/L		0.835		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Silver	<	0.835	ug/L		0.835		U		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Silver	<	0.835	ug/L		0.835		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Silver	<	0.835	ug/L		0.835		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Aluminum		77.3	ug/L		14.7		N*	J+	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Aluminum		81.1	ug/L		14.7		N*	J+	SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Aluminum	<	32.8	ug/L		14.7		B	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Aluminum	<	36	ug/L		14.7		B	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Aluminum		207	ug/L		14.7		N*	J+	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Arsenic	<	2.24	ug/L		2.24		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Arsenic	<	2.24	ug/L		2.24		U		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Arsenic	<	2.24	ug/L		2.24		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Arsenic	<	2.31	ug/L		2.24		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Arsenic	<	2.24	ug/L		2.24		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Boron		98.1	ug/L		4.88			UJ	SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Boron		102	ug/L		4.88			UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Boron		105	ug/L		4.88				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Boron		101	ug/L		4.88				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Boron		99.7	ug/L		4.88				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Barium		103	ug/L		0.222				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Barium		106	ug/L		0.222				SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Barium		102	ug/L		0.222				SW-846:6010B

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	UF	CS		METALS	Barium		107	ug/L		0.222				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Barium		103	ug/L		0.222			J	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Beryllium	<	0.158	ug/L		0.158		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Beryllium	<	0.158	ug/L		0.158		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Beryllium	<	0.158	ug/L		0.158		U		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Beryllium	<	0.158	ug/L		0.158		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Beryllium	<	0.158	ug/L		0.158		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Cobalt	<	0.541	ug/L		0.541		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Cobalt	<	0.541	ug/L		0.541		U		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Cobalt	<	0.541	ug/L		0.541		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Cobalt	<	2.46	ug/L		0.541		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Cobalt	<	0.541	ug/L		0.541		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Chromium	<	1.06	ug/L		0.503		B	U	SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Chromium	<	0.998	ug/L		0.503		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Chromium	<	1.24	ug/L		0.503		B	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Chromium	<	1.2	ug/L		0.503		B	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Chromium	<	1.49	ug/L		0.503		B	J	SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Copper	<	2.13	ug/L		1.39		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Copper	<	2.41	ug/L		1.39		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Copper	<	1.75	ug/L		1.39		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Copper	<	1.46	ug/L		1.39		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Copper	<	2.01	ug/L		1.39		B	J	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Iron	<	23.8	ug/L		12.6		B	J	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Iron		100	ug/L		12.6		*		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Iron	<	14	ug/L		12.6		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Iron	<	38.4	ug/L		12.6		B*	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Iron	<	33.3	ug/L		12.6		B*	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Manganese	<	0.296	ug/L		0.296		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Manganese	<	1.71	ug/L		0.296		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Manganese	<	0.526	ug/L		0.296		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Manganese	<	0.374	ug/L		0.296		B		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Manganese	<	0.296	ug/L		0.296		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Molybdenum		83.1	ug/L		1.43				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Molybdenum		80.3	ug/L		1.43				SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Molybdenum		81.3	ug/L		1.43				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Molybdenum		78.5	ug/L		1.43				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Molybdenum		81.2	ug/L		1.43			J	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Nickel	<	4.84	ug/L		0.69		B	J	SW-846:6010B

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Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	F	CS		METALS	Nickel		5.08	ug/L		0.69				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Nickel		5.6	ug/L		0.69				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Nickel		5.27	ug/L		0.69				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Nickel		5.34	ug/L		0.69				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Selenium	<	2.81	ug/L		2.81		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Selenium	<	2.81	ug/L		2.81		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Selenium	<	2.81	ug/L		2.81		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Selenium	<	3.8	ug/L		2.81		B	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Tin	<	3.26	ug/L		3.26		U		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Tin	<	3.26	ug/L		3.26		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Tin	<	3.26	ug/L		3.26		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Tin	<	3.26	ug/L		3.26		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Tin	<	3.26	ug/L		3.26		U	UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Strontium		156	ug/L		0.178			J	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Strontium		163	ug/L		0.178				SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Strontium		156	ug/L		0.178				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Strontium		158	ug/L		0.178				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Strontium		155	ug/L		0.178				SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Vanadium	<	0.923	ug/L		0.606		B	J	SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Vanadium	<	0.606	ug/L		0.606		U		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Vanadium	<	0.867	ug/L		0.606		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Vanadium	<	0.77	ug/L		0.606		B		SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Vanadium	<	0.606	ug/L		0.606		U		SW-846:6010B
MCO-5	05/30/02	F	CS		METALS	Zinc		5.17	ug/L		0.883			UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Zinc		5.24	ug/L		0.883			UJ	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Zinc	<	4.03	ug/L		0.883		B	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Zinc	<	4.16	ug/L		0.883		B	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Zinc	<	4.37	ug/L		0.883		B	U	SW-846:6010B
MCO-5	05/30/02	UF	CS		METALS	Cadmium	<	0.04	ug/L		0.04		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Cadmium	<	0.04	ug/L		0.04		U		SW-846:6020
MCO-5	05/30/02	F	CS		METALS	Cadmium	<	0.04	ug/L		0.04		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Cadmium	<	0.04	ug/L		0.04		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Cadmium	<	0.04	ug/L		0.04		U	UJ	SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Lead	<	0.05	ug/L		0.05		U	UJ	SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Lead	<	0.077	ug/L		0.05		B		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Lead	<	0.054	ug/L		0.05		B		SW-846:6020
MCO-5	05/30/02	F	CS		METALS	Lead	<	0.05	ug/L		0.05		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Lead	<	0.067	ug/L		0.05		B		SW-846:6020

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	F	CS		METALS	Antimony	<	0.28	ug/L		0.28		U	UJ	SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Antimony	<	0.28	ug/L		0.28		U	UJ	SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Antimony	<	0.28	ug/L		0.28		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Antimony	<	0.28	ug/L		0.28		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Antimony	<	0.28	ug/L		0.28		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Thallium	<	0.02	ug/L		0.02		U		SW-846:6020
MCO-5	05/30/02	F	CS		METALS	Thallium	<	0.02	ug/L		0.02		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Thallium	<	0.02	ug/L		0.02		U		SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Thallium	<	0.023	ug/L		0.02		B	UJ	SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Thallium	<	0.02	ug/L		0.02		B	U	SW-846:6020
MCO-5	05/30/02	UF	CS		METALS	Uranium		1.82	ug/L		0.02			J	SW-846:6020
MCO-5	05/30/02	UF	CS		RAD	Gross alpha		5.1	pCi/L	0.954		1.51			EPA:900
MCO-5	05/30/02	UF	CS		RAD	Gross beta		173	pCi/L	3.1		2.54			EPA:900
MCO-5	05/30/02	UF	CS		RAD	Actinium-228	<	4.06	pCi/L	5.01		18.6	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Americium-241	<	-1.06	pCi/L	4.42		8.92	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Barium-133	<	0.994	pCi/L	2.03		6.25	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Beryllium-7	<	0.978	pCi/L	12.7		43.6	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Bismuth-211	<	0	pCi/L	16.8		28.5	U	R	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Bismuth-212	<	8.96	pCi/L	11		40.7	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Bismuth-214		41.3	pCi/L	5.73		9.66			EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cadmium-109	<	-126	pCi/L	27.4		85.9	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cerium-139	<	-1.18	pCi/L	1.22		4.1	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cerium-141	<	-4.23	pCi/L	2.26		7.47	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cerium-144	<	2.5	pCi/L	8.18		28.4	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cobalt-57	<	-0.437	pCi/L	1.02		3.49	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cobalt-60	<	-1.25	pCi/L	1.23		4.19	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Chromium-51	<	-10.2	pCi/L	13.3		44.7	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cesium-134	<	0.42	pCi/L	1.56		4.66	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Cesium-137		1.02	pCi/L	1.44		5.12	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Europium-152	<	-0.483	pCi/L	3.76		12.9	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Europium-154	<	15.1	pCi/L	8.46		21.7	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Iron-59	<	2.81	pCi/L	3.23		12	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Gross gamma	<	204	pCi/L	3.66		682	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Mercury-203	<	0.128	pCi/L	1.52		5.22	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Iodine-133	<	-12400	pCi/L	7280			U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Potassium-40		68	pCi/L	37		45.9		J	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Manganese-54	<	-1.02	pCi/L	1.23		4.28	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Sodium-22	<	0	pCi/L	3.02		4.94	U	R	EPA:901.1

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte		Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	UF	CS		RAD	Niobium-95	<	3.79	pCi/L	1.65		6.4	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Neptunium-237	<	4.83	pCi/L	7.19		25	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Neptunium-239	<	-4.65	pCi/L	7.55		25.8	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Protactinium-231	<	19.1	pCi/L	61.7		213	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Protactinium-233	<	5.07	pCi/L	2.81		8.94	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Protactinium-234M	<	20.7	pCi/L	172		623	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Lead-211	<	2.6	pCi/L	36.1		124	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Lead-212	<	0	pCi/L	5.28		9.19	U	R	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Lead-214		38.6	pCi/L	5.93		10.2			EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Radium-223	<	33.5	pCi/L	26.7		94	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Radium-224	<	0	pCi/L	59.4		85.6	U	R	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Radium-226		41.3	pCi/L	5.73		9.66			EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Radium-228	<	4.06	pCi/L	5.01		18.6	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Rhodium-106	<	8.92	pCi/L	12.6		44.5	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Radon-219	<	20.4	pCi/L	16.5		58.5	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Ruthenium-103	<	1.44	pCi/L	1.46		5.2	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Ruthenium-106	<	10.6	pCi/L	12.5		44.3	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Antimony-124	<	-2.54	pCi/L	1.62		5.2	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Antimony-125	<	1.13	pCi/L	3.72		12.9	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Selenium-75	<	0.963	pCi/L	1.65		5.77	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Tin-113	<	-1.78	pCi/L	1.69		5.59	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Strontium-85	<	0	pCi/L	2		7	U	R	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Thorium-227	<	35.3	pCi/L	16.1		56.9	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Thorium-231	<	0.503	pCi/L	7.1		24.4	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Thorium-234	<	74.7	pCi/L	49.5		114	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Thallium-208	<	6.44	pCi/L	1.72		6.45	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Uranium-235	<	-0.739	pCi/L				U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Uranium-238	<	74.7	pCi/L	49.5		85.3	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Yttrium-88	<	-0.203	pCi/L	1.16		4.36	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Zinc-65	<	-1.22	pCi/L	3.38		10.2	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Zirconium-95	<	0.2	pCi/L	2.44		8.83	U	U	EPA:901.1
MCO-5	05/30/02	UF	CS		RAD	Tritium		3910	pCi/L	123		172			EPA:906.0
MCO-5	05/30/02	UF	CS		RAD	Americium-241		0.532	pCi/L	0.0496		0.021			Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Plutonium-238		0.0426	pCi/L	0.0109		0.0208		J	Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Plutonium-239/240		0.0224	pCi/L	0.00902		0.0241	U	U	Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Thorium-228		0.018	pCi/L	0.0111		0.0357	U	U	Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Thorium-230		0.0528	pCi/L	0.0121		0.0204		J	Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Thorium-232		0.0066	pCi/L	0.00494		0.0162	U	U	Generic:Alpha-Spec

Location Name	Sample Date	Field Prep	Sample Type	Field QC Type	Analyte Suite	Analyte	Result	Units	Uncertain	Mdl	Mda	Lab Qual	Valid Flag	Analytical Method
MCO-5	05/30/02	UF	CS		RAD	Uranium-234	1.83	pCi/L	0.165		0.0144			Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Uranium-235/236	0.144	pCi/L	0.0303		0.0495		J	Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Uranium-238	0.428	pCi/L	0.0571		0.0392			Generic:Alpha-Spec
MCO-5	05/30/02	UF	CS		RAD	Strontium-90	62.1	pCi/L	8.55		0.259			Gas Flw Propr Count
MCO-5	05/30/02	UF	CS		VOA	Dichlorobenzene[1,4-]	0.34	ug/L				J	U	SW-846:8260B
MCO-5	05/30/02	UF	CS	FTB	VOA	Dichlorobenzene[1,4-]	0.47	ug/L				J		SW-846:8260B

Secondary validation and laboratory qualifier flag codes.

Secondary Validation Flags

Valid Flag	Valid Flag Desc
A	The contractually required supporting documentation for this datum is absent.
J	The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual.
J+	The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential positive bias.
J-	The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential negative bias.
NJ	(Organic) -Analyte has been tentatively identified and the associated numerical value is estimated based upon 1:1 response factor to the nearest eluting internal standard
PM	Manual review of raw data is recommended to determine if the observed non-compliances with quality acceptance criteria adversely impacts data use.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality-control criteria. Presence or absence cannot be verified.
RPM	The reported sample result is classified as rejected due to serious noncompliances regarding quality control acceptance criteria. The presence or absence of the analyte cannot be verified based on routine validation alone.
U	The analyte is classified as not detected.
UJ	The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual.

Laboratory Qualifier Flags

Lab Qual C	Lab Qual Desc
*	(Inorganic)- Duplicate analysis not within control limits. (Organic) - Spike recovery is equal to or outside the control criteria used.
**	(Inorganic) and (Organic) GEL- Laboratory Control Sample recovery outside of acceptance limit.
*+	(Inorganic)- Duplicate analysis not within control limits. (Organic) - Spike recovery is equal to or outside the control criteria used.
+	(Inorganic) GEL- Correlation coefficient the Mehtod of Standard Addition (MSA) is less than 0.095. Paragon- no meaning (Organic) - Duplicate Analysis (relative percent difference) not within control limits.
B	(Inorganic) GEL- Correlation coefficient the Mehtod of Standard Addition (MSA) is less than 0.095. Paragon- no meaning (Organic) - Duplicate Analysis (relative percent difference) not within control limits.
B*	(Inorganic) - reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). (Organic) - Analyte present in the blank and the sample.
B*N	(Inorganic) - reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). (Inorganic)- Duplicate analysis not within control limits.
BE	(Inorganic) - Reported value < CRDL and > IDL. Duplicate Analysis not within control limits. Spiked sample recovery not within control limits.
BE*	Low surrogate recovery; analyzed twice
BEN	(Inorganic) - Concatination of B, E, and *.
BN	(Inorganic) - Concatination of B, E, and N.
D	Ignites but does not sustain ignition
E	(Organic) - Analytes analyzed at a secondary dilution. (Inorganic) Paragon- Reported value is estimated because of the presence of interference. GEL- Percent difference between the parent sample and its serial dilutions concentration exceeds 10%. (Organic) - Analyte concentration exceeded the upper level of the calibration range of the instrument for that specific analysis.

E*	(Inorganic) Paragon-Reported value is estimated due to interference. GEL- Percent diff between the parent sample and its serial dilution conc exceeds 10%. - Duplicate analysis not within control limits. (Organic) - Analyte conc exceeded the upper level of the calibration range of the instrument for that specific analysis and spike recovery is equal to or outside the control criteria used.
EB	(Organic)--Analyte concentration exceeded the upper level of calibration range of the instrument. Analyte present in the blank and the sample.
EN	(Inorganic) - Concatination of E and N.
J	(Inorganic) -The associated numerical value is an estimated quantity. (Organic) - The associated numerical value is an estimated quantity.
J*	(Inorganic) -The associated numerical value is an estimated quantity. - Duplicate Analysis not within control limits.
J*+	(Inorganic) -The associated numerical value is an estimated quantity. - Duplicate Analysis not within control limits. (Inorganic) GEL- Correlation coefficient the Method of Standard Addition (MSA) is less than 0.095. Paragon- no meaning (Organic) - Duplicate Analysis (relative percent difference) not within control limits.
JB	(Inorganic)-The associated numeric value is an estimated quantity. The reported value was obtained from a reading that was less the Contract Required Detection Limit.
JD	(Organic) - Estimated value. Analytes analyzed at a secondary dilution.
JP	(Organic) - The associated numerical value is an estimated quantity. > 25% difference for detected concentrations between two columns.
N	(Inorganic) - Spiked sample recovery not within control limits. (Organic) -Presumptive evidence based on a mass spectral library search to make a tentative identification of the analyte.
N*	(Inorganic) - Spiked sample recovery not within control limits. Duplicate analysis not within control limits.
NJ	(Organic) -Analyte has been tentatively identified and the associated numerical value is estimated based upon 1:1 response factor to the nearest eluting internal standard
P	(Organic) - > 25% difference for detected concentrations between two columns
R	(Inorganic) -The data are not useable. (Organic) -The data are unusable (compound may or may not be present.) Resampling and reanalysis is necessary for verification.
U	(Inorganic) -The material was analyzed for, but was not detected above the level of the associated numeric value. The associated numerical value is either the sample quantitation limit or the sample detection limit. (Organic) -The material was analyzed
U*	(Inorganic) - Compound was analyzed for, but was not detected. Duplicate analysis not within control limits.
UE	(Inorganic) - Compound was analyzed for, but was not detected. Reported value is estimated because of the presence of interference.
UEN	(Inorganic) - Concatination of U, E, and N.
UJ	(Inorganic) - The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise. (Organic) -The material was analyzed for, but was not detected. Quantitation limit is an estimated quantity.
UN	(Inorganic) - Compound was analyzed for,but was not detected. - Spiked sample recovery not within control limits.
UN*	(Inorganic) - Compound was analyzed for,but was not detected. - Spiked sample recovery not within control limits. - Duplicate Analysis not within control limits.
X	Rreported concentration is a false positive