


ANALYTICAL RESULTS  
FOR  
U.S. GEOLOGICAL SURVEY  
ENSECO-RMAL NO. 013918  
MARCH 30, 1991



Reviewed by:

  
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Randall Thompson

  
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KAFB1116



## **Introduction**

This report presents the analytical results as well as supporting information to aid in the evaluation and interpretation of the data and is arranged in the following order:

- o Sample Description Information
- o Analytical Test Requests
- o Analytical Results
- o Quality Control Report

## **Sample Description Information**

The Sample Description Information lists all of the samples received in this project together with the internal laboratory identification number assigned for each sample. Each project received at Enseco - RMAL is assigned a unique six digit number. Samples within the project are numbered sequentially. The laboratory identification number is a combination of the six digit project code and the sample sequence number.

Also given in the Sample Description Information is the Sample Type (matrix), Date of Sampling (if known) and Date of Receipt at the laboratory.

## **Analytical Test Requests**

The Analytical Test Requests lists the analyses that were performed on each sample. The Custom Test column indicates where tests have been modified to conform to the specific requirements of this project.

SAMPLE DESCRIPTION INFORMATION  
for  
U.S. Geological Survey

Lab ID	Client ID	Matrix	Sampled		Received
			Date	Time	Date
013918-0001-SA	MVMWK 03-2	AQUEOUS	08 MAR 91	09:53	09 MAR 91
013918-0002-SA	MVMWK 04-2	AQUEOUS	08 MAR 91	11:35	09 MAR 91
013918-0003-SA	MVMWK 05-2	AQUEOUS	08 MAR 91	11:50	09 MAR 91
013918-0004-SA	MVMWK 06-2	AQUEOUS	08 MAR 91	07:55	09 MAR 91

ANALYTICAL TEST REQUESTS  
for  
U.S. Geological Survey

Lab ID: 013918	Group Code	Analysis Description	Custom Test?
0001 - 0004	A	Nitrate Plus Nitrite Halogenated Volatile Organics Halogenated Volatile Organics-2nd Column Analysis	N N N

## Analytical Results

The analytical results for this project are presented in the following data tables. Each data table includes sample identification information, and when available and appropriate, dates sampled, received, authorized, prepared and analyzed. The authorization data is the date when the project was defined by the client such that laboratory work could begin.

Data sheets contain a listing of the parameters measured in each test, the analytical results and the Enseco reporting limit. Reporting limits are adjusted to reflect dilution of the sample, when appropriate. Solid and waste samples are reported on an "as received" basis, i.e. no correction is made for moisture content.

Enseco-RMAL is no longer routinely blank-correcting analytical data. Uncorrected analytical results are reported, along with associated blank results, for all organic and metals analyses. Analytical results and blank results are reported for conventional inorganic parameters as specified in the method. This policy is described in detail in the Enseco Incorporated Quality Assurance Program Plan for Environmental Chemical Monitoring, Revision 3.3, May, 1989.

The results from the Standard Enseco QA/QC Program, which generates data which are independent of matrix effects, is provided subsequently.

Halogenated Volatile Organics

Method 8010

Client Name: U.S. Geological Survey  
 Client ID: MVMWK 03-2  
 Lab ID: 013918-0001-SA  
 Matrix: AQUEOUS  
 Authorized: 09 MAR 91

Sampled: 08 MAR 91  
 Prepared: NA

Received: 09 MAR 91  
 Analyzed: 20 MAR 91

Parameter	Result	Units	Reporting Limit	
Chloromethane	ND	ug/L	1.1	T
Bromomethane	ND	ug/L	6.0	
Dichlorodifluoromethane	ND	ug/L	9.0	
Vinyl chloride	ND	ug/L	0.60	
Chloroethane	ND	ug/L	3.0	
Methylene chloride	ND	ug/L	2.0	
Trichlorofluoromethane	ND	ug/L	5.0	
1,1-Dichloroethene	ND	ug/L	0.70	
1,1-Dichloroethane	ND	ug/L	0.40	
trans-1,2-Dichloroethene	ND	ug/L	0.50	
Chloroform	ND	ug/L	0.30	
1,2-Dichloroethane	ND	ug/L	0.50	
1,1,1-Trichloroethane	ND	ug/L	0.20	
Carbon tetrachloride	ND	ug/L	0.60	
Bromodichloromethane	ND	ug/L	0.50	
1,2-Dichloropropane	ND	ug/L	0.50	
trans-1,3-Dichloropropene	ND	ug/L	2.0	
Trichloroethene	ND	ug/L	0.60	
Dibromochloromethane	ND	ug/L	0.60	
1,1,2-Trichloroethane	ND	ug/L	0.20	
2-Chloroethyl vinyl ether	ND	ug/L	5.5	
Bromoform	ND	ug/L	1.0	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.4	
Tetrachloroethene	ND	ug/L	0.40	
Chlorobenzene	ND	ug/L	1.2	
1,3-Dichlorobenzene	ND	ug/L	1.0	
1,2-Dichlorobenzene	ND	ug/L	0.50	
1,4-Dichlorobenzene	ND	ug/L	0.50	
Benzyl chloride	ND	ug/L	6.8	
Bromobenzene	ND	ug/L	5.0	
bis(2-Chloroisopropyl)- ether	ND	ug/L	10	
1-Chlorohexane	ND	ug/L	5.0	
4-Chlorotoluene	ND	ug/L	23	
Dibromomethane	ND	ug/L	5.0	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	
1,2,3-Trichloropropane	ND	ug/L	5.0	

Surrogate	Recovery	
Bromochloromethane	86	%

(continued on following page)

ND = Not detected  
 NA = Not applicable

Reported By: Garth Atkins

Approved By: Jeff Lowry

Halogenated Volatile Organics (CONT.)

Method 8010

Client Name: U.S. Geological Survey

Client ID: MVMWK 03-2

Lab ID: 013918-0001-SA

Matrix: AQUEOUS

Authorized: 09 MAR 91

Sampled: 08 MAR 91

Prepared: NA

Received: 09 MAR 91

Analyzed: 20 MAR 91

Note T : Preferred values unless footnoted on secondary column test.

ND = Not detected

NA = Not applicable

Reported By: Garth Atkins

Approved By: Jeff Lowry

Halogenated Volatile Organics

Method 8010

Client Name: U.S. Geological Survey

Client ID: MVMWK 04-2

Lab ID: 013918-0002-SA

Matrix: AQUEOUS

Authorized: 09 MAR 91

Sampled: 08 MAR 91  
Prepared: NA

Received: 09 MAR 91  
Analyzed: 20 MAR 91

Parameter	Result	Units	Reporting Limit	
Chloromethane	ND	ug/L	1.1	T
Bromomethane	ND	ug/L	6.0	
Dichlorodifluoromethane	ND	ug/L	9.0	
Vinyl chloride	ND	ug/L	0.60	
Chloroethane	ND	ug/L	3.0	
Methylene chloride	ND	ug/L	2.0	
Trichlorofluoromethane	ND	ug/L	5.0	
1,1-Dichloroethene	ND	ug/L	0.70	
1,1-Dichloroethane	ND	ug/L	0.40	
trans-1,2-Dichloroethene	ND	ug/L	0.50	
Chloroform	ND	ug/L	0.30	
1,2-Dichloroethane	ND	ug/L	0.50	
1,1,1-Trichloroethane	ND	ug/L	0.20	
Carbon tetrachloride	ND	ug/L	0.60	
Bromodichloromethane	ND	ug/L	0.50	
1,2-Dichloropropane	ND	ug/L	0.50	
trans-1,3-Dichloropropene	ND	ug/L	2.0	
Trichloroethene	ND	ug/L	0.60	
Dibromochloromethane	ND	ug/L	0.60	
1,1,2-Trichloroethane	ND	ug/L	0.20	
2-Chloroethyl vinyl ether	ND	ug/L	5.5	
Bromoform	ND	ug/L	1.0	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.4	
Tetrachloroethene	ND	ug/L	0.40	
Chlorobenzene	ND	ug/L	1.2	
1,3-Dichlorobenzene	ND	ug/L	1.0	
1,2-Dichlorobenzene	ND	ug/L	0.50	
1,4-Dichlorobenzene	ND	ug/L	0.50	
Benzyl chloride	ND	ug/L	6.8	
Bromobenzene	ND	ug/L	5.0	
bis(2-Chloroisopropyl)- ether	ND	ug/L	10	
1-Chlorohexane	ND	ug/L	5.0	
4-Chlorotoluene	ND	ug/L	23	
Dibromomethane	ND	ug/L	5.0	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	
1,2,3-Trichloropropane	ND	ug/L	5.0	

Surrogate

Recovery

Bromochloromethane

85 %

(continued on following page)

ND = Not detected

NA = Not applicable

Reported By: Garth Atkins

Approved By: Jeff Lowry



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**Halogenated Volatile Organics (CONT.)****Method 8010****Client Name:** U.S. Geological Survey**Client ID:** MVMWK 04-2**Lab ID:** 013918-0002-SA**Matrix:** AQUEOUS**Authorized:** 09 MAR 91**Sampled:** 08 MAR 91**Prepared:** NA**Received:** 09 MAR 91**Analyzed:** 20 MAR 91

**Note T :** Preferred values unless footnoted on secondary column test.

**ND =** Not detected

**NA =** Not applicable

**Reported By:** Garth Atkins

**Approved By:** Jeff Lowry

Halogenated Volatile Organics

Method 8010

Client Name: U.S. Geological Survey  
 Client ID: MVMWK 05-2  
 Lab ID: 013918-0003-SA  
 Matrix: AQUEOUS  
 Authorized: 09 MAR 91

Sampled: 08 MAR 91  
 Prepared: NA

Received: 09 MAR 91  
 Analyzed: 21 MAR 91

Parameter	Result	Units	Reporting Limit	
Chloromethane	ND	ug/L	1.1	T
Bromomethane	ND	ug/L	6.0	
Dichlorodifluoromethane	ND	ug/L	9.0	
Vinyl chloride	ND	ug/L	0.60	
Chloroethane	ND	ug/L	3.0	
Methylene chloride	ND	ug/L	2.0	
Trichlorofluoromethane	ND	ug/L	5.0	
1,1-Dichloroethene	ND	ug/L	0.70	
1,1-Dichloroethane	ND	ug/L	0.40	
trans-1,2-Dichloroethene	ND	ug/L	0.50	
Chloroform	ND	ug/L	0.30	
1,2-Dichloroethane	ND	ug/L	0.50	
1,1,1-Trichloroethane	ND	ug/L	0.20	
Carbon tetrachloride	ND	ug/L	0.60	
Bromodichloromethane	ND	ug/L	0.50	
1,2-Dichloropropane	0.64	ug/L	0.50	
trans-1,3-Dichloropropene	ND	ug/L	2.0	
Trichloroethene	ND	ug/L	0.60	
Dibromochloromethane	ND	ug/L	0.60	
1,1,2-Trichloroethane	ND	ug/L	0.20	
2-Chloroethyl vinyl ether	ND	ug/L	5.5	
Bromoform	ND	ug/L	1.0	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.4	
Tetrachloroethene	ND	ug/L	0.40	
Chlorobenzene	ND	ug/L	1.2	
1,3-Dichlorobenzene	ND	ug/L	1.0	
1,2-Dichlorobenzene	ND	ug/L	0.50	
1,4-Dichlorobenzene	ND	ug/L	0.50	
Benzyl chloride	ND	ug/L	6.8	
Bromobenzene	ND	ug/L	5.0	
bis(2-Chloroisopropyl)- ether	ND	ug/L	10	
1-Chlorohexane	ND	ug/L	5.0	
4-Chlorotoluene	ND	ug/L	23	
Dibromomethane	ND	ug/L	5.0	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	
1,2,3-Trichloropropane	ND	ug/L	5.0	
Surrogate	Recovery			
Bromochloromethane	90	%		

(continued on following page)

ND = Not detected  
 NA = Not applicable

Reported By: Bret Collins

Approved By: Jeff Lowry

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**Halogenated Volatile Organics (CONT.)****Method 8010****Client Name:** U.S. Geological Survey**Client ID:** MVMWK 05-2**Lab ID:** 013918-0003-SA**Matrix:** AQUEOUS**Authorized:** 09 MAR 91**Sampled:** 08 MAR 91**Prepared:** NA**Received:** 09 MAR 91**Analyzed:** 21 MAR 91

**Note T :** Preferred values unless footnoted on secondary column test.

**ND =** Not detected

**NA =** Not applicable

**Reported By:** Bret Collins

**Approved By:** Jeff Lowry

Halogenated Volatile Organics-2nd Column Analysis

Method 8010

Client Name: U.S. Geological Survey  
 Client ID: MVMWK 05-2  
 Lab ID: 013918-0003-SA  
 Matrix: AQUEOUS  
 Authorized: 09 MAR 91

Sampled: 08 MAR 91  
 Prepared: NA

Received: 09 MAR 91  
 Analyzed: 21 MAR 91

Parameter	Result	Units	Reporting Limit	
Chloromethane	ND	ug/L	1.1	
Bromomethane	ND	ug/L	6.0	
Dichlorodifluoromethane	ND	ug/L	9.0	
Vinyl chloride	ND	ug/L	0.60	
Chloroethane	ND	ug/L	3.0	
Methylene chloride	ND	ug/L	2.0	
Trichlorofluoromethane	ND	ug/L	5.0	
1,1-Dichloroethene	ND	ug/L	0.70	
1,1-Dichloroethane	ND	ug/L	0.40	
trans-1,2-Dichloroethene	ND	ug/L	0.50	
Chloroform	0.64	ug/L	0.30	
1,2-Dichloroethane	ND	ug/L	0.50	
1,1,1-Trichloroethane	ND	ug/L	0.20	
Carbon tetrachloride	ND	ug/L	0.60	
Bromodichloromethane	ND	ug/L	0.50	
1,2-Dichloropropane	1.2	ug/L	0.50	L
trans-1,3-Dichloropropene	ND	ug/L	2.0	
Trichloroethene	ND	ug/L	0.60	
Dibromochloromethane	ND	ug/L	0.60	
1,1,2-Trichloroethane	ND	ug/L	0.20	
2-Chloroethyl vinyl ether	ND	ug/L	5.5	
Bromoform	ND	ug/L	1.0	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.4	
Tetrachloroethene	ND	ug/L	0.40	
Chlorobenzene	ND	ug/L	1.2	
1,3-Dichlorobenzene	ND	ug/L	1.0	
1,2-Dichlorobenzene	ND	ug/L	0.50	
1,4-Dichlorobenzene	ND	ug/L	0.50	
Benzyl chloride	ND	ug/L	6.8	
Bromobenzene	ND	ug/L	5.0	
bis(2-Chloroisopropyl)- ether	ND	ug/L	10	
1-Chlorohexane	ND	ug/L	5.0	
4-Chlorotoluene	ND	ug/L	23	
Dibromomethane	ND	ug/L	5.0	L
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	
1,2,3-Trichloropropane	ND	ug/L	5.0	

Surrogate Recovery  
 Bromochloromethane 81 %

(continued on following page)

ND = Not detected  
 NA = Not applicable

Reported By: Bret Collins

Approved By: Jeff Lowry

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Halogenated Volatile Organics-2nd Column Analysis (CONT.)

Method 8010

Client Name: U.S. Geological Survey

Client ID: MVMWK 05-2

Lab ID: 013918-0003-SA

Matrix: AQUEOUS

Authorized: 09 MAR 91

Sampled: 08 MAR 91

Prepared: NA

Received: 09 MAR 91

Analyzed: 21 MAR 91

Note L : These components are not separable using this method and are therefore quantified together.

ND = Not detected

NA = Not applicable

Reported By: Bret Collins

Approved By: Jeff Lowry

Halogenated Volatile Organics

Method 8010

Client Name: U.S. Geological Survey  
 Client ID: MVMWK 06-2  
 Lab ID: 013918-0004-SA  
 Matrix: AQUEOUS  
 Authorized: 09 MAR 91  
 Sampled: 08 MAR 91  
 Prepared: NA  
 Received: 09 MAR 91  
 Analyzed: 21 MAR 91

Parameter	Result	Units	Reporting Limit	
Chloromethane	ND	ug/L	1.1	T
Bromomethane	ND	ug/L	6.0	
Dichlorodifluoromethane	ND	ug/L	9.0	
Vinyl chloride	ND	ug/L	0.60	
Chloroethane	ND	ug/L	3.0	
Methylene chloride	ND	ug/L	2.0	
Trichlorofluoromethane	ND	ug/L	5.0	
1,1-Dichloroethene	ND	ug/L	0.70	
1,1-Dichloroethane	ND	ug/L	0.40	
trans-1,2-Dichloroethene	ND	ug/L	0.50	
Chloroform	0.30	ug/L	0.30	
1,2-Dichloroethane	ND	ug/L	0.50	
1,1,1-Trichloroethane	ND	ug/L	0.20	
Carbon tetrachloride	ND	ug/L	0.60	
Bromodichloromethane	ND	ug/L	0.50	
1,2-Dichloropropane	0.54	ug/L	0.50	
trans-1,3-Dichloropropene	ND	ug/L	2.0	
Trichloroethene	ND	ug/L	0.60	
Dibromochloromethane	ND	ug/L	0.60	
1,1,2-Trichloroethane	ND	ug/L	0.20	
2-Chloroethyl vinyl ether	ND	ug/L	5.5	
Bromoform	ND	ug/L	1.0	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.4	
Tetrachloroethene	ND	ug/L	0.40	
Chlorobenzene	ND	ug/L	1.2	
1,3-Dichlorobenzene	ND	ug/L	1.0	
1,2-Dichlorobenzene	ND	ug/L	0.50	
1,4-Dichlorobenzene	ND	ug/L	0.50	
Benzyl chloride	ND	ug/L	6.8	
Bromobenzene	ND	ug/L	5.0	
bis(2-Chloroisopropyl)- ether	ND	ug/L	10	
1-Chlorohexane	ND	ug/L	5.0	
4-Chlorotoluene	ND	ug/L	23	
Dibromomethane	ND	ug/L	5.0	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	
1,2,3-Trichloropropane	ND	ug/L	5.0	

Surrogate Recovery  
 Bromochloromethane 85 %

(continued on following page)

ND = Not detected  
 NA = Not applicable

Reported By: Bret Collins

Approved By: Jeff Lowry

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**Halogenated Volatile Organics (CONT.)****Method 8010****Client Name:** U.S. Geological Survey**Client ID:** MVMWK 06-2**Lab ID:** 013918-0004-SA**Matrix:** AQUEOUS**Authorized:** 09 MAR 91**Sampled:** 08 MAR 91**Prepared:** NA**Received:** 09 MAR 91**Analyzed:** 21 MAR 91

Note T : Preferred values unless footnoted on secondary column test.

ND = Not detected

NA = Not applicable

Reported By: Bret Collins

Approved By: Jeff Lowry

Halogenated Volatile Organics-2nd Column Analysis



Method 8010

Client Name: U.S. Geological Survey

Client ID: MVMWK 06-2

Lab ID: 013918-0004-SA

Matrix: AQUEOUS

Authorized: 09 MAR 91

Sampled: 08 MAR 91  
Prepared: NA

Received: 09 MAR 91  
Analyzed: 21 MAR 91

Parameter	Result	Units	Reporting Limit	
Chloromethane	ND	ug/L	1.1	
Bromomethane	ND	ug/L	6.0	
Dichlorodifluoromethane	ND	ug/L	9.0	
Vinyl chloride	ND	ug/L	0.60	
Chloroethane	ND	ug/L	3.0	
Methylene chloride	ND	ug/L	2.0	
Trichlorofluoromethane	ND	ug/L	5.0	
1,1-Dichloroethene	0.70	ug/L	0.70	
1,1-Dichloroethane	ND	ug/L	0.40	
trans-1,2-Dichloroethene	ND	ug/L	0.50	
Chloroform	0.70	ug/L	0.30	
1,2-Dichloroethane	ND	ug/L	0.50	
1,1,1-Trichloroethane	ND	ug/L	0.20	
Carbon tetrachloride	ND	ug/L	0.60	
Bromodichloromethane	ND	ug/L	0.50	
1,2-Dichloropropane	1.2	ug/L	0.50	L
trans-1,3-Dichloropropene	ND	ug/L	2.0	
Trichloroethene	ND	ug/L	0.60	
Dibromochloromethane	ND	ug/L	0.60	
1,1,2-Trichloroethane	ND	ug/L	0.20	
2-Chloroethyl vinyl ether	ND	ug/L	5.5	
Bromoform	ND	ug/L	1.0	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.4	
Tetrachloroethene	ND	ug/L	0.40	
Chlorobenzene	ND	ug/L	1.2	
1,3-Dichlorobenzene	ND	ug/L	1.0	
1,2-Dichlorobenzene	ND	ug/L	0.50	
1,4-Dichlorobenzene	ND	ug/L	0.50	
Benzyl chloride	ND	ug/L	6.8	
Bromobenzene	ND	ug/L	5.0	
bis(2-Chloroisopropyl)- ether	ND	ug/L	10	
1-Chlorohexane	ND	ug/L	5.0	
4-Chlorotoluene	ND	ug/L	23	
Dibromomethane	ND	ug/L	5.0	L
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	
1,2,3-Trichloropropane	ND	ug/L	5.0	

Surrogate	Recovery	
Bromochloromethane	83	%

(continued on following page)

ND = Not detected  
NA = Not applicable

Reported By: Bret Collins

Approved By: Jeff Lowry



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Halogenated Volatile Organics-2nd Column Analysis (CONT.)



Method 8010

Client Name: U.S. Geological Survey

Client ID: MVMWK 06-2

Lab ID: 013918-0004-SA

Matrix: AQUEOUS

Authorized: 09 MAR 91

Sampled: 08 MAR 91

Prepared: NA

Received: 09 MAR 91

Analyzed: 21 MAR 91

Note L : These components are not separable using this method and are therefore quantified together.

ND = Not detected

NA = Not applicable

Reported By: Bret Collins

Approved By: Jeff Lowry

General Inorganics



Client Name: U.S. Geological Survey  
Client ID: MVMWK 03-2  
Lab ID: 013918-0001-SA  
Matrix: AQUEOUS  
Authorized: 09 MAR 91

Sampled: 08 MAR 91  
Prepared: See Below

Received: 09 MAR 91  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Nitrate plus Nitrite	ND	mg/L	0.050	353.2	NA	21 MAR 91

ND = Not detected  
NA = Not applicable

Reported By: Linda Sullivan

Approved By: Dave Roberts

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**General Inorganics**

Client Name: U.S. Geological Survey  
Client ID: MVMWK 04-2  
Lab ID: 013918-0002-SA  
Matrix: AQUEOUS  
Authorized: 09 MAR 91

Sampled: 08 MAR 91  
Prepared: See Below

Received: 09 MAR 91  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Nitrate plus Nitrite	51.8	mg/L	2.5	353.2	NA	21 MAR 91

ND = Not detected  
NA = Not applicable

Reported By: Linda Sullivan

Approved By: Dave Roberts

General Inorganics



Client Name: U.S. Geological Survey  
Client ID: MVMWK 05-2  
Lab ID: 013918-0003-SA  
Matrix: AQUEOUS  
Authorized: 09 MAR 91

Sampled: 08 MAR 91  
Prepared: See Below

Received: 09 MAR 91  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Nitrate plus Nitrite	ND	mg/L	0.050	353.2	NA	21 MAR 91

ND = Not detected  
NA = Not applicable

Reported By: Linda Sullivan

Approved By: Dave Roberts

General Inorganics



Client Name: U.S. Geological Survey  
Client ID: MVMWK 06-2  
Lab ID: 013918-0004-SA  
Matrix: AQUEOUS  
Authorized: 09 MAR 91

Sampled: 08 MAR 91  
Prepared: See Below

Received: 09 MAR 91  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Nitrate plus Nitrite	ND	mg/L	0.050	353.2	NA	21 MAR 91

ND = Not detected  
NA = Not applicable

Reported By: Linda Sullivan

Approved By: Dave Roberts

## Quality Control Results

The Enseco laboratories operate under a vigorous QA/QC program designed to ensure the generation of scientifically valid, legally defensible data by monitoring every aspect of laboratory operations. Routine QA/QC procedures include the use of approved methodologies, independent verification of analytical standards, use of duplicate Laboratory Control Samples to assess the precision and accuracy of the methodology on a routine basis, and a rigorous system of data review.

In addition, the Enseco laboratories maintain a comprehensive set of certifications from both state and federal governmental agencies which require frequent analyses of blind audit samples. Enseco - Rocky Mountain Analytical Laboratory is certified by the EPA under the EPA/CLP program for both Organic and Inorganic analyses, under the USATHAMA (U.S. Army) program, by the Army Corps of Engineers, and the states of Colorado, New Jersey, New York, Utah, and Florida, among others.

The standard laboratory QC package is designed to:

- 1) establish a strong, cost-effective QC program that ensures the generation of scientifically valid, legally defensible data
- 2) assess the laboratory's performance of the analytical method using control limits generated with a well-defined matrix
- 3) establish clear-cut guidelines for acceptability of analytical data so that QC decisions can be made immediately at the bench, and
- 4) provide a standard set of reportables which assures the client of the quality of his data.

The Enseco QC program is based upon monitoring the precision and accuracy of an analytical method by analyzing a set of Duplicate Control Samples (DCS) at frequent, well-defined intervals. Each DCS is a well-characterized matrix which is spiked with target compounds at 5-100 times the reporting limit, depending upon the methodology being monitored. The purpose of the DCS is not to duplicate the sample matrix, but rather to provide an interference-free, homogeneous matrix from which to gather data to establish control limits. These limits are used to determine whether data generated by the laboratory on any given day is in control.

Control limits for accuracy (percent recovery) are based on the average, historical percent recovery +/- 3 standard deviation units. Control limits for precision (relative percent difference) range from 0 (identical duplicate DCS results) to the average, historical relative percent difference + 3 standard deviation units. These control limits are fairly narrow based on the consistency of the matrix being monitored and are updated on a quarterly basis.

For each batch of samples analyzed, an additional control measure is taken in the form of a Single Control Sample (SCS). The SCS consists of a control matrix that is spiked with either representative target compounds or surrogate compounds appropriate to the method being used. An SCS is prepared for each sample lot for which the DCS pair are not analyzed.

Accuracy for DCS and SCS is measured by Percent Recovery.

$$\% \text{ Recovery} = \frac{\text{Measured Concentration}}{\text{Actual Concentration}} \times 100$$

Precision for DCS is measured by Relative Percent Difference (RPD).

$$\text{RPD} = \frac{|\text{Measured Concentration DCS1} - \text{Measured Concentration DCS2}|}{(\text{Measured Concentration DCS1} + \text{Measured Concentration DCS2})/2} \times 100$$

All samples analyzed concurrently by the same test are assigned the same QC lot number. Projects which contain numerous samples, analyzed over several days, may have multiple QC lot numbers associated with each test. The QC information which follows includes a listing of the QC lot numbers associated with each of the samples reported, DCS and SCS (where applicable) recoveries from the QC lots associated with the samples, and control limits for these lots. The QC data is reported by test code, in the order that the tests are reported in the analytical results section of this report.



QC LOT ASSIGNMENT REPORT  
Volatile Organics by GC

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK)
013918-0001-SA	AQUEOUS	601-A	19 MAR 91-F9	19 MAR 91-F9
013918-0002-SA	AQUEOUS	601-A	19 MAR 91-F9	19 MAR 91-F9
013918-0003-SA	AQUEOUS	601-A	21 MAR 91-F9	21 MAR 91-F9
013918-0003-SA	AQUEOUS	601-A	21 MAR 91-F9	21 MAR 91-F9
013918-0004-SA	AQUEOUS	601-A	21 MAR 91-F9	21 MAR 91-F9
013918-0004-SA	AQUEOUS	601-A	21 MAR 91-F9	21 MAR 91-F9

DUPLICATE CONTROL SAMPLE REPORT  
Volatile Organics by GC

Analyte	Concentration Spiked	Concentration Measured		AVG	Accuracy Average(%)		Precision (RPD)	
		DCS1	DCS2		DCS	Limits	DCS	Limit
Category: 601-A								
Matrix: AQUEOUS								
QC Lot: 19 MAR 91-F9								
Concentration Units: ug/L								
1,1-Dichloroethane	5.0	5.51	5.89	5.70	114	80-130	6.7	20
Chloroform	5.0	5.35	5.84	5.60	112	80-120	8.8	20
Bromodichloromethane	10	8.20	8.96	8.58	86	80-120	8.9	20
Trichloroethene	5.0	5.81	6.17	5.99	120	70-120	6.0	20
Chlorobenzene	5.0	3.82	4.88	4.35	87	80-120	24	20

Category: 601-A  
Matrix: AQUEOUS  
QC Lot: 21 MAR 91-F9  
Concentration Units: ug/L

1,1-Dichloroethane	5.0	4.77	4.89	4.83	97	80-130	2.5	20
Chloroform	5.0	5.10	5.23	5.16	103	80-120	2.5	20
Bromodichloromethane	10	8.07	8.19	8.13	81	80-120	1.5	20
Trichloroethene	5.0	4.94	4.82	4.88	98	70-120	2.5	20
Chlorobenzene	5.0	4.24	4.13	4.18	84	80-120	2.6	20

Calculations are performed before rounding to avoid round-off errors in calculated results.

SINGLE CONTROL SAMPLE REPORT  
 Volatile Organics by GC

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	SCS	Limits

Category: 601-A  
 Matrix: AQUEOUS  
 QC Lot: 19 MAR 91-F9    QC Run: 19 MAR 91-F9  
 Concentration Units: ug/L

Bromochloromethane	5.00	4.92	98	20-160
--------------------	------	------	----	--------

Category: 601-A  
 Matrix: AQUEOUS  
 QC Lot: 21 MAR 91-F9    QC Run: 21 MAR 91-F9  
 Concentration Units: ug/L

Bromochloromethane	5.00	4.22	84	20-160
--------------------	------	------	----	--------

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT  
Volatile Organics by GC

Analyte	Result	Units	Reporting Limit
Test: 601-AFIR-A			
Matrix: AQUEOUS			
QC Lot: 19 MAR 91-F9	QC Run: 19 MAR 91-F9		
Chloromethane	ND	ug/L	1.1
Bromomethane	ND	ug/L	6.0
Dichlorodifluoromethane	ND	ug/L	9.0
Vinyl chloride	ND	ug/L	0.60
Chloroethane	ND	ug/L	3.0
Methylene chloride	ND	ug/L	2.0
Trichlorofluoromethane	ND	ug/L	5.0
1,1-Dichloroethene	ND	ug/L	0.70
1,1-Dichloroethane	ND	ug/L	0.40
trans-1,2-Dichloroethene	ND	ug/L	0.50
Chloroform	ND	ug/L	0.30
1,2-Dichloroethane	ND	ug/L	0.50
1,1,1-Trichloroethane	ND	ug/L	0.20
Carbon tetrachloride	ND	ug/L	0.60
Bromodichloromethane	ND	ug/L	0.50
1,2-Dichloropropane	ND	ug/L	0.50
trans-1,3-Dichloropropene	ND	ug/L	2.0
Trichloroethene	ND	ug/L	0.60
Dibromochloromethane	ND	ug/L	0.60
1,1,2-Trichloroethane	ND	ug/L	0.20
2-Chloroethyl vinyl ether	ND	ug/L	5.5
Bromoform	ND	ug/L	1.0
1,1,2,2-Tetrachloroethane	ND	ug/L	1.4
Tetrachloroethene	ND	ug/L	0.40
Chlorobenzene	ND	ug/L	1.2
1,3-Dichlorobenzene	ND	ug/L	1.0
1,2-Dichlorobenzene	ND	ug/L	0.50
1,4-Dichlorobenzene	ND	ug/L	0.50
Benzyl chloride	ND	ug/L	6.8
Bromobenzene	ND	ug/L	5.0
bis(2-Chloroisopropyl)- ether	ND	ug/L	10
1-Chlorohexane	ND	ug/L	5.0
4-Chlorotoluene	ND	ug/L	23
Dibromomethane	ND	ug/L	5.0
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0
1,2,3-Trichloropropane	ND	ug/L	5.0

METHOD BLANK REPORT  
Volatile Organics by GC (cont.)

Analyte	Result	Units	Reporting Limit
Test: 601-AFIR-A			
Matrix: AQUEOUS			
QC Lot: 21 MAR 91-F9	QC Run: 21 MAR 91-F9		
Chloromethane	ND	ug/L	1.1
Bromomethane	ND	ug/L	6.0
Dichlorodifluoromethane	ND	ug/L	9.0
Vinyl chloride	ND	ug/L	0.60
Chloroethane	ND	ug/L	3.0
Methylene chloride	ND	ug/L	2.0
Trichlorofluoromethane	ND	ug/L	5.0
1,1-Dichloroethene	ND	ug/L	0.70
1,1-Dichloroethane	ND	ug/L	0.40
trans-1,2-Dichloroethene	ND	ug/L	0.50
Chloroform	ND	ug/L	0.30
1,2-Dichloroethane	ND	ug/L	0.50
1,1,1-Trichloroethane	ND	ug/L	0.20
Carbon tetrachloride	ND	ug/L	0.60
Bromodichloromethane	ND	ug/L	0.50
1,2-Dichloropropane	ND	ug/L	0.50
trans-1,3-Dichloropropene	ND	ug/L	2.0
Trichloroethene	ND	ug/L	0.60
Dibromochloromethane	ND	ug/L	0.60
1,1,2-Trichloroethane	ND	ug/L	0.20
2-Chloroethyl vinyl ether	ND	ug/L	5.5
Bromoform	ND	ug/L	1.0
1,1,2,2-Tetrachloroethane	ND	ug/L	1.4
Tetrachloroethene	ND	ug/L	0.40
Chlorobenzene	ND	ug/L	1.2
1,3-Dichlorobenzene	ND	ug/L	1.0
1,2-Dichlorobenzene	ND	ug/L	0.50
1,4-Dichlorobenzene	ND	ug/L	0.50
Benzyl chloride	ND	ug/L	6.8
Bromobenzene	ND	ug/L	5.0
bis(2-Chloroisopropyl)- ether	ND	ug/L	10
1-Chlorohexane	ND	ug/L	5.0
4-Chlorotoluene	ND	ug/L	23
Dibromomethane	ND	ug/L	5.0
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0
1,2,3-Trichloropropane	ND	ug/L	5.0

METHOD BLANK REPORT  
Volatile Organics by GC (cont.)

Analyte	Result	Units	Reporting Limit
Test: 601-AFIR-2-A			
Matrix: AQUEOUS			
QC Lot: 21 MAR 91-F9 QC Run: 21 MAR 91-F9			
Chloromethane	ND	ug/L	1.1
Bromomethane	ND	ug/L	6.0
Dichlorodifluoromethane	ND	ug/L	9.0
Vinyl chloride	ND	ug/L	0.60
Chloroethane	ND	ug/L	3.0
Methylene chloride	ND	ug/L	2.0
Trichlorofluoromethane	ND	ug/L	5.0
1,1-Dichloroethene	ND	ug/L	0.70
1,1-Dichloroethane	ND	ug/L	0.40
trans-1,2-Dichloroethene	ND	ug/L	0.50
Chloroform	ND	ug/L	0.30
1,2-Dichloroethane	ND	ug/L	0.50
1,1,1-Trichloroethane	ND	ug/L	0.20
Carbon tetrachloride	ND	ug/L	0.60
Bromodichloromethane	ND	ug/L	0.50
1,2-Dichloropropane	ND	ug/L	0.50
trans-1,3-Dichloropropene	ND	ug/L	2.0
Trichloroethene	ND	ug/L	0.60
Dibromochloromethane	ND	ug/L	0.60
1,1,2-Trichloroethane	ND	ug/L	0.20
2-Chloroethyl vinyl ether	ND	ug/L	5.5
Bromoform	ND	ug/L	1.0
1,1,2,2-Tetrachloroethane	ND	ug/L	1.4
Tetrachloroethene	ND	ug/L	0.40
Chlorobenzene	ND	ug/L	1.2
1,3-Dichlorobenzene	ND	ug/L	1.0
1,2-Dichlorobenzene	ND	ug/L	0.50
1,4-Dichlorobenzene	ND	ug/L	0.50
Benzyl chloride	ND	ug/L	6.8
Bromobenzene	ND	ug/L	5.0
bis(2-Chloroisopropyl)- ether	ND	ug/L	10
1-Chlorohexane	ND	ug/L	5.0
4-Chlorotoluene	ND	ug/L	23
Dibromomethane	ND	ug/L	5.0
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0
1,2,3-Trichloropropane	ND	ug/L	5.0

QC LOT ASSIGNMENT REPORT  
Wet Chemistry Analysis and Preparation

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK)
013918-0001-SA	AQUEOUS	N03-A	21 MAR 91-A	-
013918-0002-SA	AQUEOUS	N03-A	21 MAR 91-A	-
013918-0003-SA	AQUEOUS	N03-A	21 MAR 91-A	-
013918-0004-SA	AQUEOUS	N03-A	21 MAR 91-A	-

DUPLICATE CONTROL SAMPLE REPORT  
Wet Chemistry Analysis and Preparation

Analyte	Concentration Spiked	Concentration Measured		AVG	Accuracy Average(%)		Precision (RPD)		
		DCS1	DCS2		DCS	Limits	DCS	Limit	
Category: NO3-A Matrix: AQUEOUS QC Lot: 21 MAR 91-A Concentration Units: mg/L									
Nitrate as N	5.4	5.58	5.70	5.64	104	91-109	2.1	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.



ENSECO ANALYTICAL SERVICES REQUEST FORM

13918-01

**Special Handling** (Circle as appropriate and explain in record 5)  
 Hazardous material  
EQUIPMENT BLANK  
MVMWKO 3-2  
 Station Name

**Site Type (circle one)**  
 SW - Surface Water  
**GW** - Ground Water  
 ME - Meteorological  
 LK - Lake  
 ES - Estuary  
 SP - Spring  
 SS - Special Source  
 Field ID: USGS/WRD/NEW MEX  
 Field Office: KIRTLAND AFB  
 Project: IRP-SWMU'S  
 Collector: BILL DAM  
 Phone (FTS): (505) 262-5341

**File Deposition\*** (Circle one)  
 Q - WATSTORE  
 X - Lab File

**Sample identification**  
 For Laboratory Use Only: MVMWK  
 Station ID or Unique Number\*: KAFB 03-2  
 Project Account #: 463 53 600 1

Begin Date: 1991 Year, 03 Month, 08 Day, 0953 Time  
 Composite End Date: NM State Code, 035 District/User Code, 001 County Code

**Analysis level codes and schedules**

Sample Medium**	Geologic Unit	Analysis Status**	Analysis Source**	Hydrologic Condition**	Sample Type**	Hydrologic Event
<del>CHROMIUM, TOTAL</del>	<del>CHROMIUM, DISS</del>	<del>CHROMIUM, DISS</del>	<del>CHROMIUM HEXVALENT TOTAL</del>	<del>CHROMIUM HEXVALENT DISSOLVED</del>	<b>NITRATE + NITRITE</b>	<b>E353.2</b>
<del>URANIUM GROSS ALPHA &amp; GROSS BETA</del>	<del>URANIUM GROSS ALPHA &amp; GROSS BETA</del>	<del>URANIUM GROSS ALPHA &amp; GROSS BETA</del>	<b>VOX</b>	<del>TRC, TOX</del>	<del>URANIUM GROSS ALPHA &amp; GROSS BETA</del>	<del>URANIUM GROSS ALPHA &amp; GROSS BETA</del>

Method: SW3020/SW7191, SW3005/SW7191, SW7196, SW7196  
 Method: A7HB, E900, SW5030/SW8010, SW4000, SW9020, EAS.1

**Chain-of-Custody Record**

PROJECT NAME KIRTLAND AFB-IRP, SWMU'S PROJECT NO. 463536001 P.O. NO. \_\_\_\_\_

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
<u>Miho Royal</u>	FEDERAL EXPRESS	<u>3/8/91</u>	<u>1410</u>
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received at lab by: (Signature)	Date	Time
Relinquished from lab by: (Signature)	Received by: (Signature)	Date	Time
	<u>WALPO KMAL</u>	<u>03-09-91</u>	<u>0800</u>

**Comments (Only 50 characters stored in NWIS)**

Record 5 EQUIPMENT BLANK

Record 6 \_\_\_\_\_

Total number of sample bottles for this request: 4 SHIP TO:  
 Enseco-Rocky Mountain Analytical  
 4955 Yarrow Street  
 Arvada, CO 80002  
 (303) 421-6611

ENSECO ANALYTICAL SERVICES REQUEST FORM

13918-02

Special Handling

(Circle as appropriate and explain in record 5)

hazardous material  
SAMPLE

YVMWK 04-2

Station Name

Site Type (circle one)

SW - Surface Water  
**GW** - Ground Water  
ME - Meteorological

LK - Lake  
ES - Estuary  
SP - Spring  
SS - Special Source

Field ID  
USGS/WRD/NEW MEX

Field Office

KIRTLAND AFB  
IRP-SWMU'S

Project

BILL DAM

Collector

(505) 262-5341  
Phone (FTS)

File Deposition\*

Circle one)

Q - WATSTORE  
X - Lab File

[Empty box for Laboratory Use Only]

For Laboratory Use Only

Sample identification

MVMWK 04-2  
~~KAFB~~

Station ID or Unique Number\*

463.53.6.0.1

Project Account #

1991  
Year\*

03 08  
Month\* Day\*

Begin Date

1135  
Time\*

03 08  
Month\* Day\*

Composite End Date

1145  
Time\*

N.M.  
State Code\*

035  
District/ User Code\*

0.0.1  
County Code

Analysis level codes and schedules

	6 Sample Medium**	<b>(H)</b> or 9 Geologic Unit	9 Analysis Status**	9 Analysis Source**	9 Hydrologic Condition**	9 Sample Type**	9 Hydrologic Event**
PARAMETER:	<del>CHROMIUM TOTAL</del>	<del>CHROMIUM DISS</del>	<del>CHROMIUM HEXAVALENT TOTAL</del>	<del>CHROMIUM HEXAVALENT DISSOLVED</del>	<b>NITRATE + NITRITE</b>		
METHOD:	<del>SW3020/SW7191</del>	<del>SW3005/SW7191</del>	<del>SW7198</del>	<del>SW7198</del>	<b>E353.2</b>		
PARAMETER:	<del>URANIUM GROSS ALPHA &amp; GROSS BETA</del>		<b>VOX</b>	<del>TDC, TPA</del>	<del>NITROGLYCERINE PETN</del>		
METHOD:	<del>A711B, E700</del>		<b>SW5030/SW8010</b>	<del>SW7000, SW9020</del>	<del>EPLS.1</del>		<del>USATHAMA</del>
PARAMETER:							
METHOD:							

Chain-of-Custody Record

PROJECT NAME KIRTLAND AFB-IRP, SWMU'S PROJECT NO. 463536001 P.O. NO. \_\_\_\_\_

Relinquished by: (Signature) Miho Roybal Received by: (Signature) \_\_\_\_\_ Date 3/8/91 Time 1410

Relinquished by: (Signature) \_\_\_\_\_ Received by: (Signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Relinquished by: (Signature) \_\_\_\_\_ Received at lab by: (Signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Relinquished from lab by: (Signature) \_\_\_\_\_ Received by: (Signature) Alpa R MAL Date 03-08-91 Time 0800

Comments (Only 50 characters stored in NWIS)

Record 5 MOUNTAIN VIEW MONITORING WELL-K

Record 6 \_\_\_\_\_

Total number of sample bottles for this request: 4

SHIP TO:

Enseco-Rocky Mountain Analytical  
4955 Yarrow Street  
Arvada, CO 80002  
(303) 421-6611  
LINDSAY BREYER

ENSECO ANALYTICAL SERVICES REQUEST FORM

13918-03

Special Handling

(Circle as appropriate and explain in record 5)

azardous material  
 AMBIENT COND BLANK  
 HVMWK 05-2

Station Name

Site Type (circle one)

SW - Surface Water  
 GW - Ground Water  
 ME - Meteorological

LK - Lake  
 ES - Estuary  
 SP - Spring  
 SS - Special Source  
 (505) 262-5341  
 Phone (FTS)

Field ID  
 USGS/WRD/NEW MEX  
 Field Office

KIRTLAND AFB  
 RP-SWMU'S  
 Project

BILL DAM  
 Collector

File Deposition\*

Circle one)

Q - WATSTORE  
 X - Lab File

Sample identification

HVMWK 05-2  
 K A E B

For Laboratory Use Only

Station ID or Unique Number\*

463 53.600.1  
 Project Account #

1991  
 Year\*

03  
 Month\*

08  
 Day\*

1150  
 Time\*

Month

Day

Time

N M  
 State Code\*

035  
 District/ User Code\*

001  
 County Code

Begin Date

Composite End Date

Analysis level codes and schedules

	6 Sample Medium**	Geologic Unit	(H) or 9 Analysis Status**	9 Analysis Source**	Hydrologic Condition**	9 Sample Type**	9 Hydrologic Event**
PARAMETER:	<del>CHROMIUM TOTAL</del>		<del>CHROMIUM DISS</del>	<del>CHROMIUM HEXAVALENT TOTAL</del>	<del>CHROMIUM HEXAVALENT DISSOLVED</del>		NITRATE + NITRITE
METHOD:	SW3026/SW7191		SW3005/SW7191	SW7196	SW7196		E353.2
PARAMETER:	<del>URANIUM GROSS ALPHA &amp; GROSS BETA</del>			VOX	TOC TOR		<del>NITROGLYCERINE/BETA</del>
METHOD:	A711B, E700			SW5030/SW8010	SW7000, SW9020 EKS.1		<del>USATHAMA</del>
PARAMETER:							
METHOD:							

Chain-of-Custody Record

PROJECT NAME KIRTLAND AFB-IRP, SWMU'S PROJECT NO. 463536001 P.O. NO.

Relinquished by: (Signature) *Miho Royal* Received by: (Signature) FEDERAL EXPRESS Date 3/8/91 Time 1410

Relinquished by: (Signature) Received by: (Signature) Date Time

Relinquished by: (Signature) Received at lab by: (Signature) *W.P. Royal* Date 02-09-91 Time 0800

Relinquished from lab by: (Signature) Received by: (Signature) Date Time

Comments (Only 50 characters stored in NWIS)

Record 5 A.M.B.I.E.N.T. C.O.N.D.I.T.I.O.N. B.L.A.N.K.

Record 6

Total number of sample bottles for this request: 4

SHIP TO:

Enseco-Rocky Mountain Analytical  
 4955 Yarrow Street.  
 Arvada, CO 80002  
 (303) 421-6611  
 LINDSAY BREYER

ENSECO ANALYTICAL SERVICES REQUEST FORM

13918-04

Special Handling (Circle as appropriate and explain in record 5)

hazardous material  
TRIP BLANK  
MVMWK06-2

Station Name

Site Type (circle one)

SW - Surface Water  
**GW** - Ground Water  
ME - Meteorological

LK - Lake  
ES - Estuary  
SP - Spring  
SS - Special Source

Field ID  
USGS/WRD/NEW MEX

Field Office

KIRTLAND AFB  
RP-SWMU'S

Project

BILL DAM  
Collector

(505) 262-5341  
Phone (FTS)

File Deposition\*

(Circle one)

Q - WATSTORE  
X - Lab File

[Empty box for Laboratory Use Only]

For Laboratory Use Only

Sample identification

MVMWK06-2  
KAFB

Station ID or Unique Number\*

463.53.600.1

Project Account #

1 9 9 1 0 3 0 8 0 7 5 5  
Year\* Month\* Day\* Time\*  
Begin Date

Month\* Day\* Time\*  
Composite End Date

N M 0 3 5 0 0 1  
State Code\* District/ User Code\* County Code

Analysis level codes and schedules

Sample Medium**	Geologic Unit	(H) or 9 Analysis Status**	9 Analysis Source**	Hydrologic Condition**	9 Sample Type**	9 Hydrologic Event**
<del>CHROMIUM TOTAL</del>		<del>CHROMIUM DISS</del>	<del>CHROMIUM HEXAVALENT TOTAL</del>	<del>CHROMIUM HEXAVALENT DISSOLVED</del>		<u>NITRATE + NITRITE</u>
METHOD: <del>SW3020/SW7141</del>		<del>SW5005/SW7191</del>	<del>SW7196</del>	<del>SW7196</del>		<u>E353.2</u>
<del>URANIUM GROSS ALPHA &amp; GROSS BETA</del>			<u>VOX</u>	<del>TDC, TOX</del>		<del>TRIOGLYCERIN + PETN</del>
METHOD: <del>A71TB, E900</del>			<u>SW5030/SW8010</u>	<del>SW7196, SW7620</del>		<del>USATHANA</del>
PARAMETER:				<u>SAIS, I</u>		
METHOD:						

Chain-of-Custody Record

PROJECT NAME KIRTLAND AFB-IRP, SWMU'S PROJECT NO. 463536001 P.O. NO. \_\_\_\_\_

Relinquished by: (Signature) [Signature] Received by: (Signature) \_\_\_\_\_ Date 3/8/91 Time 1410

Relinquished by: (Signature) \_\_\_\_\_ Received by: (Signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Relinquished by: (Signature) \_\_\_\_\_ Received at lab by: (Signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Relinquished from lab by: (Signature) [Signature] Received by: (Signature) AMAL Date 03-09-91 Time 0800

Comments (Only 50 characters stored in NWIS)

Record 5 TRIP BLANK

Record 6 \_\_\_\_\_

Total number of sample bottles for this request: 4

SHIP TO:

Enseco-Rocky Mountain Analytical  
4955 Yarrow Street  
Arvada, CO 80002  
(303) 421-6611