

ENTERED

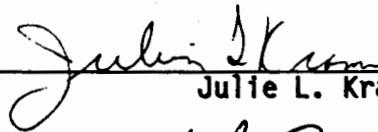
7 of 8

ANALYTICAL RESULTS  
FOR  
U.S. GEOLOGICAL SURVEY  
ENSECO-RMAL NO. 019162

Enseco  
A CORNING Company

DECEMBER 22, 1991

Reviewed by:



Julie L. Kramer



Mark Dymerski



## 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

The total hexavalent chromium analysis on sample 019162-0002 was originally analyzed within the holding time; however due to poor matrix spike recovery it was reanalyzed outside of the holding time with improved recoveries. The reanalysis is reported for sample 019162-0002, -0002-MS, and -0002-SD.

## 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 Date	Time	Received Date
019162-0001-SA	KAFB021309-2	AQUEOUS	21 NOV 91	12:35	22 NOV 91
019162-0002-SA	KAFB021310-2	AQUEOUS	21 NOV 91	12:25	22 NOV 91
019162-0002-MS	KAFB021311-2	AQUEOUS	21 NOV 91	12:25	22 NOV 91
019162-0002-SD	KAFB021312-2	AQUEOUS	21 NOV 91	12:25	22 NOV 91

ANALYTICAL TEST REQUESTS  
for  
U.S. Geological Survey

Lab ID: 019162	Group Code	Analysis Description	Custom Test?
0001 - 0002	A	Nitrate Plus Nitrite	N
		Chromium VI (Dissolved)	N
		Chromium, Furnace AA (Total)	N
		Prep - Total Metals, ICP	N
		Chromium, Furnace AA	N
		Chromium VI (Total)	N
		Chloride, Ion Chromatography, for Air Force Contracts	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.

Metals

Total Metals

Client Name: U.S. Geological Survey  
 Client ID: KAFB021309-2  
 Lab ID: 019162-0001-SA  
 Matrix: AQUEOUS  
 Authorized: 22 NOV 91

Sampled: 21 NOV 91  
 Prepared: See Below

Received: 22 NOV 91  
 Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Chromium (VI)	ND	mg/L	0.010	7196	NA	22 NOV 91
Chromium	0.0097	mg/L	0.0020	7191	04 DEC 91	09 DEC 91

ND = Not detected  
 NA = Not applicable

Reported By: David Patterson

Approved By: Will Pratt

Metals

Total Metals

Client Name: U.S. Geological Survey  
 Client ID: KAFB021310-2  
 Lab ID: 019162-0002-SA  
 Matrix: AQUEOUS  
 Authorized: 22 NOV 91

Sampled: 21 NOV 91  
 Prepared: See Below

Received: 22 NOV 91  
 Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Chromium (VI)	ND	mg/L	0.010	7196	NA	20 DEC 91
Chromium	0.0081	mg/L	0.0020	7191	04 DEC 91	09 DEC 91

ND = Not detected  
 NA = Not applicable

Reported By: David Patterson

Approved By: Will Pratt

Metals

Dissolved Metals

Client Name: U.S. Geological Survey  
 Client ID: KAFB021309-2  
 Lab ID: 019162-0001-SA  
 Matrix: AQUEOUS  
 Authorized: 22 NOV 91

Sampled: 21 NOV 91  
 Prepared: See Below

Received: 22 NOV 91  
 Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Chromium (VI)	ND	mg/L	0.010	7196	NA	22 NOV 91
Chromium	ND	mg/L	0.0020	7191	NA	12 DEC 91

ND = Not detected  
 NA = Not applicable

Reported By: David Patterson

Approved By: Will Pratt



Metals

Dissolved Metals

Client Name: U.S. Geological Survey

Client ID: KAFB021310-2

Lab ID: 019162-0002-SA

Matrix: AQUEOUS

Authorized: 22 NOV 91

Sampled: 21 NOV 91

Prepared: See Below

Received: 22 NOV 91

Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Chromium (VI)	ND	mg/L	0.010	7196	NA	22 NOV 91
Chromium	ND	mg/L	0.0020	7191	NA	12 DEC 91

ND = Not detected

NA = Not applicable

Reported By: David Patterson

Approved By: Will Pratt

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General Inorganics

Client Name: U.S. Geological Survey  
Client ID: KAFB021309-2  
Lab ID: 019162-0001-SA  
Matrix: AQUEOUS  
Authorized: 22 NOV 91

Sampled: 21 NOV 91  
Prepared: See Below

Received: 22 NOV 91  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Chloride	15.3	mg/L	0.50	A429	NA	04 DEC 91
Nitrate plus Nitrite	4.0	mg/L	0.25	353.2	NA	10 DEC 91

ND = Not detected  
NA = Not applicable

Reported By: Blake Besser

Approved By: Roxanne Sullivan

General Inorganics

Client Name: U.S. Geological Survey  
 Client ID: KAFB021310-2  
 Lab ID: 019162-0002-SA  
 Matrix: AQUEOUS  
 Authorized: 22 NOV 91

Sampled: 21 NOV 91  
 Prepared: See Below

Received: 22 NOV 91  
 Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Chloride	15.3	mg/L	0.50	A429	NA	04 DEC 91
Nitrate plus Nitrite	3.9	mg/L	0.25	353.2	NA	10 DEC 91

ND = Not detected  
 NA = Not applicable

Reported By: Blake Besser

Approved By: Roxanne Sullivan

## 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  
Metals Analysis and Preparation

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK)
019162-0001-SA	AQUEOUS	CR6-A	22 NOV 91-A	-
019162-0001-SA	AQUEOUS	CR-FAA-AT	04 DEC 91-A	04 DEC 91-A
019162-0001-SA	AQUEOUS	CR-FAA-AD	12 DEC 91-G	-
019162-0001-SA	AQUEOUS	CR6-AT	22 NOV 91-A	-
019162-0002-SA	AQUEOUS	CR6-A	22 NOV 91-A	-
019162-0002-SA	AQUEOUS	CR-FAA-AT	04 DEC 91-A	04 DEC 91-A
019162-0002-SA	AQUEOUS	CR-FAA-AD	12 DEC 91-G	-
019162-0002-SA	AQUEOUS	CR6-AT	20 DEC 91-A	-
019162-0002-MS	AQUEOUS	CR6-A	22 NOV 91-A	-
019162-0002-MS	AQUEOUS	CR-FAA-AT	04 DEC 91-A	04 DEC 91-A
019162-0002-MS	AQUEOUS	CR-FAA-AD	12 DEC 91-G	-
019162-0002-MS	AQUEOUS	CR6-AT	20 DEC 91-A	-
019162-0002-SD	AQUEOUS	CR6-A	22 NOV 91-A	-
019162-0002-SD	AQUEOUS	CR-FAA-AT	04 DEC 91-A	04 DEC 91-A
019162-0002-SD	AQUEOUS	CR-FAA-AD	12 DEC 91-G	-
019162-0002-SD	AQUEOUS	CR6-AT	20 DEC 91-A	-

DUPLICATE CONTROL SAMPLE REPORT  
Metals Analysis and Preparation

Analyte	Concentration Spiked	Concentration Measured		AVG	Accuracy Average(%)		Precision (RPD)		
		DCS1	DCS2		DCS	Limits	DCS	Limit	
Category: CR6-A Matrix: AQUEOUS QC Lot: 22 NOV 91-A Concentration Units: mg/L									
Chromium (VI)	0.05	0.0501	0.0474	0.0488	98	75-125	5.5	20	
Category: CR-FAA-AT Matrix: AQUEOUS QC Lot: 04 DEC 91-A Concentration Units: mg/L									
Chromium	0.20	0.179	0.176	0.178	89	75-125	1.7	20	
Category: CR-FAA-AD Matrix: AQUEOUS QC Lot: 12 DEC 91-G Concentration Units: mg/L									
Chromium	0.02	0.0228	0.0227	0.0228	114	75-125	0.4	20	
Category: CR6-AT Matrix: AQUEOUS QC Lot: 22 NOV 91-A Concentration Units: mg/L									
Chromium (VI)	0.05	0.0501	0.0474	0.0488	98	75-125	5.5	20	
Category: CR6-AT Matrix: AQUEOUS QC Lot: 20 DEC 91-A Concentration Units: mg/L									
Chromium (VI)	0.05	0.0482	0.0482	0.0482	96	75-125	0.0	20	

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



METHOD BLANK REPORT  
Metals Analysis and Preparation

Analyte	Result	Units	Reporting Limit
Test: CR-FAA-AT			
Matrix: AQUEOUS			
QC Lot: 04 DEC 91-A    QC Run: 04 DEC 91-A			
Chromium	ND	mg/L	0.0050

MATRIX SPECIFIC QC  
ASSIGNMENT REPORT  
Metals Analysis and Preparation

QC SAMPLE TYPE	TEST	LABORATORY SAMPLE NUMBER	QC LOT
MATRIX SPIKE DUPLICATE	CR6-SPEC-AD	019162-0002-SD	22 NOV 91-A
MATRIX SPIKE	CR6-SPEC-AD	019162-0002-MS	22 NOV 91-A
MATRIX SPIKE DUPLICATE	CR-FAA-AT	019162-0002-SD	04 DEC 91-A
MATRIX SPIKE	CR-FAA-AT	019162-0002-MS	04 DEC 91-A
MATRIX SPIKE DUPLICATE	CR-FAA-AD	019162-0002-SD	12 DEC 91-G
MATRIX SPIKE	CR-FAA-AD	019162-0002-MS	12 DEC 91-G
MATRIX SPIKE DUPLICATE	CR6-SPEC-AT	019162-0002-SD	20 DEC 91-A
MATRIX SPIKE	CR6-SPEC-AT	019162-0002-MS	20 DEC 91-A

MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT  
Metals Analysis and Preparation

Analyte	Sample	Concentration			Spiked		%Recovery		% RPD
		Matrix Spike	Matrix Spike Dup	MS	MSD	MS	MSD		
Test: CR6-SPEC-AD Matrix AQUEOUS Sample: 019162-0002 Units: mg/L									
Chromium (VI)	ND	0.051	0.050	0.050	0.050	102	100	2	
Test: CR-FAA-AT Matrix AQUEOUS Sample: 019162-0002 Units: mg/L									
Chromium	0.0081	0.19	0.19	0.20	0.20	90	93	3	
Test: CR-FAA-AD Matrix AQUEOUS Sample: 019162-0002 Units: mg/L									
Chromium	ND	0.020	0.020	0.020	0.020	100	98	2	
Test: CR6-SPEC-AT Matrix AQUEOUS Sample: 019162-0002 Units: mg/L									
Chromium (VI)	ND	0.040	0.040	0.050	0.050	80	80	0	

ND = Not detected

NC = Not calculated, calculation not applicable

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

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)
019162-0001-SA	AQUEOUS	NO3-A	10 DEC 91-A	-
019162-0001-SA	AQUEOUS	CL-IC-A	04 DEC 91-N	-
019162-0002-SA	AQUEOUS	NO3-A	10 DEC 91-A	-
019162-0002-SA	AQUEOUS	CL-IC-A	04 DEC 91-N	-
019162-0002-MS	AQUEOUS	NO3-A	10 DEC 91-A	-
019162-0002-MS	AQUEOUS	CL-IC-A	04 DEC 91-N	-
019162-0002-SD	AQUEOUS	NO3-A	10 DEC 91-A	-
019162-0002-SD	AQUEOUS	CL-IC-A	04 DEC 91-N	-

DUPLICATE CONTROL SAMPLE REPORT  
Wet Chemistry Analysis and Preparation

Analyte	Spiked	Concentration		AVG	Accuracy		Precision		
		DCS1	Measured DCS2		DCS	Average(%) Limits	(RPD) DCS Limit		
Category: NO3-A Matrix: AQUEOUS QC Lot: 10 DEC 91-A Concentration Units: mg/L									
Nitrate as N	7.1	7.32	7.13	7.22	102	91-109	2.6	10	
Category: CL-IC-A Matrix: AQUEOUS QC Lot: 04 DEC 91-N Concentration Units: mg/L									
Chloride	50	50.9	51.2	51.0	102	92-108	0.6	20	

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

MATRIX SPECIFIC QC  
ASSIGNMENT REPORT  
Wet Chemistry Analysis and Preparation

QC SAMPLE TYPE	TEST	LABORATORY SAMPLE NUMBER	QC LOT
MATRIX SPIKE DUPLICATE	NO3+NO2-TEC-A	019162-0002-SD	10 DEC 91-A
MATRIX SPIKE	NO3+NO2-TEC-A	019162-0002-MS	10 DEC 91-A
MATRIX SPIKE DUPLICATE	CL-IC-AFIR-A	019162-0002-SD	04 DEC 91-N
MATRIX SPIKE	CL-IC-AFIR-A	019162-0002-MS	04 DEC 91-N

MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT  
Wet Chemistry Analysis and Preparation

Analyte	Sample	Concentration			Spiked		%Recovery		% RPD
		Matrix Spike	Matrix Spike Dup	MS	MSD	MS	MSD		
Test: NO3+NO2-TEC-A Matrix AQUEOUS Sample: 019162-0002 Units: mg/L									
Nitrate plus Nitrite as N	3.9	5.8	5.6	2.0	2.0	95	85	11	
Test: CL-IC-AFIR-A Matrix AQUEOUS Sample: 019162-0002 Units: mg/L									
Chloride	15.3	34.9	35.0	20.0	20.0	98	99	1	

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

# Appendix



ENSECO ANALYTICAL SERVICES REQUEST FORM

1916201

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

**hazardous material**  
SAMPLE

WAFB021309-2

Station Name

Field ID  
USGS/WRD/NEW MEX

Field Office

KIRTLAND AFB  
IRP-SWMU'S

Project

Miko Roybal

Collector

Site Type (circle one)

SW - Surface Water  
 GW - Ground Water  
 ME - Meteorological

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

(505) 262-5344  
Phone (FTS)

File Deposition\*

Circle one)

Q - WATSTORE

X - Lab File

Sample identification

[Empty box for Laboratory Use Only]

For Laboratory Use Only

K A F 3 0 2 1 3 0 9 - 2

Station ID or Unique Number\*

4 6 3 5 3 6 0 0 1

Project Account #

1 9 9 1    1 1    2 1    1 2 2 5    1 1    2 1    1 2 3 5    N M    0 3 5    0 0  
Year\*    Month\*    Day\*    Time\*    Month    Day    Time    State Code\*    District User Code\*    County Code

Begin Date

Composite End Date

State Code\*

District User Code\*

County Code

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:	CHROMIUM, TOTAL	/	CHROMIUM, DISS	/	CHROMIUM HEXAVALENT TOTAL	/	CHROMIUM HEXAVALENT DISSOLVED
METHOD:	SW3020/SW7191	/	SW3005/SW7191	/	SW7196	/	SW7196
PARAMETER:	NITRATE & NITRITE	/	CHLORIDE DISSOLVED	/	APPX TX-VOC	/	URANIUM, GROSS ALPHA & GROSS BETA
METHOD:	E353.2	/	A429	/	SW5030X8240	/	A711B, E900
PARAMETER:	VOX	/		/		/	
METHOD:	SW5030X8010	/		/		/	

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

Miko Roybal

FEDERAL EXPRESS

11/21/91

1515

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

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

Ala P... MAL

11-22-91 0800

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

Comments (Only 50 characters stored in NWIS)

Record 5 SAMPLE FROM WELL AT LANDFILL 2

Record 6

Total number of sample bottles for this request: 6

SHIP TO: DEBBIE FA 210/TONI STOVALL

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



ENSECO ANALYTICAL SERVICES REQUEST FORM

1916202ms

**Special Handling** (Circle as appropriate and explain in record 5)  
 Hazardous material MATRIX SPIKE  
LAFB C-213 11-2  
 Station Name

Field ID USGS/WRD/NEW MEX  
 Field Office

Site Type (circle one)  
 SW - Surface Water  
 GW - Ground Water  
 ME - Meteorological  
 LK - Lake  
 ES - Estuary  
 SP - Spring  
 SS - Special Source

KIRTLAND AFB  
 Project

MIKE ROYDAL  
 Collector

(505) 262-5344  
 Phone (FTS)

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

**Sample identification**

KAFB C 213 11-2  
 Station ID or Unique Number\*

463 53 600 1  
 Project Account #

1991 Year\*  
11 Month\*  
21 Day\*  
 Begin Date

1225 Time\*  
11 Month  
21 Day  
12.3.5 Time  
 Composite End Date

N M State Code\*  
035 District/ User Code\*  
0.0 1 County Code

**Analysis level codes and schedules**

PARAMETER:	6 Sample Medium**	Geologic Unit	(H) or 9 Analysis Status**	9 Analysis Source**	Hydrologic Condition**	9 Sample Type**	9 Hydrologic Event**
CHROMIUM, TOTAL	SW3020/SW7191		CHROMIUM, DISS	SW3005/SW7191	CHROMIUM HEXAVALENT TOTAL	SW7196	
METHOD:							E353.2
CHROMIUM, GROSS			ALPHA & BETA		VOC		
METHOD:	A71B	E900		SW5030/SW8240	NOX	SW5030/SW8010	TOC/TOX
METHOD:							E415/SW9020
PARAMETER:	<u>CHLORIDE-DISS.</u>						
METHOD:	<u>A429</u>						

**Chain-of-Custody Record**

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

Relinquished by: (Signature) <u>Mike Roydal</u>	Received by: (Signature) FEDERAL EXPRESS	Date <u>11/21/91</u>	Time <u>1515</u>
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received at lab by: (Signature) <u>Alan RMAC</u>	Date <u>11-22-91</u>	Time <u>0800</u>
Relinquished from lab by: (Signature)	Received by: (Signature)	Date	Time

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

Record 5 MATRIX SPIKE SAMPLE FROM WELL AT LF2

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

Total number of sample bottles for this request: 6

**SHIP TO:**  
 Enenco-Rocky Mountain Analytical  
 4955 Yarrow Street  
 Arvada, CO 80002  
 (303) 421-6611  
 ATTENTION: LINDSAY BREYER

ENSECO ANALYTICAL SERVICES REQUEST FORM

19162 0250

Special Handling

(Circle as appropriate and explain in record 5)

Hazardous material

MATRIX-SP-DUP  
KAFB 021312-2

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

MIKO ROYBAL  
BILL DAM  
Collector

(505) 262-5344  
Phone (FWS)

File Deposition\*

Sample identification

Circle one)

- Q - WATSTORE
- X - Lab File

[Empty box for Laboratory Use Only]

K A F B 0 2 1 3 1 2 - 2  
Station ID or Unique Number\*

4 6 3 5 3 6 0 0 1  
Project Account #

9 9 1  
Year\*

11 21  
Month\* Day\*  
Begin Date

12 25  
Time\*

11 21  
Month\* Day\*  
Composite End Date

12 35  
Time\*

N M  
State Code\*

0 3 5  
District/ User Code\*

0 0 1  
County Code

Analysis level codes and schedules

PARAMETER:	6 Sample Medium**	Geologic Unit	(H) or 9 Analysis Status**	9 Analysis Source**	Hydrologic Condition**	9 Sample Type**	9 Hydrologic Event**
PARAMETER:	CHROMIUM, TOTAL		CHROMIUM, DISS		CHROMIUM HEXAVALENT TOTAL	CHROMIUM HEXAVALENT DISS.	NITRATE & NITRITE
METHOD:	SW3020/SW7191		SW3005/SW7191		SW7196	SW7196	E353.2
PARAMETER:	URANIUM, GROSS	ALPHA & BETA	<del>ANY X</del> -VOC		<del>VOC</del>		TOC/TOX
METHOD:	A71/B, E900		SW5030/SW8240		SW5030/SW8010		E415.1/SW9020
PARAMETER:	CHLORIDE, DISS.						
METHOD:	A 429						

Chain-of-Custody Record

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

Relinquished by: (Signature) *Miko Roybal* Received by: (Signature) FEDERAL EXPRESS Date 11/21/91 Time 1515

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 11-22-91 0800

Comments (Only 50 characters stored in NWIS)

Record 5 MATRIX-SPIKE-DUPPLICATE SAMPLE FOR WELL AT LANDFILL 2

Record 6

Total number of sample bottles for this request: 6

SHIP TO:

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