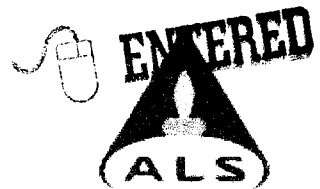


HAFB

**ALS Laboratory Group**  
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division  
Fort Collins, Colorado



## Metals Case Narrative

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### NMED Hazardous Waste Bureau Holloman AFB-MISC

Work Order Number: 0905124

1. This report consists of 8 water samples.
2. The samples were received cool and intact by ALS on 05/15/09.
3. The samples for dissolved metals had been filtered prior to receipt. All samples had a pH less than 2 upon receipt.
4. The samples were prepared for analysis based on SW-846, 3<sup>rd</sup> Edition procedures.

For analysis by Trace ICP and ICP-MS, the samples were digested following method 3005A and SOP 806 Rev. 13.

For analysis by Cold Vapor AA (CVAA), the samples were digested following method 7470A and SOP 812 Rev. 14.

5. The samples were analyzed following SW-846, 3<sup>rd</sup> Edition procedures.

Analysis by Trace ICP followed method 6010B and SOP 834 Rev. 7.

The relationship between intensity and concentration for each element is established using at least four standards, one of which is a blank solution.

During sample analysis concentrations are computed by the software and the results are printed in mg/L. The instrument software does not provide a printout which gives both intensity and concentration. The validity of the calibration equation is tested by analyzing the following solutions: a blank, a low level check solution with concentrations near the reporting limit, an Initial Calibration Verification (ICV) standard from a 2<sup>nd</sup> source standard solution with concentrations near the middle of the analytical range, a Continuing Calibration Verification (CCV) standard with concentrations at two times those in the ICV, and a readback of the highest calibration standard.



6. All standards and solutions are NIST traceable and were used within their recommended shelf life.
7. The samples were prepared and analyzed within the established hold times.

All in house quality control procedures were followed, as described below.

8. General quality control procedures.
  - A preparation (method) blank and laboratory control sample were digested and analyzed with the samples in each digestion batch. There were not more than 20 samples in each digestion batch.
  - The preparation (method) blank associated with each digestion batch was below the reporting limit for each requested analyte.
  - The laboratory control sample associated with each digestion batch was within the acceptance limits. This indicates complete digestions according to the method.
  - All initial and continuing calibration blanks associated with each analytical batch were below the practical quantitation limits for the requested analytes.
  - All initial and continuing calibration verifications associated with each analytical batch were within the acceptance criteria for the requested analytes. This indicates a valid calibration and stable instrument conditions.
  - The high standard readbacks associated with Method 6010B and 6020A analyses were within acceptance criteria.
  - The interference check samples associated with Method 6010B were within acceptance criteria.
  - The interference check samples associated with Method 6020A were analyzed.
9. Matrix specific quality control procedures.

Sample 0905124-8 was designated as the quality control sample for Trace ICP and ICP-MS analyses. Per method requirements, matrix QC was performed for the mercury analysis. Since a sample from this order number was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

Similarity of matrix and therefore relevance of the QC results should not be automatically inferred for any sample other than the native sample selected for QC.



It is a standard practice that samples for ICP-MS are analyzed at a dilution. Samples 0905124-4 and -6 required further dilutions to bring uranium into the analytical range of the ICP-MS.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Megan Johnson  
Megan Johnson  
Inorganics Primary Data Reviewer

6/2/09  
Date

Greg Felt  
Inorganics Final Data Reviewer

6/2/09  
Date

# ALS Laboratory Group -- FC

## Sample Number(s) Cross-Reference Table

---

**Paragon OrderNum:** 0905124

**Client Name:** NMED Hazardous Waste Bureau

**Client Project Name:** Holloman AFB-MISC

**Client Project Number:**

**Client PO Number:** 06-667-55-01754

---

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
TDS-MW03	0905124-1		WATER	12-May-09	17:11
MW-01	0905124-2		WATER	13-May-09	9:35
MW-01	0905124-3		WATER	13-May-09	9:35
MW-19-03	0905124-4		WATER	13-May-09	10:55
MW-19-03	0905124-5		WATER	13-May-09	10:55
MW-13	0905124-6		WATER	13-May-09	12:10
SS61-MW11	0905124-7		WATER	13-May-09	14:10
MW38-01	0905124-8		WATER	13-May-09	15:30
MW-41-03	0905124-9		WATER	14-May-09	9:20



**Paragon Analytics**

A Division of DataChem Laboratories, Inc.

225 Commerce Drive Fort Collins, CO 80524  
800-443-1511 or (970) 490-1511 (970) 490-1522 Fax

Accession Number (LAB ID) 0905124

Chain-of-Custody Date 5/14/09 Page 2 of 2

Originator: Retain pink copy!

Project Name/No.: HAFB - MSLC Sampler(s): David Strajler Turnaround (circle one) Standard or Rush (Due)          Dispose: Date          or Return to Client         

Report To: David Strajler  
Phone: 505-222-9526  
Fax: 505-222-9510  
E-mail: David.Strajler@datachem.com  
Company: MSA Environmental Dept.  
Address: 1500 San Antonio Dr, NE  
Albuquerque, NM 87109

Circle method (right); provide additional information as needed (comments).

Sample ID	Date	Time *	Lab ID	Matrix	Preservative	No. of Containers
MW-13	5/13/09	12:10	⑥	W	H <sub>2</sub> O <sub>2</sub>	1
561-MW11	5/13/09	14:10	⑦	W	H <sub>2</sub> O <sub>2</sub>	1
MW38-01	5/13/09	15:30	⑧	W	H <sub>2</sub> O <sub>2</sub>	1
MW38-01	5/13/09	15:30	↓	W	H <sub>2</sub> O <sub>2</sub>	2
MW-41-03	5/14/09	09:20	⑨	W	H <sub>2</sub> O <sub>2</sub>	2

Relinquished By:	Relinquished By:
Signature <u>[Signature]</u>	Signature <u>[Signature]</u>
Printed Name <u>David Strajler</u>	Printed Name <u>Cheryl Jumble</u>
Date <u>5/14/09</u>	Date <u>5/15/09</u>
Time <u>1000</u>	Time <u>0930</u>
Company <u>NMCD</u>	Company <u>ALC</u>

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**1 From** This portion can be removed for Recipient's records.  
 Date 5/14/09 FedEx Tracking Number 857677244882  
 Sender's Name David Strasser Phone 505 222-9526  
 Company NM Environment Dept, Hazardous Waste Bureau  
 Address 5500 San Antonio Dr. NE Dept./Floor/Suite/Room \_\_\_\_\_  
 City Albuquerque State NM ZIP 87107  
**2 Your Internal Billing Reference** 4001 NMED ALWB  
**3 To**  
 Recipient's Name CHARLES ORCHARD Phone 970 490-1511  
 Company PARAGON (ALS)  
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FedEx 2Day Freight Second business day\*\*  
 Shipments will be delivered on Monday unless SATURDAY Delivery is selected.

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No Signature Required Package may be left without obtaining a signature for delivery.

Direct Signature Anyone at recipient's address may sign for delivery. Fee applies.

Indirect Signature If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.

**519**

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# Total Recoverable ICP Metals

## Method SW6010B

### Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905124

Client Name: NMED Hazardous Waste Bureau

ClientProject ID: Holloman AFB-MISC

Field ID: MW-01  
Lab ID: 0905124-2

Sample Matrix: WATER  
% Moisture: N/A  
Date Collected: 13-May-09  
Date Extracted: 19-May-09  
Date Analyzed: 19-May-09  
Prep Method: SW3005 Rev A

Prep Batch: IP090519-2  
QCBatchID: IP090519-2-1  
Run ID: IT090519-2A5  
Cleanup: NONE  
Basis: As Received  
File Name: 090519A.

Sample Aliquot: 50 g  
Final Volume: 50 g  
Result Units: MG/L  
Clean DF: 1

Analysis ReqCode: 202

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	IDL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.0094	0.2	0.0091	B	
7440-36-0	ANTIMONY	1	0.0039	0.02	0.0028	B	
7440-38-2	ARSENIC	1	0.013	0.01	0.0034		
7440-39-3	BARIUM	1	0.027	0.1	0.00018	B	
7440-41-7	BERYLLIUM	1	0.00062	0.005	0.00015	B	
7440-43-9	CADMIUM	1	0.00067	0.005	0.00041	B	
7440-70-2	CALCIUM	50	3100	50	0.16		
7440-47-3	CHROMIUM	1	0.0023	0.01	0.00055	B	
7440-48-4	COBALT	1	0.0011	0.01	0.00065	B	
7440-50-8	COPPER	1	0.0014	0.01	0.0014	U	
7439-89-6	IRON	1	0.0013	0.1	0.0013	U	
7439-92-1	LEAD	1	0.001	0.003	0.001	U	
7439-95-4	MAGNESIUM	50	3200	50	0.38		
7439-96-5	MANGANESE	1	0.002	0.01	0.00012	B	
7440-02-0	NICKEL	1	0.0039	0.02	0.00095	B	
7440-09-7	POTASSIUM	1	130	1	0.11		
7782-49-2	SELENIUM	1	0.0021	0.005	0.0021	U	
7440-22-4	SILVER	1	0.0013	0.01	0.00083	B	
7440-23-5	SODIUM	50	7000	50	0.23		
7440-28-0	THALLIUM	1	0.0051	0.01	0.0051	U	
7440-62-2	VANADIUM	1	0.073	0.01	0.00055		
7440-66-6	ZINC	1	0.0031	0.02	0.001	B	

Data Package ID: it0905124-1

# Total Recoverable ICP Metals

## Method SW6010B

### Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905124

Client Name: NMED Hazardous Waste Bureau

ClientProject ID: Holloman AFB-MISC

Field ID: MW-19-03  
Lab ID: 0905124-4

Sample Matrix: WATER  
% Moisture: N/A  
Date Collected: 13-May-09  
Date Extracted: 19-May-09  
Date Analyzed: 19-May-09  
Prep Method: SW3005 Rev A

Prep Batch: IP090519-2  
QC Batch ID: IP090519-2-1  
Run ID: IT090519-2A5  
Cleanup: NONE  
Basis: As Received  
File Name: 090519A.

Sample Aliquot: 50 g  
Final Volume: 50 g  
Result Units: MG/L  
Clean DF: 1

Analysis ReqCode: 202

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	IDL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.019	0.2	0.0091	B	
7440-36-0	ANTIMONY	1	0.0028	0.02	0.0028	U	
7440-38-2	ARSENIC	1	0.0053	0.01	0.0034	B	
7440-39-3	BARIUM	1	0.0093	0.1	0.00018	B	
7440-41-7	BERYLLIUM	1	0.00015	0.005	0.00015	U	
7440-43-9	CADMIUM	1	0.00041	0.005	0.00041	U	
7440-70-2	CALCIUM	50	980	50	0.16		
7440-47-3	CHROMIUM	1	0.0019	0.01	0.00055	B	
7440-48-4	COBALT	1	0.0014	0.01	0.00065	B	
7440-50-8	COPPER	1	0.0014	0.01	0.0014	U	
7439-89-6	IRON	1	0.0013	0.1	0.0013	U	
7439-92-1	LEAD	1	0.001	0.003	0.001	U	
7439-95-4	MAGNESIUM	50	3200	50	0.38		
7439-96-5	MANGANESE	1	0.0014	0.01	0.00012	B	
7440-02-0	NICKEL	1	0.0011	0.02	0.00095	B	
7440-09-7	POTASSIUM	1	250	1	0.11		
7782-49-2	SELENIUM	1	0.0021	0.005	0.0021	U	
7440-22-4	SILVER	1	0.0011	0.01	0.00083	B	
7440-23-5	SODIUM	50	12000	50	0.23		
7440-28-0	THALLIUM	1	0.0055	0.01	0.0051	B	
7440-62-2	VANADIUM	1	0.02	0.01	0.00055		
7440-66-6	ZINC	1	0.0019	0.02	0.001	B	

Data Package ID: it0905124-1



# Total Recoverable ICP Metals

## Method SW6010B

### Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905124

Client Name: NMED Hazardous Waste Bureau

ClientProject ID: Holloman AFB-MISC

Field ID: MW-13  
Lab ID: 0905124-6

Sample Matrix: WATER  
% Moisture: N/A  
Date Collected: 13-May-09  
Date Extracted: 19-May-09  
Date Analyzed: 19-May-09  
Prep Method: SW3005 Rev A

Prep Batch: IP090519-2  
QCBatchID: IP090519-2-1  
Run ID: IT090519-2A5  
Cleanup: NONE  
Basis: As Received  
File Name: 090519A.

Sample Aliquot: 50 g  
Final Volume: 50 g  
Result Units: MG/L  
Clean DF: 1

Analysis ReqCode: 202

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	IDL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.024	0.2	0.0091	B	
7440-36-0	ANTIMONY	1	0.0023	0.02	0.0028	U	
7440-38-2	ARSENIC	1	0.0075	0.01	0.0034	B	
7440-39-3	BARIIUM	1	0.009	0.1	0.00018	B	
7440-41-7	BERYLLIUM	1	0.00015	0.005	0.00015	U	
7440-43-9	CADMIUM	1	0.00041	0.005	0.00041	U	
7440-70-2	CALCIUM	50	1100	50	0.16		
7440-47-3	CHROMIUM	1	0.0019	0.01	0.00055	B	
7440-48-4	COBALT	1	0.00083	0.01	0.00065	B	
7440-50-8	COPPER	1	0.0014	0.01	0.0014	U	
7439-89-6	IRON	1	0.055	0.1	0.0013	B	
7439-92-1	LEAD	1	0.001	0.003	0.001	U	
7439-95-4	MAGNESIUM	50	4200	50	0.38		
7439-96-5	MANGANESE	1	0.0024	0.01	0.00012	B	
7440-02-0	NICKEL	1	0.0057	0.02	0.00095	B	
7440-09-7	POTASSIUM	1	250	1	0.11		
7782-49-2	SELENIUM	1	0.0045	0.005	0.0021	B	
7440-22-4	SILVER	1	0.00083	0.01	0.00083	B	
7440-23-5	SODIUM	50	11000	50	0.23		
7440-28-0	THALLIUM	1	0.0051	0.01	0.0051	U	
7440-62-2	VANADIUM	1	0.025	0.01	0.00055		
7440-66-6	ZINC	1	0.0031	0.02	0.001	B	

Data Package ID: it0905124-1

Date Printed: Monday, June 01, 2009

ALS Laboratory Group -- FC

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LIMS Version: 6.265A

# Total Recoverable ICP Metals

## Method SW6010B

### Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905124

Client Name: NMED Hazardous Waste Bureau

ClientProject ID: Holloman AFB-MISC

Field ID: MW38-01  
Lab ID: 0905124-8

Sample Matrix: WATER  
% Moisture: N/A  
Date Collected: 13-May-09  
Date Extracted: 19-May-09  
Date Analyzed: 19-May-09  
Prep Method: SW3005 Rev A

Prep Batch: IP090519-2  
QCBatchID: IP090519-2-1  
Run ID: IT090519-2A5  
Cleanup: NONE  
Basis: As Received  
File Name: 090519A.

Sample Aliquot: 50 g  
Final Volume: 50 g  
Result Units: MG/L  
Clean DF: 1

Analysis ReqCode: 202

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	IDL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.016	0.2	0.0091	B	
7440-36-0	ANTIMONY	1	0.0028	0.02	0.0028	U	
7440-38-2	ARSENIC	1	0.0093	0.01	0.0034	B	
7440-39-3	BARIUM	1	0.0096	0.1	0.00018	B	E
7440-41-7	BERYLLIUM	1	0.00028	0.005	0.00015	B	
7440-43-9	CADMIUM	1	0.00041	0.005	0.00041	U	
7440-70-2	CALCIUM	50	610	50	0.16		
7440-47-3	CHROMIUM	1	0.0018	0.01	0.00055	B	N
7440-48-4	COBALT	1	0.0017	0.01	0.00065	B	
7440-50-8	COPPER	1	0.0046	0.01	0.0014	B	
7439-89-6	IRON	1	0.014	0.1	0.0013	B	
7439-92-1	LEAD	1	0.001	0.003	0.001	U	
7439-95-4	MAGNESIUM	50	530	50	0.38		
7439-96-5	MANGANESE	1	0.083	0.01	0.00012		E
7440-02-0	NICKEL	1	0.0023	0.02	0.00095	B	N
7440-09-7	POTASSIUM	1	31	1	0.11		EN
7782-49-2	SELENIUM	1	0.005	0.005	0.0021	B	
7440-22-4	SILVER	1	0.00083	0.01	0.00083	U	
7440-23-5	SODIUM	50	1700	50	0.23		
7440-28-0	THALLIUM	1	0.0051	0.01	0.0051	U	
7440-62-2	VANADIUM	1	0.028	0.01	0.00055		E
7440-66-6	ZINC	1	0.0076	0.02	0.001	B	

Data Package ID: it0905124-1

# Total MERCURY

## Method SW7470

### Sample Results

Lab Name: ALS Laboratory Group -- FC

Client Name: NMED Hazardous Waste Bureau

Client Project ID: Holloman AFB-MISC

Work Order Number: 0905124

Reporting Basis: As Received

Final Volume: 20 g

Matrix: WATER

Result Units: MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	IDL	Flag	Sample Aliquot
MW-01	0905124-2	5/13/2009	5/26/2009	05/28/2009	N/A	1	0.000052	0.0002	0.0000078	B	20 g
MW-19-03	0905124-4	5/13/2009	5/26/2009	05/28/2009	N/A	1	0.00007	0.0002	0.0000078	B	20 g
MW-13	0905124-6	5/13/2009	5/26/2009	05/28/2009	N/A	1	0.000088	0.0002	0.0000078	B	20 g
SS61-MW11	0905124-7	5/13/2009	5/26/2009	05/28/2009	N/A	1	0.00019	0.0002	0.0000078	B	20 g
MW38-01	0905124-8	5/13/2009	5/26/2009	05/28/2009	N/A	1	0.000045	0.0002	0.0000078	B	20 g

#### Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: hg0905124-1

Date Printed: Monday, June 01, 2009

ALS Laboratory Group -- FC

Page 1 of 1

LIMS Version: 6.265A

# ICP Metals

## Method SW6010B

### Laboratory Control Sample

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905124

Client Name: NMED Hazardous Waste Bureau

ClientProject ID: Holloman AFB-MISC

Lab ID: IP090519-2LCS

Sample Matrix: WATER  
 % Moisture: N/A  
 Date Collected: N/A  
 Date Extracted: 05/19/2009  
 Date Analyzed: 05/19/2009  
 Prep Method: SW3005A

Prep Batch: IP090519-2  
 QCBatchID: IP090519-2-1  
 Run ID: IT090519-2A5  
 Cleanup: NONE  
 Basis: N/A  
 File Name: 090519A.

Sample Aliquot: 50 g  
 Final Volume: 50 g  
 Result Units: MG/L  
 Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7429-90-5	ALUMINUM	2	2.01	0.2		101	80 - 120%
7440-36-0	ANTIMONY	0.5	0.478	0.02		96	80 - 120%
7440-38-2	ARSENIC	2	1.91	0.01		96	80 - 120%
7440-39-3	BARIIUM	2	1.92	0.1		96	80 - 120%
7440-41-7	BERYLLIUM	0.05	0.0471	0.005		94	80 - 120%
7440-43-9	CADMIUM	0.05	0.0484	0.005		97	80 - 120%
7440-70-2	CALCIUM	40	39.4	1		98	80 - 120%
7440-47-3	CHROMIUM	0.2	0.186	0.01		93	80 - 120%
7440-48-4	COBALT	0.5	0.47	0.01		94	80 - 120%
7440-50-8	COPPER	0.25	0.244	0.01		98	80 - 120%
7439-89-6	IRON	1	0.964	0.1		96	80 - 120%
7439-92-1	LEAD	0.5	0.469	0.003		94	80 - 120%
7439-95-4	MAGNESIUM	40	39.6	1		99	80 - 120%
7439-96-5	MANGANESE	0.5	0.494	0.01		99	80 - 120%
7440-02-0	NICKEL	0.5	0.467	0.02		93	80 - 120%
7440-09-7	POTASSIUM	40	40.7	1		102	80 - 120%
7782-49-2	SELENIUM	2	1.98	0.005		99	80 - 120%
7440-22-4	SILVER	0.1	0.0931	0.01		93	80 - 120%
7440-23-5	SODIUM	40	40.1	1		100	80 - 120%
7440-28-0	THALLIUM	2	1.94	0.01		97	80 - 120%
7440-62-2	VANADIUM	0.5	0.491	0.01		98	80 - 120%
7440-66-6	ZINC	0.5	0.481	0.02		96	80 - 120%

Data Package ID: *it0905124-1*

# ICP Metals

## Method SW6010B

### Matrix Spike And Matrix Spike Duplicate

**Lab Name:** ALS Laboratory Group -- FC  
**Work Order Number:** 0905124  
**Client Name:** NMED Hazardous Waste Bureau  
**ClientProject ID:** Holloman AFB-MISC

<b>Field ID:</b> MW38-01 <b>LabID:</b> 0905124-8MSD	<b>Sample Matrix:</b> WATER % Moisture: N/A <b>Date Collected:</b> 13-May-09 <b>Date Extracted:</b> 19-May-09 <b>Date Analyzed:</b> 19-May-09 <b>Prep Method:</b> SW3005 Rev A	<b>Prep Batch:</b> IP090519-2 <b>QCBatchID:</b> IP090519-2-1 <b>Run ID:</b> IT090519-2A5 <b>Cleanup:</b> NONE <b>Basis:</b> As Received	<b>Sample Aliquot:</b> 50 g <b>Final Volume:</b> 50 g <b>Result Units:</b> MG/L <b>File Name:</b> 090519A.
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CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7429-90-5	ALUMINIUM	1.95		2	97	0.2	20	0
7440-36-0	ANTIMONY	0.456		0.5	91	0.02	20	0
7440-38-2	ARSENIC	1.86		2	92	0.01	20	0
7440-39-3	BARIUM	1.68		2	84	0.1	20	0
7440-41-7	BERYLLIUM	0.0409		0.05	81	0.005	20	0
7440-43-9	CADMIUM	0.0459		0.05	92	0.005	20	0
7440-70-2	CALCIUM	643		40	92	50	20	0
7440-47-3	CHROMIUM	0.161	N	0.2	79	0.01	20	3
7440-48-4	COBALT	0.417		0.5	83	0.01	20	0
7440-50-8	COPPER	0.236		0.25	92	0.01	20	0
7439-89-6	IRON	0.833			82	0.1	20	7
7439-92-1	LEAD	0.413		0.5	83	0.003	20	1
7439-95-4	MAGNESIUM	568		40	90	50	20	1
7439-96-5	MANGANESE	0.516		0.5	87	0.01	20	0
7440-02-0	NICKEL	0.394	N	0.5	78	0.02	20	0
7440-09-7	POTASSIUM	97.3	N	40	166	1	20	0
7782-49-2	SELENIUM	2		2	100	0.005	20	0
7440-22-4	SILVER	0.0939		0.1	94	0.01	20	1
7440-23-5	SODIUM	1790		40	121	50	20	1
7440-28-0	THALLIUM	1.75		2	87	0.01	20	0
7440-62-2	VANADIUM	0.461		0.5	87	0.01	20	0
7440-66-6	ZINC	0.429		0.5	84	0.02	20	0

**Data Package ID:** it0905124-1

# ICPMS Metals

Method SW6020A

Method Blank

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905124

Client Name: NMED Hazardous Waste Bureau

ClientProject ID: Holloman AFB-MISC

Lab ID: IP090519-2MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 19-May-09

Date Analyzed: 20-May-09

Prep Batch: IP090519-2

QCBatchID: IP090519-2-2

Run ID: IM090520-1A4

Cleanup: NONE

Basis: N/A

File Name: 20MAY09A

Sample Aliquot: 50 g

Final Volume: 50 g

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	IDL	Result Qualifier	EPA Qualifier
7440-61-1	URANIUM	10	0.000023	0.0001	0.0000045	B	

Data Package ID: *im0905124-1*

Date Printed: Monday, June 01, 2009

ALS Laboratory Group -- FC

Page 1 of 1

LIMS Version: 6.266A

# ICPMS Metals

Method SW6020A

## Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905124

Client Name: NMED Hazardous Waste Bureau

ClientProject ID: Holloman AFB-MISC

Field ID: MW38-01 LabID: 0905124-8MS	Sample Matrix: WATER % Moisture: N/A Date Collected: 13-May-09 Date Extracted: 19-May-09 Date Analyzed: 20-May-09 Prep Method: SW3005 Rev A	Prep Batch: IP090519-2 QCBatchID: IP090519-2-2 Run ID: IM090520-1A4 Cleanup: NONE Basis: As Received	Sample Aliquot: 50 g Final Volume: 50 g Result Units: MG/L File Name: 20MAY09A
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CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7440-61-1	URANIUM	0.032		0.0531		0.0001	0.02	106	75 - 125%

Field ID: MW38-01 LabID: 0905124-8MSD	Sample Matrix: WATER % Moisture: N/A Date Collected: 13-May-09 Date Extracted: 19-May-09 Date Analyzed: 20-May-09 Prep Method: SW3005 Rev A	Prep Batch: IP090519-2 QCBatchID: IP090519-2-2 Run ID: IM090520-1A4 Cleanup: NONE Basis: As Received	Sample Aliquot: 50 g Final Volume: 50 g Result Units: MG/L File Name: 20MAY09A
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CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7440-61-1	URANIUM	0.0511		0.02	96	0.0001	20	4

Data Package ID: *im0905124-1*

# Mercury

## Method SW7470A

### Laboratory Control Sample

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905124

Client Name: NMED Hazardous Waste Bureau

ClientProject ID: Holloman AFB-MISC

Lab ID: HG090526-1LCS

Sample Matrix: WATER	Prep Batch: HG090526-1	Sample Aliquot: 20 g
% Moisture: N/A	QCBatchID: HG090526-1-1	Final Volume: 20 g
Date Collected: N/A	Run ID: HG090528-1A4	Result Units: MG/L
Date Extracted: 05/26/2009	Cleanup: NONE	Clean DF: 1
Date Analyzed: 05/28/2009	Basis: N/A	
Prep Method: METHOD	File Name: 09052800	

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7439-97-6	MERCURY	0.001	0.000935	0.0002		94	80 - 120%

Data Package ID: *hg0905124-1*



Analyte	Well Names	Well	Analytes
Sb		1 MW-01	metals, N, Diss Mn and Fe
As		2 MW-13	metals, U, N, ions
Al	SS61-MW11, TDS-MW03	3 MW-19-03	metals, Diss Mn and Fe, U, ions
Cd	MW-01, MW19-03, MW-38-01	4 MW-38-01	metals, U, N
Co		5 MW-41-03	N
Cu	MW-01, MW-13	6 SS61-MW11	Al, metals
Pb		7 TDS-MW03	Al, ions
Diss. Mn	MW-01, MW-19-03		
Diss. Fe	MW-01, MW-19-03		
Se			
Sn			
TI			
Total U	MW-13, MW-19-03, MW38-01		
U-234			
U-235			
U-238			
Th-228			
Th-230			
Th-232			
nitrate	MW-38-01, MW-41-03, MW-01		
nitrite			
ammonia	MW-01, MW-13, MW-38-01		
Kjeldhal			
Major ions			
Be			
V			
Hg	SS61-MW11, MW-13		
K	MW-19-03, MW-13, TDS-MW03		