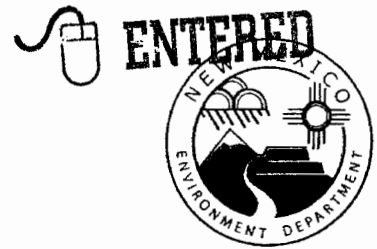




NEW MEXICO  
ENVIRONMENT DEPARTMENT



*Hazardous Waste Bureau*

SUSANA MARTINEZ  
Governor

2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
Phone (505) 476-6000 Fax (505) 476-6030  
[www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)

RYAN FLYNN  
Cabinet Secretary Designate

JOHN A. SANCHEZ  
Lieutenant Governor

BUTCH TONGATE  
Deputy Secretary

TOM BLAINE  
Division Director  
Environmental Health Division

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

July 8, 2013

Jose Franco, Manager  
Carlsbad Field Office  
Department of Energy  
P.O. Box 3090  
Carlsbad, New Mexico 88221-3100

Farok Sharif, Project Manager  
Washington TRU Solutions LLC  
P.O. Box 2078  
Carlsbad, New Mexico 88221-5608

**RE: COPY OF ANALYSIS OF SPLIT GROUNDWATER SAMPLE OF THE WASTE ISOLATION PILOT  
PLANT DETECTION MONITORING PROGRAM WELL WQSP-5**

Dear Messrs. Franco and Sharif:

As required by WIPP Permit Section 1.7.9.4, the New Mexico Environment Department (NMED) is providing a copy of the analytical laboratory results of a split groundwater sample that was collected by Nuclear Waste Partnership's (NWP) Regulatory Environmental Services (RES) on behalf of NMED. The split sample was taken at the WIPP Detection Monitoring Program well WQSP-5 on May 21 2013. The Department of Energy's Carlsbad Filed Office and Nuclear Waste Partnership LLC are required to conduct the DMP per the requirements of the WIPP Hazardous Waste Facility Permit. NMED's samples were shipped to an NMED contract analytical laboratory for the following analyses:

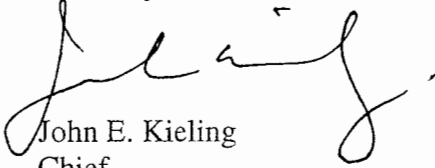
- RCRA 8 Metals



Messrs. Franco and Sharif  
July 8, 2013  
Page 2

If you have any questions regarding this matter, please contact Trais Kliphuis at (505) 476-6051.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: Tom Blaine, NMED EHD  
Dave Cobrain, NMED HWB  
Trais Kliphuis, NMED HWB  
Steve Holmes, NMED HWB  
Ricardo Maestas, NMED HWB  
Coleman Smith, NMED HWB  
Anthony Stone, DOE CBFO  
Thomas Kesterson, NMED DOEOB  
Julia Marple, NMED DOEOB  
File: Red WIPP '13



June 4, 2013

Mr. Ricardo Maestas  
NMED Hazardous Waste Bureau  
2905 Rodeo Park Drive East, Bldg 1  
Santa Fe, NM 87505

Re: ALS Workorder: 13-05-345  
Project Name: WQSP-5 Split  
Project Number: None Submitted

Dear Mr. Maestas:

Four water samples were received from NMED Hazardous Waste Bureau on May 22, 2013. The samples were scheduled for the following analysis:

Metals pages 1-15

The results for this analysis are contained in the enclosed report.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental  
Lance Steere  
Senior Project Manager

LRS/jl  
Enclosure (s): Report

ADDRESS 225 Commerce Drive, Fort Collins, Colorado, USA 80524 PHONE +1 970 490 1511 FAX +1 970 490 1522

ALS GROUP USA, CORP. Part of the ALS Laboratory Group An ALS Limited Company

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER

ALS is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

Accreditation Body	License or Certification Number
Alaska (AK)	UST-086
Alaska (AK)	CO00078
Arizona (AZ)*	AZ0742
California (CA)	06251CA
Colorado (CO)	CO00078
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO00078
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Maryland (MD)	285
Missouri	175
Nevada (NV)	CO000782008A
New Jersey (NJ)**	CO003
North Dakota (ND)	R-057
Oklahoma	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241-09-1
Utah (UT)	CO00078
Washington	C1280

# ALS Environmental -- FC

## Sample Number(s) Cross-Reference Table

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**OrderNum:** 1305345

**Client Name:** NMED Hazardous Waste Bureau

**Client Project Name:** WQSP-5 Split

**Client Project Number:**

**Client PO Number:** 20-667-00-16004

---

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
WQSP5-SVOA	1305345-1		WATER	21-May-13	9:38
WQSP5-MR8	1305345-2		WATER	21-May-13	9:11
WQSP5-VOA	1305345-3		WATER	21-May-13	8:47
TRIP BLANK	1305345-4		WATER	21-May-13	



# ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524  
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

## Chain-of-Custody

Robbin A. Spoon  
Richard Jimenez  
Ricardo Maestas RAS 5/21/13

WORKORDER

1305345

Form 202r8

PROJECT NAME	WQSP-5 Split	SAMPLER	Ricardo Maestas RAS 5/21/13	DATE	5/21/2013	PAGE	1 of 1
PROJECT No.		SITE ID	WIPP WQSP-5	TURNAROUND	Routine	DISPOSAL	By Lab or Return to Client
COMPANY NAME	NMED HWB	EDD FORMAT					
SEND REPORT TO	Ricardo Maestas	PURCHASE ORDER					
ADDRESS	2905 Rodeo Park Dr. E. Bldg 1	BILL TO COMPANY	NMED Haz Waste Bureau				
CITY / STATE / ZIP	Santa Fe, NM 87505	INVOICE ATTN TO	c/o James Valdez				
PHONE	505-476-6050	ADDRESS	2905 Rodeo Park Dr. E. Bldg 1				
FAX		CITY / STATE / ZIP	Santa Fe, NM 87505				
E-MAIL	ricardo.maestas@state.nm.us	PHONE	505-476-6000				

Semi-VOA  
RCRA 8 Metals  
VOA

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC
①	WQSP5-SVOA	W	5/21/13	08:47	1	/	X
②	WQSP5-MR8	W	L	09:11	1	HAB	X
③	WQSP5-VOA	W	L	09:38	3	HCL	X
④	TRIP BLANK	W	N/A	N/A	2	HCL	X

\*Note: Due to electrical problems w/WQSP-5 pump, custody of empty ALS sample bottles is being transferred to URS-RFS personnel. Once pump issues are resolved, RFS personnel will collect samples for NMED w/T. Kesterson observing (NMED-DOEB).  
RAS 5/30/13 RAS 5/30/13

\*Time Zone (Circle): EST CST MST PST Matrix: O=oil S=soil NS=non-soil solid W=water L=liquid E=extract F=filter

For metals or anions, please detail analytes below.

Comments:	observed by Thomas Kesterson, NMED OB. 575-885-9023.	QC PACKAGE (check below)
		LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
		LEVEL IV (Std QC + forms + raw data)
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035		

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	Ricardo Maestas	Ricardo MAESTAS	4/30/13	11:30 AM
RECEIVED BY	Robbin A. Spoon	Robbin A. Spoon	4/30/13	11:30
RELINQUISHED BY	Robbin A. Spoon	Robbin A. Spoon	5/21/13	11:30
RECEIVED BY	C Trimble	C Trimble	5-22-13	0910
RELINQUISHED BY				
RECEIVED BY				



**ALS Environmental - Fort Collins**  
**CONDITION OF SAMPLE UPON RECEIPT FORM**

Client: NMED

Workorder No: 1305345

Project Manager: LS

Initials: CDT Date: 5-22-13

1. Does this project require any special handling in addition to standard ALS procedures?		YES	<input checked="" type="radio"/> NO
2. Are custody seals on shipping containers intact?	<input checked="" type="radio"/> NONE	YES	NO
3. Are Custody seals on sample containers intact?	NONE	<input checked="" type="radio"/> YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		<input checked="" type="radio"/> YES	NO
5. Are the COC and bottle labels complete and legible?		<input checked="" type="radio"/> YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	<input checked="" type="radio"/> NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	<input checked="" type="radio"/> YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	<input checked="" type="radio"/> YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	<input checked="" type="radio"/> YES	NO
10. Is there sufficient sample for the requested analyses?		<input checked="" type="radio"/> YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		<input checked="" type="radio"/> YES	NO
12. Are all samples within holding times for the requested analyses?		<input checked="" type="radio"/> YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		<input checked="" type="radio"/> YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ___ < green pea ___ > green pea	N/A	YES	<input checked="" type="radio"/> NO
15. Do any water samples contain sediment? Amount Amount of sediment: ___ dusting ___ moderate ___ heavy	N/A	YES	<input checked="" type="radio"/> NO
16. Were the samples shipped on ice?		<input checked="" type="radio"/> YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 <input checked="" type="radio"/> #4		YES	<input checked="" type="radio"/> NO
Cooler #: <u>1</u>			
Temperature (°C): <u>13.8</u>			
No. of custody seals on cooler: <u>0</u>			
External µR/hr reading: <u>15</u>			
Background µR/hr reading: <u>13</u>			
Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? <input checked="" type="radio"/> YES / NO / NA (If no, see Form 008.)			

DOT Survey  
Acceptance  
Information

**Additional Information:** PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

HEADSPACE : 1305345-3-1 } < green pea  
                    ↓ -3-2 }

Time on SVDA bottle: 0938      Time on COC: 0847  
Time on VOA VIALS: 0847      Time on COC: 0938

Reported temp to PM.

If applicable, was the client contacted?  YES / NO / NA Contact: Ricardo Maestas Date/Time: 5/22

Project Manager Signature / Date: [Signature] 5/22/13

**1 From**  
Date: 7/11  
Sender's FedEx Account Number: \_\_\_\_\_  
Sender's Name: \_\_\_\_\_ Phone: 953-4111  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

**2 Your Internal Billing Reference**  
WG P-5 RWD 35

**3 To**  
Recipient's Name: Sample Control Phone: 710-470-1511  
Company: ALS Laboratory Group  
Address: 225 Commerce Dr  
City: Ft. Collins State: CO ZIP: 80524

**4a Express Package Service** \* To most locations. Packages up to 150 lbs.  
 **01 FedEx Priority Overnight** Next business morning. \* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.  
 **05 FedEx Standard Overnight** Next business afternoon. \* Saturday Delivery NOT available.  
 **06 FedEx First Overnight** 1 a.m. next business morning delivery to select locations.\*  
 **03 FedEx 2Day** Second business day. \* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.  
 **20 FedEx Express Saver** Third business day. \* Saturday Delivery NOT available.

**4b Express Freight Service** \*\* To most locations. Packages over 150 lbs.  
 **70 FedEx 1Day Freight** Next business day. \*\* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.  
 **FedEx 2Day Freight** Second business day. \*\* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.  
 **83 FedEx 3Day Freight** Third business day. \*\* Saturday Delivery NOT available.

**5 Packaging** \* Declared value limit \$500.  
 Envelope\*  
 **02 FedEx Pak** Includes FedEx Small Pak and FedEx Large Pak.  
 **03 FedEx Box**  
 **04 FedEx Tube**  
 **07 Other**

**6 Special Handling and Delivery Signature Options**  
 **01 SATURDAY DELIVERY**  
 **No Signature Required** Package will be left without signature for delivery.  
 **10 Direct Signature** Someone at recipient's address may sign for delivery. \* Applies.  
 **34 Indirect Signature** If no one is available at recipient's address, someone in a neighborhood may sign for delivery. For residential deliveries only. \* Fee applies.  
**Does this shipment contain dangerous goods?**  
 **No**  **04 Yes** As per attachment. Shipper's Declaration not required.  
 **06 Dry Ice** Dry Ice, 9, UN 1845  
 **Cargo Aircraft Only**

**7. Payment** Bill to:  
 Sender Acct. No. in Section 1 will be billed. Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No.   
 **1** Sender  **2** Recipient  **3** Third Party  **4** Credit Card  **5** Cash/Check  
 Total Packages: 1 Total Weight: 15 lbs. Credit Card Auth.



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# Metals

## Case Narrative

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### NMED Hazardous Waste Bureau

#### WQSP-5 Split

Work Order Number: 1305345

1. This report consists of 1 water sample.
2. The sample was received intact at 13.8°C by ALS on 05/22/13.
3. The sample had a pH less than 2 upon receipt.
4. The sample was prepared and analyzed based on SW-846, 3<sup>rd</sup> Edition procedures.

For analysis by Trace ICP, the sample was digested following method 3005A and the current revision of SOP 806.

For analysis by Cold Vapor AA (CVAA), the sample was digested following method 7470A and the current revision of SOP 812.

5. Analysis by Trace ICP followed method 6010B and the current revision of SOP 834.  
Analysis by CVAA followed method 7470A and the current revision of SOP 812.
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.



- The preparation (method) blank associated with each digestion batch was below the reporting limit for the requested analytes.
- All laboratory control sample criteria were met.
- All initial and continuing calibration blanks were below the reporting limit for the requested analytes.
- All initial and continuing calibration verifications were within the acceptance criteria for the requested analytes.
- The interference check samples and high standard readbacks associated with Method 6010B were within acceptance criteria.

9. Matrix specific quality control procedures.

Sample 1305345-2 was designated as the quality control sample for the mercury analysis. Per method requirements, matrix QC was performed for the Trace ICP 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.

- A matrix spike and matrix spike duplicate were digested and analyzed with the mercury batch. All acceptance criteria for accuracy were met.
- A sample duplicate and matrix spike duplicate were digested and analyzed with the mercury batch. All acceptance criteria for precision were met.

10. Sample dilutions were not required for the requested analyses.

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.

Jill Latelle  
Jill Latelle  
Inorganics Primary Data Reviewer

5-31-13  
Date

Tom E Miller  
Tom E Miller  
Inorganics Final Data Reviewer

5-31-13  
Date



### Inorganic Data Reporting Qualifiers

The following qualifiers are used by the laboratory when reporting results of inorganic analyses.

- Result qualifier -- A "B" is entered if the reported value was obtained from a reading that was less than the Reporting Limit but greater than or equal to the Method Detection Limit (MDL). If the analyte was analyzed for but not detected a "U" is entered. For samples, negative values are reported as non-detects ("U" flagged). For blanks, if the absolute value of the negative value is above the MDL and below the reporting limit, then the result is "B" flagged.
- QC qualifier -- Specified entries and their meanings are as follows:
  - E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
  - M - Duplicate injection precision was not met.
  - N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
  - Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
  - \* - Duplicate analysis (relative percent difference) not within control limits.

# ALS Environmental -- FC

## Sample Number(s) Cross-Reference Table

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**OrderNum:** 1305345

**Client Name:** NMED Hazardous Waste Bureau

**Client Project Name:** WQSP-5 Split

**Client Project Number:**

**Client PO Number:** 20-667-00-16004

---

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
WQSP5-SVOA	1305345-1		WATER	21-May-13	9:38
WQSP5-MR8	1305345-2		WATER	21-May-13	9:11
WQSP5-VOA	1305345-3		WATER	21-May-13	8:47
TRIP BLANK	1305345-4		WATER	21-May-13	



**ALS Laboratory Group**

225 Commerce Drive, Fort Collins, Colorado 80524  
 TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

**Chain-of-Custody**

Robbin A. Spoon  
 Richard Simonson  
 Ricardo Maestas R <sup>AS 5/21/13</sup>

WORKORDER #	1305345
PAGE	1 of 1

PROJECT NAME	WQSP-5 Split	SAMPLER	Richard Maestas R
PROJECT No.		SITE ID	WIPP WQSP-5
COMPANY NAME	NMED HWB	EDD FORMAT	
SEND REPORT TO	Ricardo Maestas	PURCHASE ORDER	
ADDRESS	2905 Rodeo Park Dr. E Bldg 1	BILL TO COMPANY	NMED Haz Waste Bureau
CITY / STATE / ZIP	Santa Fe, NM 87505	INVOICE ATTN TO	c/o James Valdez
PHONE	505-476-6050	ADDRESS	2905 Rodeo Park Dr. E Bldg 1
FAX		CITY / STATE / ZIP	Santa Fe, NM 87505
E-MAIL	ricardo.maestas@state.nm.us	PHONE	505-476-6000
		FAX	
		E-MAIL	

DATE	5/21/2013	TURNAROUND	Routine	DISPOSAL	By Lab	Return to Client
Semi-VOA PCBs & metals VOA						

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC
①	WQSP5-SVOA	W	5/21/13	08:47	1	/	X
②	WQSP5-MR8	W	↓	09:11	1	HAZ	X
③	WQSP5-VOA	W	↓	09:38	3	HAZ	X
④	TRIP BLANK	W	N/A	N/A	2	HAZ	X

\*Note: Due to electrical problems w/ WQSP-5 pump, custody of empty ALS sample bottles is being transferred to UPS-RES personnel. Once pump issues are resolved, RES personnel will collect samples for NMED w/ T. Kesterson observing (NMED-DEQB) <sup>PM 4/30/13</sup>

Time Zone (Circle): EST CST MST PST Matrix: O=oil S=soil NS=non-soil solid W=water L=liquid E=extract F=filter

Comments:	observed by Thomas Kesterson, NMED-OB. 575-885-9023.
S O F T S	QC PACKAGE (check below)
	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)
Preservative Key:	1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

SIGNATURE	PRINTED NAME	DATE	TIME
<i>Ricardo Maestas</i>	Ricardo MAESTAS	4/20/13	11:30am
<i>Robbin A. Spoon</i>	Robbin A. Spoon	4/30/13	11:30
<i>Robbin A. Spoon</i>	Robbin A. Spoon	5/21/13	11:30
<i>C Trimble</i>	C Trimble	5-22-13	09:10
RELINQUISHED BY			
RECEIVED BY			



ALS Environmental - Fort Collins  
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: NMED

Workorder No: 1305345

Project Manager: LS

Initials: CDT

Date: 5-22-13

1. Does this project require any special handling in addition to standard ALS procedures?		YES	<input checked="" type="radio"/> NO
2. Are custody seals on shipping containers intact?	<input checked="" type="radio"/> NONE	YES	NO
3. Are Custody seals on sample containers intact?	NONE	<input checked="" type="radio"/> YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		<input checked="" type="radio"/> YES	NO
5. Are the COC and bottle labels complete and legible?		<input checked="" type="radio"/> YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	<input checked="" type="radio"/> NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	<input checked="" type="radio"/> YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	<input checked="" type="radio"/> YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	<input checked="" type="radio"/> YES	NO
10. Is there sufficient sample for the requested analyses?		<input checked="" type="radio"/> YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		<input checked="" type="radio"/> YES	NO
12. Are all samples within holding times for the requested analyses?		<input checked="" type="radio"/> YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		<input checked="" type="radio"/> YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: <u>   </u> < green pea <u>   </u> > green pea	N/A	YES	<input checked="" type="radio"/> NO
15. Do any water samples contain sediment? Amount Amount of sediment: <u>   </u> dusting <u>   </u> moderate <u>   </u> heavy	N/A	YES	<input checked="" type="radio"/> NO
16. Were the samples shipped on ice?		<input checked="" type="radio"/> YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 <input checked="" type="radio"/> #4		<input checked="" type="radio"/> YES	<input checked="" type="radio"/> NO
Cooler #: <u>1</u>			
Temperature (°C): <u>13.8</u>			
No. of custody seals on cooler: <u>0</u>			
External μR/hr reading: <u>15</u>			
Background μR/hr reading: <u>13</u>			
Were external μR/hr readings ≤ two times background and within DOT acceptance criteria? <input checked="" type="radio"/> YES / NO / NA (If no, see Form 008.)			

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

HEADSPACE: 1305345-3-1 } < GREEN PEA  
  ↓ -3-2 }

Time on SVDA bottle: 0938

Time on COC: 0847

Time on VOA VIALS: 0847

Time on COC: 0938

Reported temp to PM.

If applicable, was the client contacted?  YES / NO / NA Contact: Ricardo Maertens Date/Time: 5/22

Project Manager Signature / Date: [Signature] 5/22/13

1 From  
 Date 5/2/11 Sender's FedEx Account Number \_\_\_\_\_  
 Sender's Name Kellie H Spear Phone 715 224 4777  
 Company GARMED - Haz-Waste Bureau  
 Address 2705 North Park Dr, Fort Collins, CO  
 City Fort Collins State CO ZIP 7865

2 Your Internal Billing Reference WGP-5 Round 35

3 To Recipient's Name Sample Control Phone 970 470-1511  
 Company ALS Laboratory Group  
 Address 225 Commerce Dr  
 City Ft. Collins State CO ZIP 80524

4a Express Package Service \* To meet location. Packages up to 150 lbs.  
 01  FedEx Priority Overnight Next business morning. \* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.  
 05  FedEx Standard Overnight Next business morning. \* Saturday Delivery NOT available.  
 06  FedEx First Overnight Earliest next business morning delivery to select locations.  
 03  FedEx 2Day Second business day. \* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.  
 20  FedEx Express Saver Third business day. Saturday Delivery NOT available.

4b Express Freight Service \*\* To meet location. Packages over 150 lbs.  
 70  FedEx 1Day Freight Next business day. \* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.  
 FedEx 2Day Freight Second business day. \* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.  
 83  FedEx 3Day Freight Third business day. \* Saturday Delivery NOT available.

5 Packaging \* Reduced value limit.  
 01  Envelope \*  
 02  FedEx Pak\* Includes FedEx Small Pak and FedEx Large Pak.  
 03  FedEx Box  
 04  FedEx Tube  
 05  Other

6 Special Handling and Delivery Signature Options  
 SATURDAY DELIVERY  
 No Signature Required Packages may be left without a signature for delivery.  
 10  Direct Signature Someone at recipient's address may sign for delivery. \* Fee applies.  
 34  Indirect Signature If no one is available at recipient's address, someone at the freight forwarding address may sign for delivery. For residential deliveries only. Fee applies.  
 Does this shipment contain dangerous goods? \* Fee applies.  
 No 04  Yes As per attach Shipper's Declaration. \* Shipper's Declaration not required.  
 06  Dry Ice Dry Ice, 3, UN 1845 \_\_\_\_\_ kg  
 Cargo Aircraft Only

7. Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No.   
 1  Sender Acct. No. in Section I will be billed. 2  Recipient 3  Third Party 4  Credit Card 5  Cash/Check  
 Total Packages 1 Total Weight 15 lbs. Credit Card Auth. [Redacted]  
 \*Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Services Guide for details.



8739 5711 7396

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# Total Recoverable ICP Metals

## Method SW6010B

### Sample Results

Lab Name: ALS Environmental – FC

Work Order Number: 1305345

Client Name: NMED Hazardous Waste Bureau

ClientProject ID: WQSP-5 Split

Field ID: WQSP5-MR8	Sample Matrix: WATER	Prep Batch: IP130528-5	Analyst: Steve Workman
Lab ID: 1305345-2	% Moisture: N/A	QCBatchID: IP130528-5-10	Sample Aliquot: 50 g
	Date Collected: 21-May-13	Run ID: IT130529-2A4	Final Volume: 50 g
	Date Extracted: 28-May-13	Cleanup: NONE	Result Units: MG/L
Analysis ReqCode: 205	Date Analyzed: 29-May-13	Basis: As Received	Clean DF: 1
	Prep Method: SW3005 Rev A	File Name: 130529A.	

CASNO	Target Analyte	Dilution Factor	Result	RptLimit\ LOD\LOQ	MDL/DL	Result Qualifier	EPA Qualifier
7440-38-2	ARSENIC	1	0.0086	0.01	0.004	B	
7440-39-3	BARIUM	1	0.01	0.1	0.0012	B	
7440-43-9	CADMIUM	1	0.0005	0.005	0.0005	U	
7440-47-3	CHROMIUM	1	0.0006	0.01	0.0006	U	
7439-92-1	LEAD	1	0.002	0.003	0.002	U	
7782-49-2	SELENIUM	1	0.003	0.005	0.003	U	
7440-22-4	SILVER	1	0.0024	0.01	0.0024	U	

Data Package ID: *it1305345-1*

Date Printed: Friday, May 31, 2013

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# Total Mercury

Method SW7470A

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1305345

Client Name: NMED Hazardous Waste Bureau

ClientProject ID: WQSP-5 Split

Field ID: WQSP5-MR8

Lab ID: 1305345-2

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 21-May-13

Date Extracted: 29-May-13

Date Analyzed: 29-May-13

Prep Method: METHOD

Prep Batch: HG130529-2

QCBatchID: HG130529-2-1

Run ID: HG130529-2A2

Cleanup: NONE

Basis: As Received

File Name: HG130529-2

Analyst: Sheri Lafferty

Sample Aliquot: 20 g

Final Volume: 20 g

Result Units: MG/L

Clean DF: 1

Analysis ReqCode: 205

CASNO	Target Analyte	Dilution Factor	Result	RptLimit\ LOD\LOQ	MDL/DL	Result Qualifier	EPA Qualifier
7439-97-6	MERCURY	1	0.00006	0.0002	0.00006	U	

Data Package ID: hg1305345-1

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# ICP Metals

## Method SW6010B

### Method Blank

Lab Name: ALS Environmental – FC

Work Order Number: 1305345

Client Name: NMED Hazardous Waste Bureau

ClientProject ID: WQSP-5 Split

Lab ID: IP130528-5MB

Sample Matrix: WATER  
 % Moisture: N/A  
 Date Collected: N/A  
 Date Extracted: 28-May-13  
 Date Analyzed: 29-May-13

Prep Batch: IP130528-5  
 QCBatchID: IP130528-5-10  
 Run ID: IT130529-2A4  
 Cleanup: NONE  
 Basis: N/A  
 File Name: 130529A.

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

CASNO	Target Analyte	DF	Result	RptLimit LOD/LOQ	MDL	Result Qualifier	EPA Qualifier
7440-38-2	ARSENIC	1	-0.0047	0.01	0.004	B	
7440-39-3	BARIUM	1	0.0012	0.1	0.0012	U	
7440-43-9	CADMIUM	1	-0.00077	0.005	0.0005	B	
7440-47-3	CHROMIUM	1	-0.002	0.01	0.0006	B	
7439-92-1	LEAD	1	0.002	0.003	0.002	U	
7782-49-2	SELENIUM	1	0.003	0.005	0.003	U	
7440-22-4	SILVER	1	0.0024	0.01	0.0024	U	

Data Package ID: *it1305345-1*

**ICP Metals**  
**Method SW6010B**  
**Laboratory Control Sample**

Lab Name: ALS Environmental – FC  
 Work Order Number: 1305345  
 Client Name: NMED Hazardous Waste Bureau  
 ClientProject ID: WQSP-5 Split

Lab ID: IP130528-5LCS	Sample Matrix: WATER	Prep Batch: IP130528-5	Sample Allquot: 50 g
	% Moisture: N/A	QCBatchID: IP130528-5-10	Final Volume: 50 g
	Date Collected: N/A	Run ID: IT130529-2A4	Result Units: MG/L
	Date Extracted: 05/28/2013	Cleanup: NONE	Clean DF: 1
	Date Analyzed: 05/29/2013	Basis: N/A	
	Prep Method: SW3005A	File Name: 130529A.	

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7440-38-2	ARSENIC	1	1.03	0.01		103	80 - 120%
7440-39-3	BARIUM	1	0.981	0.1		98	80 - 120%
7440-43-9	CADMIUM	0.05	0.0515	0.005		103	80 - 120%
7440-47-3	CHROMIUM	0.2	0.195	0.01		98	80 - 120%
7439-92-1	LEAD	0.5	0.502	0.003		100	80 - 120%
7782-49-2	SELENIUM	2	2.09	0.005		104	80 - 120%
7440-22-4	SILVER	0.1	0.1	0.01		100	80 - 120%

Data Package ID: *it1305345-1*

# Mercury

## Method SW7470A

### Method Blank

Lab Name: ALS Environmental – FC

Work Order Number: 1305345

Client Name: NMED Hazardous Waste Bureau

ClientProject ID: WQSP-5 Split

Lab ID: HG130529-2MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 29-May-13

Date Analyzed: 29-May-13

Prep Batch: HG130529-2

QCBatchID: HG130529-2-1

Run ID: HG130529-2A2

Cleanup: NONE

Basis: N/A

File Name: HG130529-2

Sample Allquot: 20 g

Final Volume: 20 g

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit LOD/LOQ	MDL	Result Qualifier	EPA Qualifier
7439-97-6	MERCURY	1	0.00006	0.0002	0.00006	U	

Data Package ID: hg1305345-1

Date Printed: Friday, May 31, 2013

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# Mercury

## Method SW7470A

### Laboratory Control Sample

**Lab Name:** ALS Environmental – FC  
**Work Order Number:** 1305345  
**Client Name:** NMED Hazardous Waste Bureau  
**ClientProject ID:** WQSP-5 Split

Lab ID: HG130529-2LCS	<b>Sample Matrix:</b> WATER <b>% Moisture:</b> N/A <b>Date Collected:</b> N/A <b>Date Extracted:</b> 05/29/2013 <b>Date Analyzed:</b> 05/29/2013 <b>Prep Method:</b> METHOD	<b>Prep Batch:</b> HG130529-2 <b>QC Batch ID:</b> HG130529-2-1 <b>Run ID:</b> HG130529-2A2 <b>Cleanup:</b> NONE <b>Basis:</b> N/A <b>File Name:</b> HG130529-2	<b>Sample Aliquot:</b> 20 g <b>Final Volume:</b> 20 g <b>Result Units:</b> MG/L <b>Clean DF:</b> 1
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CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7439-97-6	MERCURY	0.001	0.00101	0.0002		101	80 - 120%

**Data Package ID:** hg1305345-1

# Mercury

## Method SW7470A

### Matrix Spike And Matrix Spike Duplicate

**Lab Name:** ALS Environmental -- FC  
**Work Order Number:** 1305345  
**Client Name:** NMED Hazardous Waste Bureau  
**ClientProject ID:** WQSP-5 Split

<b>Field ID:</b> WQSP5-MR8 <b>LabID:</b> 1305345-2MS	<b>Sample Matrix:</b> WATER <b>% Moisture:</b> N/A <b>Date Collected:</b> 21-May-13 <b>Date Extracted:</b> 29-May-13 <b>Date Analyzed:</b> 29-May-13 <b>Prep Method:</b> METHOD	<b>Prep Batch:</b> HG130529-2 <b>QCBatchID:</b> HG130529-2-1 <b>Run ID:</b> HG130529-2A2 <b>Cleanup:</b> NONE <b>Basis:</b> As Received	<b>Sample Aliquot:</b> 20 g <b>Final Volume:</b> 20 g <b>Result Units:</b> MG/L <b>File Name:</b> HG130529-2
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CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7439-97-6	MERCURY	0.00006	U	0.00192		0.0002	0.002	96	80 - 120%

<b>Field ID:</b> WQSP5-MR8 <b>LabID:</b> 1305345-2MSD	<b>Sample Matrix:</b> WATER <b>% Moisture:</b> N/A <b>Date Collected:</b> 21-May-13 <b>Date Extracted:</b> 29-May-13 <b>Date Analyzed:</b> 29-May-13 <b>Prep Method:</b> METHOD	<b>Prep Batch:</b> HG130529-2 <b>QCBatchID:</b> HG130529-2-1 <b>Run ID:</b> HG130529-2A2 <b>Cleanup:</b> NONE <b>Basis:</b> As Received	<b>Sample Aliquot:</b> 20 g <b>Final Volume:</b> 20 g <b>Result Units:</b> MG/L <b>File Name:</b> HG130529-2
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CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7439-97-6	MERCURY	0.00194		0.002	97	0.0002	20	1

**Data Package ID:** hg1305345-1

# Mercury

## Method SW7470

### Duplicate Sample Results

**Lab Name:** ALS Environmental -- FC  
**Work Order Number:** 1305345  
**Client Name:** NMED Hazardous Waste Bureau  
**ClientProject ID:** WQSP-5 Split

<b>Field ID:</b> WQSP5-MR8 <b>Lab ID:</b> 1305345-2D	<b>Sample Matrix:</b> WATER <b>% Moisture:</b> N/A <b>Date Collected:</b> 05/21/2013 <b>Date Extracted:</b> 05/29/2013 <b>Date Analyzed:</b> 05/29/2013	<b>Prep Batch:</b> HG130529-2 <b>QCBatchID:</b> HG130529-2-1 <b>Run ID:</b> HG130529-2A2 <b>Cleanup:</b> NONE <b>Basis:</b> As Received <b>File Name:</b> HG130529-2	<b>Sample Aliquot:</b> 20 g <b>Final Volume:</b> 20 g <b>Result Units:</b> MG/L <b>Clean DF:</b> 1
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CASNO	Target Analyte	Sample Result	Samp Qual	Duplicate Result	Dup Qual	Reporting Limit	Dilution Factor	RPD	RPD Limit
7439-97-6	MERCURY	0.00006	U	0.00006	U	0.0002	1		20

**Data Package ID:** hg1305345-1