TA 03

ENTERED

PARAGON ANALYTICS
A Division of DataChem Laboratories, Inc.

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

June 20, 2008

Ms. Kim Granzow
NMED DOE Oversight Bureau
134 State Road 4, Suite A
White Rock, NM 87544

Re: Paragon Workorder: 08-06-057
Client Project Name: None Submitted
Client Project Number: 06.04.08-570(HWB PE-15)

Dear Ms. Granzow:

Four water samples were received from NMED DOE Oversight Bureau on June 6, 2008. The samples were scheduled for the following analyses:

Metals	pages 1-19
Inorganics	pages 1-23
Perchlorate	pages 110-

The results for these analyses are contained in the enclosed report.

Thank you for your confidence in Paragon Analytics. Should you have any questions, please call.

Sincerely,

Paragon Analytics
Lance Steere
Senior Project Manager

LRS/jb
Enclosure: Report

31500

Dade 7

Paragon Analytics

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 0806057
Client Name: NMED DOE Oversight Bureau
Client Project Name:
Client Project Number: 06.04.08-570(HWB PE-15)
Client PO Number: 06-667-55-01754

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
PE-15-6-4-ClO4	0806057-1		WATER	04-Jun-08	12:40
PE-15-6-4-MET	0806057-2		WATER	04-Jun-08	12:40
PE-15-6-4-N	0806057-3		WATER	04-Jun-08	12:40
PE-15-6-4-Anions	0806057-4		WATER	04-Jun-08	12:40

Chain of Custody Record

SHIP TO:

Paragon Analytics
225 Commerce Drive
Fort Collins, CO 80524
(970) 490-1511

MAIL REPORT TO:

Kim Granzow
NMED-DOE Oversight Bureau
134 State Road 4, Suite A
White Rock, New Mexico 87544
kgranzow@lanl.gov

Initials

KG
(505) 672-0447

BILL TO:

Dave Cobrain/Cathy Herrera
New Mexico Environ. Dept. Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, NM 87505-2567
505-476-6055/505-476-6017

08060057

Project Number: 06.04.08-570(HWB PE-15)
(Lab Invoice Use Only)

HWB Cost Code 002731703

				ClO4 (Line Item # 560) $175	Dissolved TAL Metals + U (Line Item #203) $205	Acid Digestion for Metals (Line Item #221) $15	Additional metal Sr (Line Item #211) $15	Additional metal Si (Line Item #211) $15	Additional metal Li (Line Item #211) $15	Nitrate and Nitrite (Line Item #542) $15	Ammonia as N (Line Item #543) $20	Major Anions (Line Item #524) $60	ALK - CO3 & HCO3 (Line Item 531) $15	3 Week turnaround (Line Item 7) 25 x $550 = $137.5	Total cost = $687.50
				F/NA	F/Nitric					F/H2SO4		F/NA			
			Line Item No.	560	203	221	~~211~~ 201	~~211~~ 201	~~211~~ 201	542	543	524	531	7	
			Price per Sample	$175.00	$205.00	$15.00	$15.00	$15.00	$15.00	$15.00	$20.00	$60.00	$15.00	######	
Lab ID Number	**NMED - Sample ID**	**Date**	**Time**												
1	PE-15-6-4-ClO4	6/4/2008	12:40	X										X	250 ml nalgene
2	PE-15-6-4-MET	6/4/2008	12:40		X	X	X	X	X						500 ml nalgene
3	PE-15-6-4-N	6/4/2008	12:40							X	X				150 ml nalgene
4	PE-15-6-4-Anions	6/4/2008	12:40									X	X		500 ml nalgene
			Total No. of Samples	1	1	1	1	1	1	1	1	1	1	1	

Date/Time	Relinquished By:	
6/5/08@ 1310		Sign
	Michael Dale	Print
	NMED DOE Oversight Bureau	Co./Org.

Date/Time	Received By:	
6·6·08 1000		Sign
	Sheri Lafferty	Print
	paragon	Co./Org.

Comments: Lance - three week turnaround - we made line item 7 charge = 25% rather than 50%

QC Level: **Standard**
QC Required: MS MSD Blank
Turn Around Time (TAT): **RUSH**

☐ **Place "X" in box if there are less than 5 total samples for shipping costs.**

CONDITION OF SAMPLE UPON RECEIPT FORM **Paragon Analytics**

Client: NMED Workorder No: 0806057

Project Manager: LS Initials: SL Date: 6·6·08

1. Does this project require any **special handling** in addition to standard Paragon procedures?		YES	(NO)
2. Are custody **seals on shipping containers** intact?	(NONE)	YES	NO
3. Are Custody seals on **sample containers** intact?	NONE	(YES)	NO
4. Is there a **COC (Chain-of-Custody) present** or other representative documents?		(YES)	NO
5. Are the **COC and bottle labels complete and legible**?		(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)	NO
7. Were **airbills / shipping documents** present and/or removable?	DROP OFF	(YES)	NO
8. Are all aqueous **samples requiring preservation preserved correctly**? (excluding volatiles)	N/A	(YES)	NO
9. Are all aqueous **non-preserved samples pH 4-9**?	N/A	(YES)	NO
10. Is there **sufficient sample** for the requested analyses?		(YES)	NO
11. Were all samples placed in the **proper containers** for the requested analyses?		(YES)	NO
12. Are all samples within **holding times** for the requested analyses?		(YES)	NO
13. Were all sample containers received **intact**? (not broken or leaking, etc.)		(YES)	NO
14. Are all samples requiring no headspace (VOC, GRO, Rx CN/S, radon), headspace free? **Size of bubble:** ____ < green pea ____ > green pea	(N/A)	YES	NO
15. Were samples checked for and free from the presence of **residual chlorine**? (Applicable when PM has indicated samples are from a chlorinated water source; note if field preservation with sodium thiosulfate was not observed.)	(N/A)	YES	NO
16. Were the samples **shipped on ice**?		(YES)	NO
17. Were cooler temperatures measured at 0.1-6.0°C? **IR gun used*:** (#2) #4	RAD ONLY	(YES)	NO

Cooler #:	1
Temperature (°C):	5.0
No. of custody seals on cooler:	Ø
DOT Survey/ Acceptance Information — External µR/hr reading:	13
Background µR/hr reading:	13

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? (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

If applicable, was the client contacted? YES / NO / NA Contact: _____ Date/Time: _____

Project Manager Signature / Date: 6/6/08

*IR Gun #2: Oakton, SN 29922500201-0066 *IR Gun #4: Oakton, SN 2372220101-0002

Form 201r20.xls (12/27/07)

FedEx. US Airbill Express

FedEx Tracking Number 8604 4512 4092

Recipient's Copy

From

Date

Sender's Name Phone

Company

Address Dept./Floor/Suite/Room

City State

Your Internal Billing Reference

To

Recipient's Name Phone

Company

Recipient's Address Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City State ZIP

8604 4512 4092

4a Express Package Service

Packages up to 150 lbs.

- [ ] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available
- [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service

Packages over 150 lbs.

- [ ] 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.
- [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation:

** To most locations.

5 Packaging

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [ ] FedEx Box
- [ ] FedEx Tube
- [ ] Other

* Declared value limit $500.

6 Special Handling

Include FedEx account no. in Section 3.

- [ ] SATURDAY Delivery — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] HOLD Weekday at FedEx Location — Not available for FedEx First Overnight.
- [ ] HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods?
One box must be checked.

- [ ] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

- [ ] Cargo-Aircraft Only

7 Payment

Bill to: Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Obtain Recip. Acct. No. [ ]

Total Packages	Total Weight	Total Declared Value†	Total Charges
	12	$ .00	
			Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See back for details.

8 NEW Residential Delivery Signature Options

If you require a signature, check Direct or Indirect.

- [ ] 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.*

520

Rev. Date 8/05 Part #158281 ©1994–2005 FedEx PRINTED IN U.S.A. SRY

Paragon Analytics

METALS CASE NARRATIVE

NMED DOE Oversight Bureau

06.04.08-570(HWB PE-15)

Order Number - 0806057

1. This report consists of 1 water sample.
2. The sample was received cool and intact on 06/06/08.
3. The sample was to be analyzed for dissolved metals. The sample had been filtered prior to receipt, and had a pH less than 2 upon receipt.
4. The sample was prepared for analysis based on SW-846, 3rd Edition procedures.

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

   The sample was prepared for ICP-MS analysis of arsenic and selenium by passing the digested samples and associated QC through a cation exchange column. The cation exchange column removes cations from the matrix and eliminates the CaCl+ (mass 75) interferences on arsenic.

   For analysis by Cold Vapor AA (CVAA), the sample was digested following method 7470A and PA SOP 812 Rev. 14.
5. The sample was analyzed following SW-846, 3rd Edition procedures.

   Analysis by Trace ICP followed method 6010B and PA 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 2nd 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.

These solutions provide verification that the calibration equations are functioning properly throughout the analytical range of the instrument. During sample analysis dilutions are made for analytes found at concentrations above the highest calibration standard. No results are taken from extrapolations beyond the highest standard.

Analysis by ICP-MS followed method 6020A and PA SOP 827 Rev. 6.

The relationship between intensity and concentration for each element is established using at least four standards, one of which is a blank solution. A calibration equation relating instrument response to concentration is developed by the instrument software. The equation is a higher order polynomial. This type of equation is used to improve quantitation accuracy at lower concentrations where the relationship between concentration and instrument response is non-linear.

During sample analysis concentrations are computed by the software and the results are printed in ug/L. 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 2nd source standard solution with concentrations near the middle of the analytical range, a Continuing Calibration Verification (CCV) standard with concentrations near the middle of the analytical range but different than those in the ICV, and a readback of the highest calibration standard.

These solutions provide verification that the calibration equations are functioning properly throughout the analytical range of the instrument. During sample analysis dilutions are made for analytes found at concentrations above the highest calibration standard. No results are taken from extrapolations beyond the highest standard.

Analysis by CVAA followed method 7470A and PA SOP 812 Rev. 14.

The relationship between intensity and concentration is determined daily, prior to sample analysis. At least five standards and a blank solution are analyzed to establish the calibration curve. The instrument software performs a linear regression to fit the calibration data to a curve of the form:

$$conc. = B * I + C$$

where: conc. = concentration

B = slope coefficient

I = intensity

C = intercept coefficient

A printout summarizing the calibration data supplies the calibration curve and correlation coefficient. During sample analysis both intensity and concentration values are printed. Dilutions are made for concentrations above

the highest calibration standard. No results are taken from extrapolations above the highest standard.

6. All standards and solutions are NIST traceable and were used within their recommended shelf life.
7. The sample was 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 practical quantitation limit for each requested analyte with the exception of barium. The absolute value of barium was above the client requested reporting limit. The sample had barium at least 5 times that found in the method blank so no further action was warranted. A non-conformance report has been completed and included to document this occurrence.
   - The laboratory control sample associated with each digestion batch was within the acceptance limits. This indicates complete digestion 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 with the exceptions of the ICB and all CCBs for barium. The sample had barium at least 5 times that found in the ICB and CCBs so no further action was warranted. A non-conformance report has been completed and included to document this occurrence.
   - All initial and continuing calibration verifications associated with each analytical batch were within the acceptance criteria for the requested analytes.
   - 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.

   Per method requirements, matrix QC was performed for each 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.
10. It is a standard PA practice that samples for ICP-MS are analyzed at a dilution.

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

Darryl Patrick — 6/19/08

Darryl Patrick
Inorganics Primary Data Reviewer

Date

Inorganics Final Data Reviewer — 6/19/08

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 Practical Quantitation Limit but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected a “U” is entered.

- 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.

  S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Paragon Analytics

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 0806057
Client Name: NMED DOE Oversight Bureau
Client Project Name:
Client Project Number: 06.04.08-570(HWB PE-15)
Client PO Number: 06-667-55-01754

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
PE-15-6-4-ClO4	0806057-1		WATER	04-Jun-08	12:40
PE-15-6-4-MET	0806057-2		WATER	04-Jun-08	12:40
PE-15-6-4-N	0806057-3		WATER	04-Jun-08	12:40
PE-15-6-4-Anions	0806057-4		WATER	04-Jun-08	12:40

Chain of Custody Record

SHIP TO:

Paragon Analytics
225 Commerce Drive
Fort Collins, CO 80524
(970) 490-1511

MAIL REPORT TO:

Kim Granzow
NMED-DOE Oversight Bureau
134 State Road 4, Suite A
White Rock, New Mexico 87544
kgranzow@lanl.gov

Initials

KG
(505) 672-0447

BILL TO:

Dave Cobrain/Cathy Herrera
New Mexico Environ. Dept. Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, NM 87505-2567
505-476-6055/505-476-6017

08060057

Project Number: 06.04.08-570(HWB PE-15)
(Lab Invoice Use Only)

HWB Cost Code 002731703

	ClO4 (Line Item # 560) $175	Dissolved TAL Metals + U (Line Item #203) $205	Acid Digestion for Metals (Line Item #221) $15	Additional metal Sr (Line Item #211) $15	Additional metal Si (Line Item #211) $15	Additional metal Li (Line Item #211) $15	Nitrate and Nitrite (Line Item #542) $15	Ammonia as N (Line Item #543) $20	Major Anions (Line Item #524) $60	ALK - CO3 & HCO3 (Line Item 531) $15	3 Week turnaround (Line Item 7) .25 x $550 = $137.5	Total cost = $687.50
	F/NA	F/Nitric					F/H2SO4		F/NA			
				201	201	201						
Line Item No.	560	203	221	~~211~~	~~211~~	~~211~~	542	543	524	531	7	
Price per Sample	$175.00	$205.00	$15.00	$15.00	$15.00	$15.00	$15.00	$20.00	$60.00	$15.00	######	
Lab ID Number / **NMED - Sample ID** / **Date** / **Time**												
1 / **PE-15-6-4-ClO4** / **6/4/2008** / **12:40**	X										X	**250 ml nalgene**
2 / **PE-15-6-4-MET** / **6/4/2008** / **12:40**		X	X	X	X	X						**500 ml nalgene**
3 / **PE-15-6-4-N** / **6/4/2008** / **12:40**							X	X				**150 ml nalgene**
4 / **PE-15-6-4-Anions** / **6/4/2008** / **12:40**									X	X		**500 ml nalgene**
Total No. of Samples	1	1	1	1	1	1	1	1	1	1	1	

Date/Time	**Relinquished By:**	
6/5/08@ 1310		Sign 6-5-08
	Michael Dale	Print
	NMED DOE Oversight Bureau	Co./Org.

Date/Time	**Received By:**	
6·6·08 1000		Sign
	Sheri Lafferty	Print
	paragon	Co./Org.

Comments: Lance - three week turnaround - we made line item 7 charge = 25% rather than 50%

QC Level: **Standard**
QC Required: MS MSD Blank
Turn Around Time (TAT): **RUSH**

☐ **Place "X" in box if there are less than 5 total samples for shipping costs.**

CONDITION OF SAMPLE UPON RECEIPT FORM **Paragon Analytics**

Client: NMED Workorder No: 0806057

Project Manager: LS Initials: SL Date: 6·6·08

1.	Does this project require any **special handling** in addition to standard Paragon procedures?		YES	**NO**
2.	Are custody **seals** on **shipping containers** intact?	NONE	**YES**	NO
3.	Are Custody seals on **sample containers** intact?	**NONE**	YES	NO
4.	Is there a **COC (Chain-of-Custody) present** or other representative documents?		YES	NO
5.	Are the **COC and bottle labels complete and legible**?		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	NO
7.	Were **airbills / shipping documents** present and/or removable?	DROP OFF	YES	NO
8.	Are all aqueous **samples requiring preservation preserved correctly?** (excluding volatiles)	N/A	YES	NO
9.	Are all aqueous **non-preserved samples pH 4-9**?	N/A	YES	NO
10.	Is there **sufficient sample** for the requested analyses?		YES	NO
11.	Were all samples placed in the **proper containers** for the requested analyses?		YES	NO
12.	Are all samples within **holding times** for the requested analyses?		YES	NO
13.	Were all sample containers received **intact**? (not broken or leaking, etc.)		YES	NO
14.	Are all samples requiring no headspace (VOC, GRO, Rx CN/S, radon), headspace free? **Size of bubble**: ____ < green pea ____ > green pea	N/A	**YES**	NO
15.	Were samples checked for and free from the presence of **residual chlorine?** (Applicable when PM has indicated samples are from a chlorinated water source; note if field preservation with sodium thiosulfate was not observed.)	N/A	YES	NO
16.	Were the samples **shipped on ice**?		YES	NO
17.	Were cooler temperatures measured at 0.1-6.0°C? **IR gun used*:** #2 #4	RAD ONLY	YES	NO

Cooler #:	1							
Temperature (°C):	5.0							
No. of custody seals on cooler:	Ø							
DOT Survey/ Acceptance Information — External µR/hr reading:	13							
Background µR/hr reading:	13							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **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

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: 6/6/08

*IR Gun #2: Oakton, SN 29922500201-0066 *IR Gun #4: Oakton, SN 2372220101-0002

Form 201r20.xls (12/27/07)

FedEx Express **US Airbill**

FedEx Tracking Number 8604 4512 4092

Recipient's Copy

From

Date

Sender's Name Phone

Company

Address Dept./Floor/Suite/Room

City State

Your Internal Billing Reference

To

Recipient's Name Phone

Company

Recipient's Address

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City State ZIP

8604 4512 4092

4a Express Package Service *Packages up to 150 lbs.*

- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service *Packages over 150 lbs.*

- [ ] 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.
- [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation: ** To most locations.

5 Packaging

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [ ] Other

* Declared value limit $500.

6 Special Handling Include FedEx addresses in Section 3.

- [ ] **SATURDAY Delivery** — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] **HOLD Weekday** at FedEx Location — Not available for FedEx First Overnight.
- [ ] **HOLD Saturday** at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- [ ] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recip. Acct. No. [ ]

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Total Packages	Total Weight	Total Declared Value†	Total Charges
	12	$ .00	
			Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See back for details.

8 *NEW* Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- [ ] 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.*

520

Rev. Date 8/05 Part #158281 ©1994–2005 FedEx PRINTED IN U.S.A. SRY

Dissolved ICP Metals

Method SW6010B

Sample Results

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Field ID: PE-15-6-4-MET
Lab ID: 0806057-2

Analysis ReqCode: 203

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 04-Jun-08
Date Extracted: 10-Jun-08
Date Analyzed: 11-Jun-08
Prep Method: SW3005 Rev A

Prep Batch: IP080610-1
QCBatchID: IP080610-1-3
Run ID: IT080611-2A3
Cleanup: NONE
Basis: As Received
File Name: 080611A.

Sample Aliquot: 50 g
Final Volume: 50 g
Result Units: mg/l
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	IDL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.18	0.1	0.038		
7440-39-3	BARIUM	1	0.031	0.002	0.000095		
7440-41-7	BERYLLIUM	1	0.00042	0.001	0.00042	U	
7440-70-2	CALCIUM	1	15	0.5	0.0038		
7440-47-3	CHROMIUM	1	0.00057	0.005	0.00057	U	
7440-48-4	COBALT	1	0.00076	0.002	0.00076	U	
7440-50-8	COPPER	1	0.00059	0.002	0.00059	U	
7439-89-6	IRON	1	0.082	0.05	0.0029		
7439-93-2	LITHIUM	1	0.0064	0.01	0.0001	B	
7439-95-4	MAGNESIUM	1	3.9	0.5	0.0047		
7439-96-5	MANGANESE	1	0.0021	0.002	0.00013		
7440-02-0	NICKEL	1	0.00068	0.005	0.00068	U	
7440-09-7	POTASSIUM	1	2	0.5	0.044		
7440-21-3	SILICON	1	17	0.05	0.0099		
7440-23-5	SODIUM	1	5.5	0.5	0.0026		
7440-24-6	STRONTIUM	1	0.15	0.01	0.00004		
7440-62-2	VANADIUM	1	0.0023	0.005	0.00043	B	
7440-66-6	ZINC	1	0.0012	0.005	0.0012	U	

Data Package ID: *IT0806057-1*

Dissolved ICPMS Metals

Method SW6020A

Sample Results

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Field ID: PE-15-6-4-MET
Lab ID: 0806057-2

Analysis ReqCode: 203

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 04-Jun-08
Date Extracted: 10-Jun-08
Date Analyzed: 12-Jun-08
Prep Method: SW3005 Rev A

Prep Batch: IP080610-1
QCBatchID: IP080610-1-4
Run ID: IM080612-1A2
Cleanup: NONE
Basis: As Received
File Name: 12JUN08A

Sample Aliquot: 50 g
Final Volume: 50 g
Result Units: mg/l
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	IDL	Result Qualifier	EPA Qualifier
7440-36-0	ANTIMONY	10	0.000049	0.0003	0.000049	U	
7440-38-2	ARSENIC	10	0.0003	0.002	0.00022	B	
7440-43-9	CADMIUM	10	0.000055	0.0003	0.000055	U	
7439-92-1	LEAD	10	0.00022	0.0005	0.000026	B	
7782-49-2	SELENIUM	10	0.0004	0.001	0.0004	U	
7440-22-4	SILVER	10	0.000025	0.0001	0.000024	B	
7440-28-0	THALLIUM	10	0.000032	0.0002	0.000011	B	
7440-61-1	URANIUM	10	0.00013	0.0001	0.0000035		

Data Package ID: *IM0806057-1*

Dissolved Mercury

Method SW7470A

Sample Results

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Field ID: PE-15-6-4-MET
Lab ID: 0806057-2

Analysis ReqCode: **203**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 04-Jun-08
Date Extracted: 16-Jun-08
Date Analyzed: 17-Jun-08
Prep Method: METHOD

Prep Batch: HG080616-3
QCBatchID: HG080616-3-2
Run ID: HG080617-1A8
Cleanup: NONE
Basis: As Received
File Name: 08061700

Sample Aliquot: 20 g
Final Volume: 20 g
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	IDL	Result Qualifier	EPA Qualifier
7439-97-6	MERCURY	1	0.000021	0.0001	0.000016	B	

Data Package ID: *HG0806057-1*

ICP Metals

Method SW6010B
Method Blank

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: IP080610-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 10-Jun-08
Date Analyzed: 11-Jun-08

Prep Batch: IP080610-1
QCBatchID: IP080610-1-3
Run ID: IT080611-2A3
Cleanup: NONE
Basis: N/A
File Name: 080611A.

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
7429-90-5	ALUMINUM	1	0.038	0.1	0.038	U	
7440-39-3	BARIUM	1	-0.0032	0.002	0.000095		
7440-41-7	BERYLLIUM	1	0.00042	0.001	0.00042	U	
7440-70-2	CALCIUM	1	-0.27	0.5	0.0038	B	
7440-47-3	CHROMIUM	1	0.00057	0.005	0.00057	U	
7440-48-4	COBALT	1	0.00076	0.002	0.00076	U	
7440-50-8	COPPER	1	-0.0007	0.002	0.00059	B	
7439-89-6	IRON	1	0.0029	0.05	0.0029	U	
7439-93-2	LITHIUM	1	0.0054	0.01	0.0001	B	
7439-95-4	MAGNESIUM	1	-0.024	0.5	0.0047	B	
7439-96-5	MANGANESE	1	0.00013	0.002	0.00013	U	
7440-02-0	NICKEL	1	0.00068	0.005	0.00068	U	
7440-09-7	POTASSIUM	1	0.16	0.5	0.044	B	
7440-21-3	SILICON	1	0.0099	0.05	0.0099	U	
7440-23-5	SODIUM	1	0.14	0.5	0.0026	B	
7440-24-6	STRONTIUM	1	-0.0044	0.01	0.00004	B	
7440-62-2	VANADIUM	1	0.00043	0.005	0.00043	U	
7440-66-6	ZINC	1	0.0012	0.005	0.0012	U	

Data Package ID: *IT0806057-1*

ICP Metals

Method SW6010B

Laboratory Control Sample

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: IP080610-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06/10/2008
Date Analyzed: 06/11/2008
Prep Method: SW3005A

Prep Batch: IP080610-1
QCBatchID: IP080610-1-3
Run ID: IT080611-2A3
Cleanup: NONE
Basis: N/A
File Name: 080611A.

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	2.05	0.1		103	80 - 120%
7440-39-3	BARIUM	2	1.95	0.002		97	80 - 120%
7440-41-7	BERYLLIUM	0.05	0.0487	0.001		97	80 - 120%
7440-70-2	CALCIUM	40	41	0.5		103	80 - 120%
7440-47-3	CHROMIUM	0.2	0.202	0.005		101	80 - 120%
7440-48-4	COBALT	0.5	0.482	0.002		96	80 - 120%
7440-50-8	COPPER	0.25	0.254	0.002		102	80 - 120%
7439-89-6	IRON	1	0.96	0.05		96	80 - 120%
7439-93-2	LITHIUM	0.5	0.5	0.01		100	80 - 120%
7439-95-4	MAGNESIUM	40	41.3	0.5		103	80 - 120%
7439-96-5	MANGANESE	0.5	0.491	0.002		98	80 - 120%
7440-02-0	NICKEL	0.5	0.488	0.005		98	80 - 120%
7440-09-7	POTASSIUM	40	38.8	0.5		97	80 - 120%
7440-21-3	SILICON	2	1.93	0.05		97	80 - 120%
7440-23-5	SODIUM	40	39	0.5		98	80 - 120%
7440-24-6	STRONTIUM	0.5	0.477	0.01		95	80 - 120%
7440-62-2	VANADIUM	0.5	0.502	0.005		100	80 - 120%
7440-66-6	ZINC	0.5	0.508	0.005		102	80 - 120%

Data Package ID: *IT0806057-1*

ICPMS Metals

Method SW6020A
Method Blank

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: IP080610-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 10-Jun-08
Date Analyzed: 12-Jun-08

Prep Batch: IP080610-1
QCBatchID: IP080610-1-4
Run ID: IM080612-1A2
Cleanup: NONE
Basis: N/A
File Name: 12JUN08A

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
7440-36-0	ANTIMONY	10	0.00006	0.0003	0.000049	B	
7440-38-2	ARSENIC	10	0.00022	0.002	0.00022	U	
7440-43-9	CADMIUM	10	0.000055	0.0003	0.000055	U	
7439-92-1	LEAD	10	0.00018	0.0005	0.000026	B	
7782-49-2	SELENIUM	10	0.0004	0.001	0.0004	U	
7440-22-4	SILVER	10	0.000024	0.0001	0.000024	U	
7440-28-0	THALLIUM	10	0.000011	0.0002	0.000011	U	
7440-61-1	URANIUM	10	0.000015	0.0001	0.0000035	B	

Data Package ID: *IM0806057-1*

ICPMS Metals

Method SW6020A

Laboratory Control Sample

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: IM080610-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06/10/2008
Date Analyzed: 06/12/2008
Prep Method: SW3005A

Prep Batch: IP080610-1
QCBatchID: IP080610-1-4
Run ID: IM080612-1A2
Cleanup: NONE
Basis: N/A
File Name: 12JUN08A

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
7440-36-0	ANTIMONY	0.02	0.0202	0.0003		101	80 - 120%
7440-38-2	ARSENIC	0.04	0.0409	0.002		102	80 - 120%
7440-43-9	CADMIUM	0.02	0.0201	0.0003		100	80 - 120%
7439-92-1	LEAD	0.1	0.103	0.0005		103	80 - 120%
7782-49-2	SELENIUM	0.04	0.0436	0.001		109	80 - 120%
7440-22-4	SILVER	0.02	0.0204	0.0001		102	80 - 120%
7440-28-0	THALLIUM	0.001	0.000995	0.0002		100	80 - 120%
7440-61-1	URANIUM	0.02	0.0214	0.0001		107	80 - 120%

Data Package ID: *IM0806057-1*

Mercury

Method SW7470A
Method Blank

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: HG080616-3MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 16-Jun-08
Date Analyzed: 17-Jun-08

Prep Batch: HG080616-3
QCBatchID: HG080616-3-2
Run ID: HG080617-1A8
Cleanup: NONE
Basis: N/A
File Name: 08061700

Sample Aliquot: 20 g
Final Volume: 20 g
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	IDL	Result Qualifier	EPA Qualifier
7439-97-6	MERCURY	1	0.00002	0.0001	0.000016	B	

Data Package ID: *HG0806057-1*

Mercury

Method SW7470A

Laboratory Control Sample

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: HG080616-3LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06/16/2008
Date Analyzed: 06/17/2008
Prep Method: METHOD

Prep Batch: HG080616-3
QCBatchID: HG080616-3-2
Run ID: HG080617-1A8
Cleanup: NONE
Basis: N/A
File Name: 08061700

Sample Aliquot: 20 g
Final Volume: 20 g
Result Units: MG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7439-97-6	MERCURY	0.001	0.001	0.0001		100	80 - 120%

Data Package ID: *HG0806057-1*

NCR #: 10697

PARAGON ANALYTICS

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

CONTROLLED

NON-CONFORMANCE REPORT

Non-Conformance

Initiated By: Roy French on 6/11/2008

Event Type: Client Criteria Not Met -- MB

Event Explanation: The clients Ba RL is 2ppb. After calibration, the blanks for Ba were reading -3ppb for Ba. All the CCB and MB failed. There was only one sample (0806057-2) that needs the clients low RL, and it had Ba at 31.2ppb.

Action To Prevent Reccurence: Noted

Corrective Action

Corrective Action: Document in Narrative

Department Manager Approval: Roy French

Approval Date: 6/13/2008

Corrective Action Comments: This sample meets the 5x rule.

Workorders Affected

Workorder -- Procedure		Approved By	Approval Date
0806057 -- SW6010	No client contact information.	Lance R. Steere	6/13/2008

There Are No Associated Batches

NCR Approval

Project Manager Approval: LRS on 6/13/2008

Department Manager Approval: Roy French on 6/13/2008

QA Manager Approval: Deb Scheib on 6/15/2008

Paragon Analytics

INORGANICS CASE NARRATIVE

NMED DOE Oversight Bureau

06.04.08-570(HWB PE-15)

Order Number - 0806057

1. This report consists of 2 water samples.
2. The samples were received cool and intact on 06/06/08.
3. The samples had been correctly preserved for the requested analyses.
4. The samples were prepared for analysis based on Methods for the Chemical Analysis of Waters and Wastes (MCAWW), May 1994 procedures and Environmental Monitoring Systems Laboratory (EMSL) Rev 2.1 procedures.
5. The samples were analyzed following MCAWW and EMSL procedures for the following methods:

Analyte	Method	SOP #
Alkalinity	310.1	1106 Rev 6
Bicarbonate	310.1	1106 Rev 6
Carbonate	310.1	1106 Rev 6
Ammonia as N	350.1	1129 Rev 6
Nitrate/nitrite as N	353.2	1127 Rev 6
Bromide	300.0	1113 Rev 11
Chloride	300.0	1113 Rev 11
Fluoride	300.0	1113 Rev 11
Sulfate	300.0	1113 Rev 11

6. All standards and solutions were used within their recommended shelf life.
7. The samples were prepared and analyzed within the established hold time for each analysis.

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

8. General quality control procedures.
   - A preparation (method) blank and laboratory control sample (LCS) were prepared and analyzed with the samples in each preparation batch. There were not more than 20 samples in each preparation batch.

- The method blank associated with each batch was below the reporting limit for the requested analytes. This indicates that no contaminants were introduced to the samples during preparation and analysis.
- The LCS was within the acceptance limits for each analysis.
- All initial and continuing calibration blanks (ICB/CCB) associated with each analytical batch were below the reporting limit for the requested analytes.
- All initial and continuing calibration verifications (ICV/CCV) associated with each analytical batch were within the acceptance criteria for the requested analytes. This indicates a valid calibration and stable instrument conditions.

9. Matrix specific quality control procedures.

   Per method requirements, matrix QC was performed for each 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.

10. Reduced aliquots were taken of sample for the alkalinity, bicarbonate, and carbonate analysis. Reporting limits were elevated accordingly.

11. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in Paragon Analytics Standard Operating Procedure 939 Revision 3.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, Paragon Analytics 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

6/18/08
Date

Inorganics Final Data Reviewer

6/18/08
Date

Inorganic Data Reporting Qualifiers

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

- Concentration qualifier -- If the analyte was analyzed for but not detected a “U” is entered.

- QC qualifier -- Specified entries and their meanings are as follows:

  N - Spiked sample recovery not within control limits.

  * - Duplicate analysis (relative percent difference) not within control limits.

  Z - Calibration spike recovery not within control limits.

Paragon Analytics

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 0806057
Client Name: NMED DOE Oversight Bureau
Client Project Name:
Client Project Number: 06.04.08-570(HWB PE-15)
Client PO Number: 06-667-55-01754

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
PE-15-6-4-ClO4	0806057-1		WATER	04-Jun-08	12:40
PE-15-6-4-MET	0806057-2		WATER	04-Jun-08	12:40
PE-15-6-4-N	0806057-3		WATER	04-Jun-08	12:40
PE-15-6-4-Anions	0806057-4		WATER	04-Jun-08	12:40

Chain of Custody Record

SHIP TO:

Paragon Analytics
225 Commerce Drive
Fort Collins, CO 80524
(970) 490-1511

MAIL REPORT TO:

Kim Granzow
NMED-DOE Oversight Bureau
134 State Road 4, Suite A
White Rock, New Mexico 87544
kgranzow@lanl.gov

Initials

KG
(505) 672-0447

BILL TO:

Dave Cobrain/Cathy Herrera
New Mexico Environ. Dept. Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, NM 87505-2567
505-476-6055/505-476-6017

08060057

Project Number: 06.04.08-570(HWB PE-15)
(Lab Invoice Use Only)

HWB Cost Code 002731703

	ClO4 (Line Item # 560) $175	Dissolved TAL Metals + U (Line Item #203) $205	Acid Digestion for Metals (Line Item #221) $15	Additional metal Sr (Line Item #211) $15	Additional metal Si (Line Item #211) $15	Additional metal Li (Line Item #211) $15	Nitrate and Nitrite (Line Item #542) $15	Ammonia as N (Line Item #543) $20	Major Anions (Line Item #524) $60	ALK - CO3 & HCO3 (Line Item 531) $15	3 Week turnaround (Line Item 7) .25 x $550 = $137.5	Total cost = $687.50
	F/NA	F/Nitric					F/H2SO4		F/NA			
				201	201	201						
Line Item No.	560	203	221	~~211~~	~~211~~	~~211~~	542	543	524	531	7	
Price per Sample	$175.00	$205.00	$15.00	$15.00	$15.00	$15.00	$15.00	$20.00	$60.00	$15.00	######	
Lab ID Number / **NMED - Sample ID** / **Date** / **Time**												
1 / **PE-15-6-4-ClO4** / **6/4/2008** / **12:40**	X										X	**250 ml nalgene**
2 / **PE-15-6-4-MET** / **6/4/2008** / **12:40**		X	X	X	X	X						**500 ml nalgene**
3 / **PE-15-6-4-N** / **6/4/2008** / **12:40**							X	X				**150 ml nalgene**
4 / **PE-15-6-4-Anions** / **6/4/2008** / **12:40**									X	X		**500 ml nalgene**
Total No. of Samples	1	1	1	1	1	1	1	1	1	1	1	

Date/Time	**Relinquished By:**	
6/5/08@ 1310		Sign 6-5-08
	Michael Dale	Print
	NMED DOE Oversight Bureau	Co./Org.

Date/Time	**Received By:**	
6·6·08 1000		Sign
	Sheri Lafferty	Print
	paragon	Co./Org.

Comments: Lance - three week turnaround - we made line item 7 charge = 25% rather than 50%

QC Level: **Standard**
QC Required: MS MSD Blank
Turn Around Time (TAT): **RUSH**

☐ **Place "X" in box if there are less than 5 total samples for shipping costs.**

5

CONDITION OF SAMPLE UPON RECEIPT FORM **Paragon Analytics**

Client: NMED Workorder No: 0806057

Project Manager: LS Initials: SL Date: 6·6·08

1.	Does this project require any **special handling** in addition to standard Paragon procedures?		YES	**NO**
2.	Are custody **seals** on **shipping containers** intact?	NONE	**YES**	NO
3.	Are Custody seals on **sample containers** intact?	**NONE**	YES	NO
4.	Is there a **COC (Chain-of-Custody) present** or other representative documents?		YES	NO
5.	Are the **COC and bottle labels complete and legible**?		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	NO
7.	Were **airbills / shipping documents** present and/or removable?	DROP OFF	YES	NO
8.	Are all aqueous **samples requiring preservation preserved correctly?** (excluding volatiles)	N/A	YES	NO
9.	Are all aqueous **non-preserved samples pH 4-9**?	N/A	YES	NO
10.	Is there **sufficient sample** for the requested analyses?		YES	NO
11.	Were all samples placed in the **proper containers** for the requested analyses?		YES	NO
12.	Are all samples within **holding times** for the requested analyses?		YES	NO
13.	Were all sample containers received **intact**? (not broken or leaking, etc.)		YES	NO
14.	Are all samples requiring no headspace (VOC, GRO, Rx CN/S, radon), headspace free? **Size of bubble**: ____ < green pea ____ > green pea	N/A	**YES**	NO
15.	Were samples checked for and free from the presence of **residual chlorine?** (Applicable when PM has indicated samples are from a chlorinated water source; note if field preservation with sodium thiosulfate was not observed.)	N/A	YES	NO
16.	Were the samples **shipped on ice**?		YES	NO
17.	Were cooler temperatures measured at 0.1-6.0°C? **IR gun used*:** #2 #4	RAD ONLY	YES	NO

Cooler #:	1							
Temperature (°C):	5.0							
No. of custody seals on cooler:	Ø							
DOT Survey/ Acceptance Information — External µR/hr reading:	13							
Background µR/hr reading:	13							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **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

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: 6/6/08

*IR Gun #2: Oakton, SN 29922500201-0066 *IR Gun #4: Oakton, SN 2372220101-0002

Form 201r20.xls (12/27/07)

FedEx Express **US Airbill**

FedEx Tracking Number 8604 4512 4092

Recipient's Copy

From

Date

Sender's Name Phone

Company

Address Dept./Floor/Suite/Room

City State

Your Internal Billing Reference

To

Recipient's Name Phone

Company

Recipient's Address

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City State ZIP

8604 4512 4092

4a Express Package Service *Packages up to 150 lbs.*

- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service *Packages over 150 lbs.*

- [ ] 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.
- [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation: ** To most locations.

5 Packaging

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [ ] Other

* Declared value limit $500.

6 Special Handling Include FedEx address in Section 3.

- [ ] **SATURDAY Delivery** — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] **HOLD Weekday** at FedEx Location — Not available for FedEx First Overnight.
- [ ] **HOLD Saturday** at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recip. Acct. No. [ ]

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Total Packages	Total Weight	Total Declared Value†	Total Charges
	12	$ .00	Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See back for details.

8 *NEW* Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- [ ] 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.*

520

Rev. Date 8/05 Part #158281 ©1994–2005 FedEx PRINTED IN U.S.A. SRY

BICARBONATE AS CaCO3

Method EPA310.1

Sample Results

Lab Name: Paragon Analytics
Client Name: NMED DOE Oversight Bureau
Client Project ID: 06.04.08-570(HWB PE-15)
Work Order Number: 0806057
Reporting Basis: As Received
Prep Method: NONE
Final Volume: 100 ml
Matrix: WATER
Result Units: mg/l

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
PE-15-6-4-Anions	0806057-4	06/04/2008	06/10/2008	06/10/2008	N/A	1	66	10		50 ml

Comments:

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

Data Package ID: *ak0806057-1*

CARBONATE AS CaCO3

Method EPA310.1

Sample Results

Lab Name: Paragon Analytics
Client Name: NMED DOE Oversight Bureau
Client Project ID: 06.04.08-570(HWB PE-15)
Work Order Number: 0806057
Reporting Basis: As Received
Prep Method: NONE
Final Volume: 100 ml
Matrix: WATER
Result Units: mg/l

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
PE-15-6-4-Anions	0806057-4	06/04/2008	06/10/2008	06/10/2008	N/A	1	10	10	U	50 ml

Comments:

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

Data Package ID: *ak0806057-1*

TOTAL ALKALINITY AS CaCO3

Method EPA310.1

Sample Results

Lab Name: Paragon Analytics
Client Name: NMED DOE Oversight Bureau
Client Project ID: 06.04.08-570(HWB PE-15)
Work Order Number: 0806057
Reporting Basis: As Received
Prep Method: NONE
Final Volume: 100 ml
Matrix: WATER
Result Units: mg/l

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
PE-15-6-4-Anions	0806057-4	06/04/2008	06/10/2008	06/10/2008	N/A	1	66	10		50 ml

Comments:

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

Data Package ID: *ak0806057-1*

AMMONIA AS N

Method EPA350.1

Sample Results

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Field ID: PE-15-6-4-N
Lab ID: 0806057-3

Analysis ReqCode: **543**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 04-Jun-08
Date Extracted: 06-Jun-08
Date Analyzed: 06-Jun-08
Prep Method: NONE

Prep Batch: NH080606-1
QCBatchID: NH080606-1-1
Run ID: nh080606-1a
Cleanup: NONE
Basis: As Received
File Name: 0606NH.FDT

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: mg/l
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7664-41-7	AMMONIA AS N	1	0.25	0.1		

Data Package ID: *nh0806057-1*

Nitrate/Nitrite as N

Method EPA353.2 Revision 2.0

Sample Results

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Field ID: PE-15-6-4-N
Lab ID: 0806057-3

Analysis ReqCode: **542**

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 04-Jun-08
Date Extracted: 11-Jun-08
Date Analyzed: 11-Jun-08
Prep Method: NONE

Prep Batch: NN080611-1
QCBatchID: NN080611-1-1
Run ID: nn080611-1a
Cleanup: NONE
Basis: As Received
File Name: 0611NOX.FDT

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: mg/l
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
1-005	NITRATE/NITRITE AS N	1	0.01	0.01	U	

Data Package ID: *nn0806057-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Field ID: PE-15-6-4-Anions
Lab ID: 0806057-4

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 04-Jun-08
Date Extracted: 06-Jun-08
Date Analyzed: 06-Jun-08
Prep Method: NONE

Prep Batch: IC080606-2
QCBatchID: IC080606-2-2
Run ID: ic080606-1a
Cleanup: NONE
Basis: As Received
File Name: 80606_048.DXD

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: mg/l
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE	1	0.1	0.1	U	
16887-00-6	CHLORIDE	1	0.77	0.2		
24959-67-9	BROMIDE	1	0.2	0.2	U	
14808-79-8	SULFATE	1	4.6	1		

Data Package ID: *ic0806057-1*

BICARBONATE AS CaCO3

Method EPA310.1

Method Blank

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: AK080610-1MB

Sample Matrix: WATER
% Moisture: N/A

Prep Batch: AK080610-1
QCBatchID: AK080610-1-1
Run ID: ak080610-1a
Cleanup: NONE
Basis: N/A

Sample Aliquot: 100 ml
Final Volume: 100 ml
Result Units: mg/l

Lab ID	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag
AK080610-1MB	6/10/2008	06/10/2008	N/A	1	5	5	U

Comments:

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

Data Package ID: *ak0806057-1*

CARBONATE AS CaCO3

Method EPA310.1

Method Blank

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: AK080610-1MB

Sample Matrix: WATER
% Moisture: N/A

Prep Batch: AK080610-1
QCBatchID: AK080610-1-1
Run ID: ak080610-1a
Cleanup: NONE
Basis: N/A

Sample Aliquot: 100 ml
Final Volume: 100 ml
Result Units: mg/l

Lab ID	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag
AK080610-1MB	6/10/2008	06/10/2008	N/A	1	5	5	U

Comments:

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

Data Package ID: *ak0806057-1*

TOTAL ALKALINITY AS CaCO3

Method EPA310.1

Method Blank

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: AK080610-1MB

Sample Matrix: WATER
% Moisture: N/A

Prep Batch: AK080610-1
QCBatchID: AK080610-1-1
Run ID: ak080610-1a
Cleanup: NONE
Basis: N/A

Sample Aliquot: 100 ml
Final Volume: 100 ml
Result Units: mg/l

Lab ID	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag
AK080610-1MB	6/10/2008	06/10/2008	N/A	1	5	5	U

Comments:

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

Data Package ID: *ak0806057-1*

TOTAL ALKALINITY AS CaCO3

Method EPA310.1

Laboratory Control Sample

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: AK080610-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06/10/2008
Date Analyzed: 06/10/2008

Prep Batch: AK080610-1
QCBatchID: AK080610-1-1
Run ID: ak080610-1a
Cleanup: NONE
Basis: N/A

Sample Aliquot: 100 ml
Final Volume: 100 ml
Result Units: mg/l

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
11-43-8	TOTAL ALKALINITY AS CaCO3	100	98.9	5		99	85 - 115

Data Package ID: *ak0806057-1*

AMMONIA AS N

Method EPA350.1

Method Blank

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: NH080606-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06-Jun-08
Date Analyzed: 06-Jun-08
Prep Method: NONE

Prep Batch: NH080606-1
QCBatchID: NH080606-1-1
Run ID: nh080606-1a
Cleanup: NONE
Basis: N/A
File Name: 0606NH.FDT

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: mg/l
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7664-41-7	AMMONIA AS N	1	0.1	0.1	U	

Data Package ID: *nh0806057-1*

Ammonia as N

Method EPA350.1

Laboratory Control Sample

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: NH080606-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06/06/2008
Date Analyzed: 06/06/2008
Prep Method: NONE

Prep Batch: NH080606-1
QCBatchID: NH080606-1-1
Run ID: nh080606-1a
Cleanup: NONE
Basis: N/A
File Name: 0606NH.FDT

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: mg/l
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7664-41-7	AMMONIA AS N	1	0.932	0.1		93	90 - 110%

Data Package ID: *nh0806057-1*

Nitrate/Nitrite as N

Method EPA353.2 Revision 2.0

Method Blank

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: NN080611-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 11-Jun-08
Date Analyzed: 11-Jun-08
Prep Method: NONE

Prep Batch: NN080611-1
QCBatchID: NN080611-1-1
Run ID: nn080611-1a
Cleanup: NONE
Basis: N/A
File Name: 0611NOX.FDT

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: mg/l
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
1-005	NITRATE/NITRITE AS N	1	0.01	0.01	U	

Data Package ID: *nn0806057-1*

Nitrate/Nitrite as N

Method EPA353.2 Revision 2.0

Laboratory Control Sample

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: NN080611-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06/11/2008
Date Analyzed: 06/11/2008
Prep Method: NONE

Prep Batch: NN080611-1
QCBatchID: NN080611-1-1
Run ID: nn080611-1a
Cleanup: NONE
Basis: N/A
File Name: 0611NOX.FDT

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: mg/l
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
1-005	NITRATE/NITRITE AS N	0.5	0.506	0.01		101	90 - 110%

Data Package ID: *nn0806057-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Method Blank

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: IC080606-2MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06-Jun-08
Date Analyzed: 06-Jun-08
Prep Method: NONE

Prep Batch: IC080606-2
QCBatchID: IC080606-2-2
Run ID: ic080606-1a
Cleanup: NONE
Basis: N/A
File Name: 80606_019.DXD

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: mg/l
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE	1	0.1	0.1	U	
16887-00-6	CHLORIDE	1	0.2	0.2	U	
24959-67-9	BROMIDE	1	0.2	0.2	U	
14808-79-8	SULFATE	1	1	1	U	

Data Package ID: *ic0806057-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Laboratory Control Sample

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: IC080606-2LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06/06/2008
Date Analyzed: 06/06/2008
Prep Method: NONE

Prep Batch: IC080606-2
QCBatchID: IC080606-2-2
Run ID: ic080606-1a
Cleanup: NONE
Basis: N/A
File Name: 80606_020.DXD

Sample Aliquot: 5 ml
Final Volume: 5 ml
Result Units: mg/l
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
16984-48-8	FLUORIDE	2.5	2.26	0.1		91	90 - 110%
16887-00-6	CHLORIDE	5	4.76	0.2		95	90 - 110%
24959-67-9	BROMIDE	5	4.75	0.2		95	90 - 110%
14808-79-8	SULFATE	25	23.4	1		93	90 - 110%

Data Package ID: *ic0806057-1*

Paragon Analytics

Perchlorate Case Narrative

NMED DOE Oversight Bureau

06.04.08-570(HWB PE-15)

Order Number - 0806057

1. This report consists of 1 water sample. The sample was received cool and intact by Paragon on 06/06/2008. As prescribed by the method, the aqueous sample contained headspace upon receipt.
2. The sample was prepared and analyzed according to SW-846, 3rd Edition procedures, method SW6850 Revision 0 and PA SOP448R0.
3. The preparation batch included a method blank, laboratory control sample, matrix spike, and sample duplicate. Per method requirements, matrix QC was performed for this 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.
4. The analytical batch included an initial calibration, an initial calibration verification and blank (ICV and ICB), continuing calibration verifications (CCV) and Limit of Detection verifications (LODV). In addition, isotope ratios, relative retention times (RRT) and internal standards for each injection were monitored.
5. All analytical QC were within the acceptance criteria.
6. Sample dilutions were not required for the requested analyses.
7. The sample was prepared and analyzed within the established holding time.
8. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in Paragon Analytics Standard Operating Procedure 939 Revision 3.

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

Mindy Norton
Mindy Norton
Organics Primary Data Reviewer

6.17.08
Date

Linda S. Jeffs
Organics Final Data Reviewer

6.18.08
Date

Paragon Analytics, Inc.
Data Qualifier Flags
Chromatography and Mass Spectrometry

U or ND:	**This flag indicates that the compound was analyzed for but not detected.**
J:	**This flag indicates an estimated value. This flag is used as follows : (1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; (2) when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the reporting limit (RL) but greater than the method detection limit (MDL); (3) when the data indicate the presence of a compound that meets the identification criteria, and the result is less than the RL but greater than the MDL; and (4) the reported value is estimated.**
B:	**This flag is used when the analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user. This flag shall be used for a tentatively identified compound (TIC) as well as for a positively identified target compound.**
E:	**This flag identifies compounds whose concentration exceeds the upper level of the calibration range.**
A:	**This flag indicates that a tentatively identified compound is a suspected aldol-condensation product.**
X:	**This flag indicates that the analyte was diluted below an accurate quantitation level.**
***:**	**This flag indicates that a spike recovery is outside the control criteria.**
+:	**This flag indicates that the relative percent difference (RPD) exceeds the control criteria.**

Paragon Analytics

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 0806057
Client Name: NMED DOE Oversight Bureau
Client Project Name:
Client Project Number: 06.04.08-570(HWB PE-15)
Client PO Number: 06-667-55-01754

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
PE-15-6-4-ClO4	0806057-1		WATER	04-Jun-08	12:40
PE-15-6-4-MET	0806057-2		WATER	04-Jun-08	12:40
PE-15-6-4-N	0806057-3		WATER	04-Jun-08	12:40
PE-15-6-4-Anions	0806057-4		WATER	04-Jun-08	12:40

Chain of Custody Record

SHIP TO:

Paragon Analytics
225 Commerce Drive
Fort Collins, CO 80524
(970) 490-1511

MAIL REPORT TO:

Kim Granzow
NMED-DOE Oversight Bureau
134 State Road 4, Suite A
White Rock, New Mexico 87544
kgranzow@lanl.gov

Initials

KG
(505) 672-0447

BILL TO:

Dave Cobrain/Cathy Herrera
New Mexico Environ. Dept. Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, NM 87505-2567
505-476-6055/505-476-6017

08060057

Project Number: 06.04.08-570(HWB PE-15)
(Lab Invoice Use Only)

HWB Cost Code 002731703

	ClO4 (Line Item # 560) $175	Dissolved TAL Metals + U (Line Item #203) $205	Acid Digestion for Metals (Line Item #221) $15	Additional metal Sr (Line Item #211) $15	Additional metal Si (Line Item #211) $15	Additional metal Li (Line Item #211) $15	Nitrate and Nitrite (Line Item #542) $15	Ammonia as N (Line Item #543) $20	Major Anions (Line Item #524) $60	ALK - CO3 & HCO3 (Line Item 531) $15	3 Week turnaround (Line Item 7) .25 x $550 = $137.5	Total cost = $687.50
	F/NA	F/Nitric					F/H2SO4		F/NA			
				201	201	201						
Line Item No.	560	203	221	~~211~~	~~211~~	~~211~~	542	543	524	531	7	
Price per Sample	$175.00	$205.00	$15.00	$15.00	$15.00	$15.00	$15.00	$20.00	$60.00	$15.00	######	
Lab ID Number / **NMED - Sample ID** / **Date** / **Time**												
1 / **PE-15-6-4-ClO4** / **6/4/2008** / **12:40**	X										X	**250 ml nalgene**
2 / **PE-15-6-4-MET** / **6/4/2008** / **12:40**		X	X	X	X	X						**500 ml nalgene**
3 / **PE-15-6-4-N** / **6/4/2008** / **12:40**							X	X				**150 ml nalgene**
4 / **PE-15-6-4-Anions** / **6/4/2008** / **12:40**									X	X		**500 ml nalgene**
Total No. of Samples	1	1	1	1	1	1	1	1	1	1	1	

Date/Time	**Relinquished By:**	
6/5/08@ 1310		Sign 6-5-08
	Michael Dale	Print
	NMED DOE Oversight Bureau	Co./Org.

Date/Time	**Received By:**	
6·6·08 1000		Sign
	Sheri Lafferty	Print
	paragon	Co./Org.

Comments: Lance - three week turnaround - we made line item 7 charge = 25% rather than 50%

QC Level: **Standard**
QC Required: MS MSD Blank
Turn Around Time (TAT): **RUSH**

☐ **Place "X" in box if there are less than 5 total samples for shipping costs.**

CONDITION OF SAMPLE UPON RECEIPT FORM **Paragon Analytics**

Client: NMED Workorder No: 08060057

Project Manager: LS Initials: SL Date: 6·6·08

1.	Does this project require any **special handling** in addition to standard Paragon procedures?		YES	**NO**
2.	Are custody **seals** on **shipping containers** intact?	**NONE**	**YES**	NO
3.	Are Custody seals on **sample containers** intact?	**NONE**	**YES**	NO
4.	Is there a **COC (Chain-of-Custody) present** or other representative documents?		**YES**	NO
5.	Are the **COC and bottle labels complete and legible**?		**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**	NO
7.	Were **airbills / shipping documents** present and/or removable?	DROP OFF	**YES**	NO
8.	Are all aqueous **samples requiring preservation preserved correctly?** (excluding volatiles)	N/A	**YES**	NO
9.	Are all aqueous **non-preserved samples pH 4-9**?	N/A	**YES**	NO
10.	Is there **sufficient sample** for the requested analyses?		**YES**	NO
11.	Were all samples placed in the **proper containers** for the requested analyses?		**YES**	NO
12.	Are all samples within **holding times** for the requested analyses?		**YES**	NO
13.	Were all sample containers received **intact**? (not broken or leaking, etc.)		**YES**	NO
14.	Are all samples requiring no headspace (VOC, GRO, Rx CN/S, radon), headspace free? **Size of bubble**: ____ < green pea ____ > green pea	N/A	**YES**	NO
15.	Were samples checked for and free from the presence of **residual chlorine?** (Applicable when PM has indicated samples are from a chlorinated water source; note if field preservation with sodium thiosulfate was not observed.)	N/A	YES	NO
16.	Were the samples **shipped on ice**?		**YES**	NO
17.	Were cooler temperatures measured at 0.1-6.0°C? **IR gun used*:** #2 #4	RAD ONLY	**YES**	NO

Cooler #:	1							
Temperature (°C):	5.0							
No. of custody seals on cooler:	Ø							
DOT Survey/ Acceptance Information — External µR/hr reading:	13							
Background µR/hr reading:	13							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **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

If applicable, was the client contacted? **YES / NO / NA** Contact: _____ Date/Time: _____

Project Manager Signature / Date: 6/6/08

*IR Gun #2: Oakton, SN 29922500201-0066 *IR Gun #4: Oakton, SN 2372220101-0002

Form 201r20.xls (12/27/07)

FedEx Express **US Airbill**

FedEx Tracking Number 8604 4512 4092

Recipient's Copy

From

Date

Sender's Name Phone

Company

Address Dept./Floor/Suite/Room

City State

Your Internal Billing Reference

To

Recipient's Name Phone

Company

Recipient's Address

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City State ZIP

8604 4512 4092

4a Express Package Service *Packages up to 150 lbs.*

- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service *Packages over 150 lbs.*

- [ ] 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.
- [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation: ** To most locations.

5 Packaging

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [ ] Other

* Declared value limit $500.

6 Special Handling Include FedEx addresses in Section 3.

- [ ] **SATURDAY Delivery** — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] **HOLD Weekday** at FedEx Location — Not available for FedEx First Overnight.
- [ ] **HOLD Saturday** at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- [ ] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recip. Acct. No. [ ]

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Total Packages	Total Weight	Total Declared Value†	Total Charges
	12	$ .00	Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See back for details.

8 *NEW* Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- [ ] 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.*

520

Rev. Date 8/05•Part #158281•©1994–2005 FedEx•PRINTED IN U.S.A. SRY

Perchlorates by LCMS/MS

Method SW6850

Method Blank

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: LM080609-1MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 09-Jun-08
Date Analyzed: 09-Jun-08
Prep Method: METHOD

Prep Batch: LM080609-1
QCBatchID: LM080609-1-1
Run ID: LM080609-1A
Cleanup: NONE
Basis: N/A
File Name: PERC060908

Sample Aliquot: 2 ml
Final Volume: 2 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
14797-73-0	PERCHLORATE	1	0.05	0.05	U	

Data Package ID: *LM0806057-1*

PERCHLORATE

Method SW6850

Sample Results

Lab Name: Paragon Analytics
Client Name: NMED DOE Oversight Bureau
Client Project ID: 06.04.08-570(HWB PE-15)
Work Order Number: 0806057
Reporting Basis: As Received
Prep Method: METHOD
Final Volume: 2 ml
Matrix: WATER
Result Units: UG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
PE-15-6-4-ClO4	0806057-1	06/04/2008	06/09/2008	06/09/2008	N/A	1	0.077	0.05		2 ml

Comments:

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

Data Package ID: *LM0806057-1*

Perchlorates by LCMS/MS

Method SW6850

Laboratory Control Sample

Lab Name: **Paragon Analytics**
Work Order Number: 0806057
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 06.04.08-570(HWB PE-15)

Lab ID: LM080609-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06/09/2008
Date Analyzed: 06/09/2008
Prep Method: METHOD

Prep Batch: LM080609-1
QCBatchID: LM080609-1-1
Run ID: LM080609-1A
Cleanup: NONE
Basis: N/A
File Name: PERC060908

Sample Aliquot: 2 ml
Final Volume: 2 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
14797-73-0	PERCHLORATE	1	1.03	0.05		103	80 - 120%

Data Package ID: *LM0806057-1*