TA 36

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

APR 1 2 2007
DOE OVERSIGHT BUREAU

April 10, 2007

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

Re: Paragon Workorder: 07-03-027
Client Project Name: None Submitted
Client Project Number: 02.26.07-501 (HWB R-23i)

Dear Ms. Granzow:

Five water samples were received from NMED DOE Oversight Bureau on March 2, 2007. The samples were scheduled for GC/MS Volatiles (pages 1-25) analysis.

The results for this analysis are contained in the enclosed report. Please note the Tritium analysis was contracted to The Tritium Laboratory at University of Miami and is included with this package.

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

12724

Paragon Analytics

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 0703027
Client Name: NMED DOE Oversight Bureau
Client Project Name:
Client Project Number: 02.26.07-501 (HWB R-23i)
Client PO Number: 06-667-55-01754

Client Sample	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
R-23i-Screen 3-2-26-07 V	0703027-1		WATER	26-Feb-07	14:10
R-23i-Screen 3a-2-26-07 V	0703027-2		WATER	26-Feb-07	17:00
R-23i-Screen 1-2-28-07 V	0703027-3		WATER	28-Feb-07	14:00
R-23i-Screen 3-2-26-07 Tri	0703027-4		WATER	26-Feb-07	14:10
R-23i-Screen 1-2-28-07 Tri	0703027-5		WATER	28-Feb-07	14:00

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: 0703027

Dave Cobrain/Bryon Pippin
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

Project Number:
(Lab Invoice Use Only) 02.26.07-501 (HWB R-23i)

				VOCs	Tritium										
			Line Item No.	101	370										
				NF/HCl	NF/None										
			Price per Sample	$100.00	$200										
Lab ID Number		**NMED - Sample ID**	**Date**	**Time**											
1	3	R-23i-Screen 3-2-26-07 VOAs	2/26/2007	14:10	X										
2	1	R-23i-Screen 3a-2-26-07 VOAs	2/26/2007	17:00	X										
3	2	R-23i-Screen 1-2-28-07 VOAs	2/28/2007	14:00	X										
4	3	R-23i-Screen 3-2-26-07 Tritium	2/26/2007	14:10		X									
5	2	R-23i-Screen 1-2-28-07 Tritium	2/28/2007	14:00		X									
			Total No. of Samples	3	2										

Date/Time	**Relinquished By:**	
	Hai Shen	Sign
3/1/07 11:00	Hai Shen	Print
	NMED-HWB	Co./Org.
Date/Time	**Received By:**	
3.2.07 0920	Sheri Lafferty	Sign
	Sheri Lafferty	Print
	paragon	Co./Org.

Comments: Lance - Please send the invoice to HWB c/o Dave Cobrain/Bryon Pippin . Thanks. Kim

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

[X] **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: 0703027

Project Manager: LS Initials: SL Date: 3·2·07

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 SL 3·2·07	(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):	4.6								
No. of custody seals on cooler:	0								
DOT Survey/ Acceptance Information — External µR/hr reading:	16								
Background µR/hr reading:	16								

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.

• Sample 1 bottle 2 (id on bottle does not match id on coc.
ID on bottle : R-23i Screen 3-3-26-07
↓ ID on coc : R-23i Screen 3-2-26-07 times + dates match

* samples for tritium were received ~~with~~ SL 3.2.07 in 500 ml poly bottles
OK

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

Project Manager Signature / Date: 3/2/07

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

Form 201r19.xls (1/13/06)

FedEx Express — US Airbill

FedEx Tracking Number 8556 0088 8575

Recipient's Copy

From

Date 3-1-07 [redacted]

Sender's Name Chris Rees Phone 314 746-6562

Company Booz Allen & Hamilton

Address 901 Main St Ste 6500 Dept./Floor/Suite/Room

City Dallas State TX ZIP 75202-8298

Your Internal Billing Reference B0907501433626000006

To

Recipient's Name Lance Steere Phone 970 490-1511

Company Paragon Analytics

Recipient's Address

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

Address 225 Commerce Drive

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

City Ft. Collins State CO ZIP 80524

8556 0088 8575

4a Express Package Service To add SATURDAY Delivery, see Section 6. *Packages up to 150 lbs.* *To most locations.

- [ ] FedEx Priority Overnight — Next business morning.*
- [x] FedEx Standard Overnight — Next business afternoon.*
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.*
- [ ] FedEx 2Day — Second business day.*
- [ ] FedEx Express Saver — Third business day.*

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

4b Express Freight Service To add SATURDAY Delivery, see Section 6. *Packages over 150 lbs.* ** To most locations.

- [ ] FedEx 1Day Freight* — Next business day.**
- [ ] FedEx 2Day Freight — Second business day.**
- [ ] FedEx 3Day Freight — Third business day.**

* Call for Confirmation:

5 Packaging * Declared value limit $500.

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

6 Special Handling Include FedEx address in Section 3.

- [ ] **SATURDAY Delivery** — Available ONLY for FedEx Priority Overnight, FedEx 2Day, FedEx 1Day Freight, and FedEx 2Day Freight to select ZIP codes.
- [ ] **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.

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

Obtain Recip. Acct. No. [ ]

[redacted] 26

Total Packages	Total Weight	Total Declared Value†	Total Charges
1	59	$ .00	

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

Credit Card Auth.

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

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Paragon Analytics

GC/MS Volatiles Case Narrative

NMED DOE Oversight Bureau

02.26.07-501 (HWB R-23i)

Order Number - 0703027

1. This report consists of 3 water samples. The samples were received cool and intact by Paragon on 03/02/2007. The aqueous samples were free of headspace prior to analysis.

2. These samples were prepared according to SW-846, 3rd Edition procedures. Specifically, the water samples were prepared by purging 10 mls using purge and trap procedures based on Method 5030C.

3. The samples were analyzed using GC/MS with an RTX-624 capillary column according to Paragon Standard Operating Procedure 525 Revision 12 based on SW-846 Method 8260B. All positive results were quantitated against the initial calibration standards using the internal standard technique. The identification of positive results was achieved by a comparison of the retention time and mass spectrum of the sample versus the daily calibration standard.

4. All initial calibration criteria for SPCC's and CCC's were met. If average response factors were used in the initial calibration, %RSD was $\leq$15%. If linear or higher order regression calibrations were used in the initial calibration, the coefficient of determination (r^2) $\geq$0.99.

5. All initial calibrations are verified by comparing a second source standard calibration verification (ICV) against the calibration curve. All compounds in the second source verification had a %D of less than 25%.

6. All criteria for SPCC's and CCC's were met in daily (continuing) calibration verifications (CCV).

7. Methylene chloride, acetone and 2-butanone are common laboratory contaminants. In order to minimize the levels of these compounds detected in the gc/ms analysis, Paragon has designated its volatile laboratory as a restricted access area. In addition,

the laboratory has been equipped with a dedicated, air intake and exhaust system that operates under positive pressure in order to minimize cross contamination of these compounds. Due to fluctuations in ambient laboratory conditions, reported sample values for common laboratory contaminants may be due to lab contamination even if the compound in question is not detected in the associated method blank.

The method blank VL070306-3MB had methylene chloride detected below the reporting limit. This compound was not detected in the associated samples.

8. All laboratory control spike and laboratory control spike duplicate recoveries and RPDs were within the acceptance criteria with the following exceptions:

Spiked Compound	QC Sample	Direction
Bromoform	VL070306-3LCS	Low

Because of the large number of target analytes reported by this method, the lab allows for sporadic marginal exceedances. No further action was taken.

9. Matrix QC was performed for this analysis. Since a sample from this client was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

10. The samples were analyzed within the established holding time.

11. All surrogate recoveries were within acceptance criteria.

12. All internal standard recoveries were within acceptance criteria.

13. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in Paragon Analytics Standard Operating Procedure 939 Revision 2.

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.

Steven J. White — 3/8/07

Steven White
GC/MS Analyst
Date

Reviewer's Initials — 3/8/07

Date

Paragon Analytics
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 retention time data indicate the presence of a compound that meets the GC 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 equal to or outside the control criteria used.**
+:	**This flag indicates that the relative percent difference (RPD) equals or exceeds the control criteria.**

Paragon Analytics

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 0703027
Client Name: NMED DOE Oversight Bureau
Client Project Name:
Client Project Number: 02.26.07-501 (HWB R-23i)
Client PO Number: 06-667-55-01754

Client Sample	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
R-23i-Screen 3-2-26-07 V	0703027-1		WATER	26-Feb-07	14:10
R-23i-Screen 3a-2-26-07 V	0703027-2		WATER	26-Feb-07	17:00
R-23i-Screen 1-2-28-07 V	0703027-3		WATER	28-Feb-07	14:00
R-23i-Screen 3-2-26-07 Tri	0703027-4		WATER	26-Feb-07	14:10
R-23i-Screen 1-2-28-07 Tri	0703027-5		WATER	28-Feb-07	14:00

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: 0703027

Dave Cobrain/Bryon Pippin
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

Project Number:
(Lab Invoice Use Only) 02.26.07-501 (HWB R-23i)

				VOCs	Tritium										
			Line Item No.	101	370										
				NF/HCl	NF/None										
			Price per Sample	$100.00	$200										
Lab ID Number		**NMED - Sample ID**	**Date**	**Time**											
1	3	**R-23i-Screen 3-2-26-07 VOAs**	**2/26/2007**	**14:10**	X										
2	1	**R-23i-Screen 3a-2-26-07 VOAs**	**2/26/2007**	**17:00**	X										
3	2	**R-23i-Screen 1-2-28-07 VOAs**	**2/28/2007**	**14:00**	X										
4	3	**R-23i-Screen 3-2-26-07 Tritium**	**2/26/2007**	**14:10**		X									
5	2	**R-23i-Screen 1-2-28-07 Tritium**	**2/28/2007**	**14:00**		X									
			Total No. of Samples	3	2										

Date/Time	**Relinquished By:**	
	Hai Shen	Sign
3/1/07 11:00	Hai Shen	Print
	NMED-HWB	Co./Org.

Date/Time	**Received By:**	
3.2.07 0920	Sheri Lafferty	Sign
	Sheri Lafferty	Print
	paragon	Co./Org.

Comments: Lance - Please send the invoice to HWB c/o Dave Cobrain/Bryon Pippin . Thanks, Kim

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

[X] **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: 0703027

Project Manager: LS

Initials: SL

Date: 3·2·07

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 SL 3·2·07	(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): 4.6

No. of custody seals on cooler: 0

DOT Survey/ Acceptance Information

External µR/hr reading: 16

Background µR/hr reading: 16

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.

• Sample 1 bottle 2 (id on bottle does not match id on coc.
ID on bottle : R-23i Screen 3-3-26-07
ID on coc : R-23i Screen 3-2-26-07 times + dates match

* Samples for tritium were received ~~with~~ SL 3.2.07 in 500 ml poly bottles OK

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

Project Manager Signature / Date: 3/2/07

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

Form 201r19.xls (1/13/06)

FedEx Express — US Airbill

FedEx Tracking Number 8556 0088 8575

Recipient's Copy

1 From

Date 3-1-07 [redacted]

Sender's Name Chris Rees Phone 314 746-6562

Company Booz Allen & Hamilton

Address 901 Main St Ste 6500 Dept./Floor/Suite/Room

City Dallas State TX ZIP 75202-8298

2 Your Internal Billing Reference B09075014 33626 0000006

3 To

Recipient's Name Lance Steere Phone 770 490-1511

Company Paragon Analytics

Recipient's Address

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

Address 225 Commerce Drive

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

City Ft. Collins State CO ZIP 80524

8556 0088 8575

4a Express Package Service To add SATURDAY Delivery, see Section 5. Packages up to 150 lbs. *No most locations.

- [ ] FedEx Priority Overnight — Next business morning *
- [x] FedEx Standard Overnight — Next business afternoon *
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.*
- [ ] FedEx 2Day — Second business day.*
- [ ] FedEx Express Saver — Third business day.*

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

4b Express Freight Service To add SATURDAY Delivery, see Section 5. Packages over 150 lbs. ** To most locations.

- [ ] FedEx 1Day Freight* — Next business day.**
- [ ] FedEx 2Day Freight — Second business day.**
- [ ] FedEx 3Day Freight — Third business day.**

* Call for Confirmation:

5 Packaging * Declared value limit $500.

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

6 Special Handling Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Available ONLY for FedEx Priority Overnight, FedEx 2Day, FedEx 1Day Freight, and FedEx 2Day Freight to select ZIP codes
- [ ] 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.

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

Obtain Recip. Acct. No. [ ]

[redacted] 26

Total Packages	Total Weight	Total Declared Value†	Total Charges
1	59	$ .00	

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

Credit Card Auth.

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

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GC/MS Volatiles

Method SW8260_25B

Method Blank

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Lab ID: VL070306-3MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06-Mar-07
Date Analyzed: 06-Mar-07
Prep Method: SW5030 Rev C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: N/A

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03386

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
75-71-8	DICHLORODIFLUOROMETHANE	1	1	1	U	
74-87-3	CHLOROMETHANE	1	1	1	U	
75-01-4	VINYL CHLORIDE	1	1	1	U	
74-83-9	BROMOMETHANE	1	1	1	U	
75-00-3	CHLOROETHANE	1	1	1	U	
75-69-4	TRICHLOROFLUOROMETHANE	1	1	1	U	
75-35-4	1,1-DICHLOROETHENE	1	1	1	U	
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROET	1	1	1	U	
67-64-1	ACETONE	1	10	10	U	
74-88-4	IODOMETHANE	1	1	1	U	
75-15-0	CARBON DISULFIDE	1	1	1	U	
75-09-2	METHYLENE CHLORIDE	1	0.66	1	J	
156-60-5	TRANS-1,2-DICHLOROETHENE	1	1	1	U	
1634-04-4	METHYL TERTIARY BUTYL ETHER	1	1	1	U	
75-34-3	1,1-DICHLOROETHANE	1	1	1	U	
108-05-4	VINYL ACETATE	1	2	2	U	
156-59-2	CIS-1,2-DICHLOROETHENE	1	1	1	U	
78-93-3	2-BUTANONE	1	10	10	U	
74-97-5	BROMOCHLOROMETHANE	1	1	1	U	
67-66-3	CHLOROFORM	1	1	1	U	
71-55-6	1,1,1-TRICHLOROETHANE	1	1	1	U	
594-20-7	2,2-DICHLOROPROPANE	1	1	1	U	
56-23-5	CARBON TETRACHLORIDE	1	1	1	U	
563-58-6	1,1-DICHLOROPROPENE	1	1	1	U	
107-06-2	1,2-DICHLOROETHANE	1	1	1	U	
71-43-2	BENZENE	1	1	1	U	
79-01-6	TRICHLOROETHENE	1	1	1	U	

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Method Blank

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Lab ID: VL070306-3MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06-Mar-07
Date Analyzed: 06-Mar-07
Prep Method: SW5030 Rev C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: N/A

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03386

78-87-5	1,2-DICHLOROPROPANE	1	1	1	U	
74-95-3	DIBROMOMETHANE	1	1	1	U	
75-27-4	BROMODICHLOROMETHANE	1	1	1	U	
10061-01-5	CIS-1,3-DICHLOROPROPENE	1	1	1	U	
108-10-1	4-METHYL-2-PENTANONE	1	10	10	U	
108-88-3	TOLUENE	1	1	1	U	
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	1	1	U	
79-00-5	1,1,2-TRICHLOROETHANE	1	1	1	U	
591-78-6	2-HEXANONE	1	10	10	U	
127-18-4	TETRACHLOROETHENE	1	1	1	U	
142-28-9	1,3-DICHLOROPROPANE	1	1	1	U	
124-48-1	DIBROMOCHLOROMETHANE	1	1	1	U	
106-93-4	1,2-DIBROMOETHANE	1	1	1	U	
544-10-5	1-CHLOROHEXANE	1	1	1	U	
108-90-7	CHLOROBENZENE	1	1	1	U	
630-20-6	1,1,1,2-TETRACHLOROETHANE	1	1	1	U	
100-41-4	ETHYLBENZENE	1	1	1	U	
136777-61-2	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	1	1	U	
100-42-5	STYRENE	1	1	1	U	
75-25-2	BROMOFORM	1	1	1	U	
98-82-8	ISOPROPYLBENZENE	1	1	1	U	
96-18-4	1,2,3-TRICHLOROPROPANE	1	1	1	U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	1	1	1	U	
108-86-1	BROMOBENZENE	1	1	1	U	
103-65-1	N-PROPYLBENZENE	1	1	1	U	
95-49-8	2-CHLOROTOLUENE	1	1	1	U	
108-67-8	1,3,5-TRIMETHYLBENZENE	1	1	1	U	
106-43-4	4-CHLOROTOLUENE	1	1	1	U	

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B
Method Blank

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Lab ID: VL070306-3MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 06-Mar-07
Date Analyzed: 06-Mar-07
Prep Method: SW5030 Rev C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: N/A

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03386

98-06-6	TERT-BUTYLBENZENE	1	1	1	U	
95-63-6	1,2,4-TRIMETHYLBENZENE	1	1	1	U	
135-98-8	SEC-BUTYLBENZENE	1	1	1	U	
541-73-1	1,3-DICHLOROBENZENE	1	1	1	U	
99-87-6	P-ISOPROPYLTOLUENE	1	1	1	U	
106-46-7	1,4-DICHLOROBENZENE	1	1	1	U	
104-51-8	N-BUTYLBENZENE	1	1	1	U	
95-50-1	1,2-DICHLOROBENZENE	1	1	1	U	
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	1	2	2	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	1	1	U	
87-68-3	HEXACHLOROBUTADIENE	1	1	1	U	
91-20-3	NAPHTHALENE	1	1	1	U	
87-61-6	1,2,3-TRICHLOROBENZENE	1	1	1	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	9		10	90	78 - 129
1868-53-7	DIBROMOFLUOROMETHANE	9.26		10	93	80 - 124
2037-26-5	TOLUENE-D8	9.27		10	93	81 - 119

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Field ID: R-23i-Screen 3-2-26-07 VO
Lab ID: 0703027-1

Analysis ReqCode: 101

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-Feb-07
Date Extracted: 06-Mar-07
Date Analyzed: 06-Mar-07
Prep Method: SW5030 Rev C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03388

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
75-71-8	DICHLORODIFLUOROMETHANE	1	1	1	U	
74-87-3	CHLOROMETHANE	1	1	1	U	
75-01-4	VINYL CHLORIDE	1	1	1	U	
74-83-9	BROMOMETHANE	1	1	1	U	
75-00-3	CHLOROETHANE	1	1	1	U	
75-69-4	TRICHLOROFLUOROMETHANE	1	1	1	U	
75-35-4	1,1-DICHLOROETHENE	1	1	1	U	
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1	1	1	U	
67-64-1	ACETONE	1	10	10	U	
74-88-4	IODOMETHANE	1	1	1	U	
75-15-0	CARBON DISULFIDE	1	1	1	U	
75-09-2	METHYLENE CHLORIDE	1	1	1	U	
156-60-5	TRANS-1,2-DICHLOROETHENE	1	1	1	U	
1634-04-4	METHYL TERTIARY BUTYL ETHER	1	1	1	U	
75-34-3	1,1-DICHLOROETHANE	1	1	1	U	
108-05-4	VINYL ACETATE	1	2	2	U	
156-59-2	CIS-1,2-DICHLOROETHENE	1	1	1	U	
78-93-3	2-BUTANONE	1	10	10	U	
74-97-5	BROMOCHLOROMETHANE	1	1	1	U	
67-66-3	CHLOROFORM	1	1	1	U	
71-55-6	1,1,1-TRICHLOROETHANE	1	1	1	U	
594-20-7	2,2-DICHLOROPROPANE	1	1	1	U	
56-23-5	CARBON TETRACHLORIDE	1	1	1	U	
563-58-6	1,1-DICHLOROPROPENE	1	1	1	U	
107-06-2	1,2-DICHLOROETHANE	1	1	1	U	
71-43-2	BENZENE	1	1	1	U	
79-01-6	TRICHLOROETHENE	1	1	1	U	

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Field ID: R-23i-Screen 3-2-26-07 VO
Lab ID: 0703027-1

Analysis ReqCode: 101

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-Feb-07
Date Extracted: 06-Mar-07
Date Analyzed: 06-Mar-07
Prep Method: SW5030 Rev C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03388

78-87-5	1,2-DICHLOROPROPANE	1	1	1	U	
74-95-3	DIBROMOMETHANE	1	1	1	U	
75-27-4	BROMODICHLOROMETHANE	1	1	1	U	
10061-01-5	CIS-1,3-DICHLOROPROPENE	1	1	1	U	
108-10-1	4-METHYL-2-PENTANONE	1	10	10	U	
108-88-3	TOLUENE	1	1	1	U	
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	1	1	U	
79-00-5	1,1,2-TRICHLOROETHANE	1	1	1	U	
591-78-6	2-HEXANONE	1	10	10	U	
127-18-4	TETRACHLOROETHENE	1	1	1	U	
142-28-9	1,3-DICHLOROPROPANE	1	1	1	U	
124-48-1	DIBROMOCHLOROMETHANE	1	1	1	U	
106-93-4	1,2-DIBROMOETHANE	1	1	1	U	
544-10-5	1-CHLOROHEXANE	1	1	1	U	
108-90-7	CHLOROBENZENE	1	1	1	U	
630-20-6	1,1,1,2-TETRACHLOROETHANE	1	1	1	U	
100-41-4	ETHYLBENZENE	1	1	1	U	
136777-61-2	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	1	1	U	
100-42-5	STYRENE	1	1	1	U	
75-25-2	BROMOFORM	1	1	1	U	
98-82-8	ISOPROPYLBENZENE	1	1	1	U	
96-18-4	1,2,3-TRICHLOROPROPANE	1	1	1	U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	1	1	1	U	
108-86-1	BROMOBENZENE	1	1	1	U	
103-65-1	N-PROPYLBENZENE	1	1	1	U	
95-49-8	2-CHLOROTOLUENE	1	1	1	U	
108-67-8	1,3,5-TRIMETHYLBENZENE	1	1	1	U	
106-43-4	4-CHLOROTOLUENE	1	1	1	U	

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Field ID: R-23i-Screen 3-2-26-07 VO
Lab ID: 0703027-1

Analysis ReqCode: 101

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-Feb-07
Date Extracted: 06-Mar-07
Date Analyzed: 06-Mar-07
Prep Method: SW5030 Rev C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03388

98-06-6	TERT-BUTYLBENZENE	1	1	1	U	
95-63-6	1,2,4-TRIMETHYLBENZENE	1	1	1	U	
135-98-8	SEC-BUTYLBENZENE	1	1	1	U	
541-73-1	1,3-DICHLOROBENZENE	1	1	1	U	
99-87-6	P-ISOPROPYLTOLUENE	1	1	1	U	
106-46-7	1,4-DICHLOROBENZENE	1	1	1	U	
104-51-8	N-BUTYLBENZENE	1	1	1	U	
95-50-1	1,2-DICHLOROBENZENE	1	1	1	U	
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	1	2	2	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	1	1	U	
87-68-3	HEXACHLOROBUTADIENE	1	1	1	U	
91-20-3	NAPHTHALENE	1	1	1	U	
87-61-6	1,2,3-TRICHLOROBENZENE	1	1	1	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	9.17		10	92	78 - 129
1868-53-7	DIBROMOFLUOROMETHANE	9.38		10	94	80 - 124
2037-26-5	TOLUENE-D8	8.74		10	87	81 - 119

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Field ID: R-23i-Screen 3a-2-26-07 V
Lab ID: 0703027-2

Analysis ReqCode: 101

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-Feb-07
Date Extracted: 06-Mar-07
Date Analyzed: 06-Mar-07
Prep Method: SW5030 Rev C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03390

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
75-71-8	DICHLORODIFLUOROMETHANE	1	1	1	U	
74-87-3	CHLOROMETHANE	1	1	1	U	
75-01-4	VINYL CHLORIDE	1	1	1	U	
74-83-9	BROMOMETHANE	1	1	1	U	
75-00-3	CHLOROETHANE	1	1	1	U	
75-69-4	TRICHLOROFLUOROMETHANE	1	1	1	U	
75-35-4	1,1-DICHLOROETHENE	1	1	1	U	
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1	1	1	U	
67-64-1	ACETONE	1	7.4	10	J	
74-88-4	IODOMETHANE	1	1	1	U	
75-15-0	CARBON DISULFIDE	1	1	1	U	
75-09-2	METHYLENE CHLORIDE	1	1	1	U	
156-60-5	TRANS-1,2-DICHLOROETHENE	1	1	1	U	
1634-04-4	METHYL TERTIARY BUTYL ETHER	1	1	1	U	
75-34-3	1,1-DICHLOROETHANE	1	1	1	U	
108-05-4	VINYL ACETATE	1	2	2	U	
156-59-2	CIS-1,2-DICHLOROETHENE	1	1	1	U	
78-93-3	2-BUTANONE	1	10	10	U	
74-97-5	BROMOCHLOROMETHANE	1	1	1	U	
67-66-3	CHLOROFORM	1	1	1	U	
71-55-6	1,1,1-TRICHLOROETHANE	1	1	1	U	
594-20-7	2,2-DICHLOROPROPANE	1	1	1	U	
56-23-5	CARBON TETRACHLORIDE	1	1	1	U	
563-58-6	1,1-DICHLOROPROPENE	1	1	1	U	
107-06-2	1,2-DICHLOROETHANE	1	1	1	U	
71-43-2	BENZENE	1	1	1	U	
79-01-6	TRICHLOROETHENE	1	1	1	U	

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Field ID: R-23i-Screen 3a-2-26-07 V
Lab ID: 0703027-2

Analysis ReqCode: 101

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-Feb-07
Date Extracted: 06-Mar-07
Date Analyzed: 06-Mar-07
Prep Method: SW5030 Rev C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03390

78-87-5	1,2-DICHLOROPROPANE	1	1	1	U	
74-95-3	DIBROMOMETHANE	1	1	1	U	
75-27-4	BROMODICHLOROMETHANE	1	1	1	U	
10061-01-5	CIS-1,3-DICHLOROPROPENE	1	1	1	U	
108-10-1	4-METHYL-2-PENTANONE	1	10	10	U	
108-88-3	TOLUENE	1	1	1	U	
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	1	1	U	
79-00-5	1,1,2-TRICHLOROETHANE	1	1	1	U	
591-78-6	2-HEXANONE	1	10	10	U	
127-18-4	TETRACHLOROETHENE	1	1	1	U	
142-28-9	1,3-DICHLOROPROPANE	1	1	1	U	
124-48-1	DIBROMOCHLOROMETHANE	1	1	1	U	
106-93-4	1,2-DIBROMOETHANE	1	1	1	U	
544-10-5	1-CHLOROHEXANE	1	1	1	U	
108-90-7	CHLOROBENZENE	1	1	1	U	
630-20-6	1,1,1,2-TETRACHLOROETHANE	1	1	1	U	
100-41-4	ETHYLBENZENE	1	1	1	U	
136777-61-2	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	1	1	U	
100-42-5	STYRENE	1	1	1	U	
75-25-2	BROMOFORM	1	1	1	U	
98-82-8	ISOPROPYLBENZENE	1	1	1	U	
96-18-4	1,2,3-TRICHLOROPROPANE	1	1	1	U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	1	1	1	U	
108-86-1	BROMOBENZENE	1	1	1	U	
103-65-1	N-PROPYLBENZENE	1	1	1	U	
95-49-8	2-CHLOROTOLUENE	1	1	1	U	
108-67-8	1,3,5-TRIMETHYLBENZENE	1	1	1	U	
106-43-4	4-CHLOROTOLUENE	1	1	1	U	

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Field ID: R-23i-Screen 3a-2-26-07 V
Lab ID: 0703027-2

Analysis ReqCode: 101

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 26-Feb-07
Date Extracted: 06-Mar-07
Date Analyzed: 06-Mar-07
Prep Method: SW5030 Rev C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03390

98-06-6	TERT-BUTYLBENZENE	1	1	1	U	
95-63-6	1,2,4-TRIMETHYLBENZENE	1	1	1	U	
135-98-8	SEC-BUTYLBENZENE	1	1	1	U	
541-73-1	1,3-DICHLOROBENZENE	1	1	1	U	
99-87-6	P-ISOPROPYLTOLUENE	1	1	1	U	
106-46-7	1,4-DICHLOROBENZENE	1	1	1	U	
104-51-8	N-BUTYLBENZENE	1	1	1	U	
95-50-1	1,2-DICHLOROBENZENE	1	1	1	U	
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	1	2	2	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	1	1	U	
87-68-3	HEXACHLOROBUTADIENE	1	1	1	U	
91-20-3	NAPHTHALENE	1	1	1	U	
87-61-6	1,2,3-TRICHLOROBENZENE	1	1	1	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	8.86		10	89	78 - 129
1868-53-7	DIBROMOFLUOROMETHANE	9.37		10	94	80 - 124
2037-26-5	TOLUENE-D8	8.63		10	86	81 - 119

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Field ID: R-23i-Screen 1-2-28-07 VO
Lab ID: 0703027-3

Analysis ReqCode: 101

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Feb-07
Date Extracted: 06-Mar-07
Date Analyzed: 06-Mar-07
Prep Method: SW5030 Rev C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03392

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
75-71-8	DICHLORODIFLUOROMETHANE	1	1	1	U	
74-87-3	CHLOROMETHANE	1	1	1	U	
75-01-4	VINYL CHLORIDE	1	1	1	U	
74-83-9	BROMOMETHANE	1	1	1	U	
75-00-3	CHLOROETHANE	1	1	1	U	
75-69-4	TRICHLOROFLUOROMETHANE	1	1	1	U	
75-35-4	1,1-DICHLOROETHENE	1	1	1	U	
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1	1	1	U	
67-64-1	ACETONE	1	10	10	U	
74-88-4	IODOMETHANE	1	1	1	U	
75-15-0	CARBON DISULFIDE	1	1	1	U	
75-09-2	METHYLENE CHLORIDE	1	1	1	U	
156-60-5	TRANS-1,2-DICHLOROETHENE	1	1	1	U	
1634-04-4	METHYL TERTIARY BUTYL ETHER	1	1	1	U	
75-34-3	1,1-DICHLOROETHANE	1	1	1	U	
108-05-4	VINYL ACETATE	1	2	2	U	
156-59-2	CIS-1,2-DICHLOROETHENE	1	1	1	U	
78-93-3	2-BUTANONE	1	10	10	U	
74-97-5	BROMOCHLOROMETHANE	1	1	1	U	
67-66-3	CHLOROFORM	1	1	1	U	
71-55-6	1,1,1-TRICHLOROETHANE	1	1	1	U	
594-20-7	2,2-DICHLOROPROPANE	1	1	1	U	
56-23-5	CARBON TETRACHLORIDE	1	1	1	U	
563-58-6	1,1-DICHLOROPROPENE	1	1	1	U	
107-06-2	1,2-DICHLOROETHANE	1	1	1	U	
71-43-2	BENZENE	1	1	1	U	
79-01-6	TRICHLOROETHENE	1	1	1	U	

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Field ID: R-23i-Screen 1-2-28-07 VO
Lab ID: 0703027-3

Analysis ReqCode: 101

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Feb-07
Date Extracted: 06-Mar-07
Date Analyzed: 06-Mar-07
Prep Method: SW5030 Rev C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03392

78-87-5	1,2-DICHLOROPROPANE	1	1	1	U	
74-95-3	DIBROMOMETHANE	1	1	1	U	
75-27-4	BROMODICHLOROMETHANE	1	1	1	U	
10061-01-5	CIS-1,3-DICHLOROPROPENE	1	1	1	U	
108-10-1	4-METHYL-2-PENTANONE	1	10	10	U	
108-88-3	TOLUENE	1	1	1	U	
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	1	1	U	
79-00-5	1,1,2-TRICHLOROETHANE	1	1	1	U	
591-78-6	2-HEXANONE	1	10	10	U	
127-18-4	TETRACHLOROETHENE	1	1	1	U	
142-28-9	1,3-DICHLOROPROPANE	1	1	1	U	
124-48-1	DIBROMOCHLOROMETHANE	1	1	1	U	
106-93-4	1,2-DIBROMOETHANE	1	1	1	U	
544-10-5	1-CHLOROHEXANE	1	1	1	U	
108-90-7	CHLOROBENZENE	1	1	1	U	
630-20-6	1,1,1,2-TETRACHLOROETHANE	1	1	1	U	
100-41-4	ETHYLBENZENE	1	1	1	U	
136777-61-2	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	1	1	U	
100-42-5	STYRENE	1	1	1	U	
75-25-2	BROMOFORM	1	1	1	U	
98-82-8	ISOPROPYLBENZENE	1	1	1	U	
96-18-4	1,2,3-TRICHLOROPROPANE	1	1	1	U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	1	1	1	U	
108-86-1	BROMOBENZENE	1	1	1	U	
103-65-1	N-PROPYLBENZENE	1	1	1	U	
95-49-8	2-CHLOROTOLUENE	1	1	1	U	
108-67-8	1,3,5-TRIMETHYLBENZENE	1	1	1	U	
106-43-4	4-CHLOROTOLUENE	1	1	1	U	

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Field ID: R-23i-Screen 1-2-28-07 VO
Lab ID: 0703027-3

Analysis ReqCode: 101

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 28-Feb-07
Date Extracted: 06-Mar-07
Date Analyzed: 06-Mar-07
Prep Method: SW5030 Rev C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03392

98-06-6	TERT-BUTYLBENZENE	1	1	1	U	
95-63-6	1,2,4-TRIMETHYLBENZENE	1	1	1	U	
135-98-8	SEC-BUTYLBENZENE	1	1	1	U	
541-73-1	1,3-DICHLOROBENZENE	1	1	1	U	
99-87-6	P-ISOPROPYLTOLUENE	1	1	1	U	
106-46-7	1,4-DICHLOROBENZENE	1	1	1	U	
104-51-8	N-BUTYLBENZENE	1	1	1	U	
95-50-1	1,2-DICHLOROBENZENE	1	1	1	U	
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	1	2	2	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	1	1	U	
87-68-3	HEXACHLOROBUTADIENE	1	1	1	U	
91-20-3	NAPHTHALENE	1	1	1	U	
87-61-6	1,2,3-TRICHLOROBENZENE	1	1	1	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	9.03		10	90	78 - 129
1868-53-7	DIBROMOFLUOROMETHANE	9.55		10	95	80 - 124
2037-26-5	TOLUENE-D8	8.82		10	88	81 - 119

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Lab ID: VL070306-3LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/06/2007
Date Analyzed: 03/06/2007
Prep Method: SW5030C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: N/A

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03383

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
75-71-8	DICHLORODIFLUOROMETHANE	15	17.8	1		119	38 - 131%
74-87-3	CHLOROMETHANE	15	16.9	1		113	62 - 141%
75-01-4	VINYL CHLORIDE	15	17.3	1		115	77 - 124%
74-83-9	BROMOMETHANE	15	16.5	1		110	76 - 133%
75-00-3	CHLOROETHANE	15	17.1	1		114	81 - 130%
75-69-4	TRICHLOROFLUOROMETHANE	15	17.9	1		119	84 - 146%
75-35-4	1,1-DICHLOROETHENE	15	18.5	1		124	75 - 126%
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	15	17.9	1		119	71 - 144%
67-64-1	ACETONE	60	66.2	10		110	50 - 150%
74-88-4	IODOMETHANE	15	16.9	1		113	76 - 116%
75-15-0	CARBON DISULFIDE	15	13.4	1		89	68 - 129%
75-09-2	METHYLENE CHLORIDE	15	16.3	1		109	22 - 146%
156-60-5	TRANS-1,2-DICHLOROETHENE	15	17.7	1		118	76 - 135%
1634-04-4	METHYL TERTIARY BUTYL ETHER	15	15.5	1		103	75 - 125%
75-34-3	1,1-DICHLOROETHANE	15	17	1		113	77 - 131%
108-05-4	VINYL ACETATE	15	16.6	2		111	56 - 151%
156-59-2	CIS-1,2-DICHLOROETHENE	15	16.4	1		109	81 - 121%
78-93-3	2-BUTANONE	60	62.5	10		104	50 - 150%
74-97-5	BROMOCHLOROMETHANE	15	15.7	1		105	85 - 126%
67-66-3	CHLOROFORM	15	16.9	1		113	84 - 125%
71-55-6	1,1,1-TRICHLOROETHANE	15	17.7	1		118	82 - 129%
594-20-7	2,2-DICHLOROPROPANE	15	17.3	1		115	79 - 130%
56-23-5	CARBON TETRACHLORIDE	15	18.8	1		126	83 - 135%
563-58-6	1,1-DICHLOROPROPENE	15	18.1	1		121	85 - 127%
107-06-2	1,2-DICHLOROETHANE	15	16.2	1		108	84 - 126%
71-43-2	BENZENE	15	16.7	1		111	82 - 122%

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Lab ID: VL070306-3LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/06/2007
Date Analyzed: 03/06/2007
Prep Method: SW5030C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: N/A

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03383

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
79-01-6	TRICHLOROETHENE	15	16.9	1		113	82 - 121%
78-87-5	1,2-DICHLOROPROPANE	15	15.4	1		103	81 - 121%
74-95-3	DIBROMOMETHANE	15	15.3	1		102	81 - 125%
75-27-4	BROMODICHLOROMETHANE	15	16	1		107	82 - 120%
10061-01-5	CIS-1,3-DICHLOROPROPENE	15	14	1		93	79 - 120%
108-10-1	4-METHYL-2-PENTANONE	60	59.9	10		100	50 - 150%
108-88-3	TOLUENE	15	16.4	1		109	83 - 121%
10061-02-6	TRANS-1,3-DICHLOROPROPENE	15	13.2	1		88	78 - 113%
79-00-5	1,1,2-TRICHLOROETHANE	15	14.3	1		95	82 - 122%
591-78-6	2-HEXANONE	60	57.7	10		96	50 - 150%
127-18-4	TETRACHLOROETHENE	15	16.8	1		112	79 - 136%
142-28-9	1,3-DICHLOROPROPANE	15	14.9	1		100	80 - 126%
124-48-1	DIBROMOCHLOROMETHANE	15	15.7	1		105	80 - 123%
106-93-4	1,2-DIBROMOETHANE	15	15	1		100	85 - 124%
544-10-5	1-CHLOROHEXANE	15	17.3	1		115	77 - 135%
108-90-7	CHLOROBENZENE	15	16.1	1		107	82 - 121%
630-20-6	1,1,1,2-TETRACHLOROETHANE	15	15.8	1		105	85 - 128%
100-41-4	ETHYLBENZENE	15	17	1		113	83 - 126%
136777-61-2	M+P-XYLENE	30	32.3	1		108	82 - 129%
95-47-6	O-XYLENE	15	16.2	1		108	87 - 132%
100-42-5	STYRENE	15	16.6	1		111	82 - 123%
75-25-2	BROMOFORM	15	11.5	1	*	77	79 - 118%
98-82-8	ISOPROPYLBENZENE	15	16.1	1		107	75 - 132%
96-18-4	1,2,3-TRICHLOROPROPANE	15	12.9	1		86	77 - 128%
79-34-5	1,1,2,2-TETRACHLOROETHANE	15	14.4	1		96	74 - 130%
108-86-1	BROMOBENZENE	15	15.5	1		104	78 - 124%
103-65-1	N-PROPYLBENZENE	15	16.1	1		107	75 - 134%

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Lab ID: VL070306-3LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/06/2007
Date Analyzed: 03/06/2007
Prep Method: SW5030C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: N/A

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03383

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
95-49-8	2-CHLOROTOLUENE	15	16.2	1		108	77 - 128%
108-67-8	1,3,5-TRIMETHYLBENZENE	15	16.6	1		111	77 - 131%
106-43-4	4-CHLOROTOLUENE	15	15.3	1		102	79 - 128%
98-06-6	TERT-BUTYLBENZENE	15	16.2	1		108	76 - 134%
95-63-6	1,2,4-TRIMETHYLBENZENE	15	17.2	1		114	80 - 138%
135-98-8	SEC-BUTYLBENZENE	15	16.2	1		108	73 - 135%
541-73-1	1,3-DICHLOROBENZENE	15	15.6	1		104	79 - 126%
99-87-6	P-ISOPROPYLTOLUENE	15	16.1	1		107	72 - 132%
106-46-7	1,4-DICHLOROBENZENE	15	15.6	1		104	81 - 125%
104-51-8	N-BUTYLBENZENE	15	17.2	1		115	77 - 141%
95-50-1	1,2-DICHLOROBENZENE	15	15.5	1		104	82 - 128%
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	15	14.6	2		97	64 - 134%
120-82-1	1,2,4-TRICHLOROBENZENE	15	17	1		114	80 - 128%
87-68-3	HEXACHLOROBUTADIENE	15	16.3	1		109	70 - 136%
91-20-3	NAPHTHALENE	15	16.5	1		110	78 - 125%
87-61-6	1,2,3-TRICHLOROBENZENE	15	16.9	1		113	79 - 131%

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Lab ID: VL070306-3LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/06/2007
Date Analyzed: 03/06/2007
Prep Method: SW5030C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: N/A

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03384

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
75-71-8	DICHLORODIFLUOROMETHANE	15	16.6	1		111	20	7
74-87-3	CHLOROMETHANE	15	16.3	1		108	20	4
75-01-4	VINYL CHLORIDE	15	16.7	1		111	20	4
74-83-9	BROMOMETHANE	15	15.9	1		106	20	4
75-00-3	CHLOROETHANE	15	17	1		113	20	1
75-69-4	TRICHLOROFLUOROMETHANE	15	17.2	1		115	20	4
75-35-4	1,1-DICHLOROETHENE	15	17.8	1		118	20	4
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	15	17.2	1		114	20	4
67-64-1	ACETONE	60	67.9	10		113	30	3
74-88-4	IODOMETHANE	15	16.7	1		112	20	1
75-15-0	CARBON DISULFIDE	15	13.2	1		88	20	2
75-09-2	METHYLENE CHLORIDE	15	16.5	1		110	20	1
156-60-5	TRANS-1,2-DICHLOROETHENE	15	17.8	1		118	20	0
1634-04-4	METHYL TERTIARY BUTYL ETHER	15	16.3	1		109	20	5
75-34-3	1,1-DICHLOROETHANE	15	16.8	1		112	20	1
108-05-4	VINYL ACETATE	15	17.1	2		114	20	3
156-59-2	CIS-1,2-DICHLOROETHENE	15	16.2	1		108	20	2
78-93-3	2-BUTANONE	60	69.5	10		116	30	11
74-97-5	BROMOCHLOROMETHANE	15	16.8	1		112	20	7
67-66-3	CHLOROFORM	15	16.7	1		111	20	1
71-55-6	1,1,1-TRICHLOROETHANE	15	17.1	1		114	20	3
594-20-7	2,2-DICHLOROPROPANE	15	17.1	1		114	20	1
56-23-5	CARBON TETRACHLORIDE	15	17.9	1		119	20	5
563-58-6	1,1-DICHLOROPROPENE	15	17.2	1		115	20	5
107-06-2	1,2-DICHLOROETHANE	15	15.8	1		105	20	2
71-43-2	BENZENE	15	16.1	1		108	20	3
79-01-6	TRICHLOROETHENE	15	16.8	1		112	20	1

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Lab ID: VL070306-3LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/06/2007
Date Analyzed: 03/06/2007
Prep Method: SW5030C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: N/A

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03384

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
78-87-5	1,2-DICHLOROPROPANE	15	15.4	1		102	20	0
74-95-3	DIBROMOMETHANE	15	15.8	1		105	20	3
75-27-4	BROMODICHLOROMETHANE	15	15.9	1		106	20	1
10061-01-5	CIS-1,3-DICHLOROPROPENE	15	14.2	1		94	20	1
108-10-1	4-METHYL-2-PENTANONE	60	63.3	10		106	30	6
108-88-3	TOLUENE	15	16.4	1		109	20	0
10061-02-6	TRANS-1,3-DICHLOROPROPENE	15	13.9	1		93	20	6
79-00-5	1,1,2-TRICHLOROETHANE	15	15.1	1		101	20	6
591-78-6	2-HEXANONE	60	60.1	10		100	30	4
127-18-4	TETRACHLOROETHENE	15	16.3	1		109	20	3
142-28-9	1,3-DICHLOROPROPANE	15	15.7	1		105	20	5
124-48-1	DIBROMOCHLOROMETHANE	15	15.9	1		106	20	1
106-93-4	1,2-DIBROMOETHANE	15	15.3	1		102	20	2
544-10-5	1-CHLOROHEXANE	15	16.4	1		109	20	5
108-90-7	CHLOROBENZENE	15	15.8	1		106	20	2
630-20-6	1,1,1,2-TETRACHLOROETHANE	15	16.1	1		107	20	2
100-41-4	ETHYLBENZENE	15	16.9	1		113	20	0
136777-61-2	M+P-XYLENE	30	31.5	1		105	20	3
95-47-6	O-XYLENE	15	16	1		107	20	1
100-42-5	STYRENE	15	16.6	1		111	20	0
75-25-2	BROMOFORM	15	12	1		80	20	5
98-82-8	ISOPROPYLBENZENE	15	15.9	1		106	20	2
96-18-4	1,2,3-TRICHLOROPROPANE	15	13	1		87	20	1
79-34-5	1,1,2,2-TETRACHLOROETHANE	15	15.2	1		102	20	6
108-86-1	BROMOBENZENE	15	15.2	1		101	20	2
103-65-1	N-PROPYLBENZENE	15	15.4	1		102	20	5
95-49-8	2-CHLOROTOLUENE	15	15.8	1		106	20	2

Data Package ID: *VL0703027-1*

GC/MS Volatiles

Method SW8260_25B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: Paragon Analytics
Work Order Number: 0703027
Client Name: NMED DOE Oversight Bureau
ClientProject ID: 02.26.07-501 (HWB R-23i)

Lab ID: VL070306-3LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/06/2007
Date Analyzed: 03/06/2007
Prep Method: SW5030C

Prep Batch: VL070306-3
QCBatchID: VL070306-3-1
Run ID: VL070306-3A
Cleanup: NONE
Basis: N/A

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: ug/l
Clean DF: 1
File Name: C03384

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
108-67-8	1,3,5-TRIMETHYLBENZENE	15	16.2	1		108	20	3
106-43-4	4-CHLOROTOLUENE	15	15.5	1		104	20	2
98-06-6	TERT-BUTYLBENZENE	15	16.2	1		108	20	0
95-63-6	1,2,4-TRIMETHYLBENZENE	15	16.6	1		111	20	3
135-98-8	SEC-BUTYLBENZENE	15	16.3	1		109	20	1
541-73-1	1,3-DICHLOROBENZENE	15	15.4	1		102	20	2
99-87-6	P-ISOPROPYLTOLUENE	15	15.9	1		106	20	1
106-46-7	1,4-DICHLOROBENZENE	15	15.1	1		101	20	3
104-51-8	N-BUTYLBENZENE	15	16.9	1		113	20	2
95-50-1	1,2-DICHLOROBENZENE	15	15.7	1		105	20	1
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	15	14.5	2		97	20	0
120-82-1	1,2,4-TRICHLOROBENZENE	15	16.7	1		111	20	2
87-68-3	HEXACHLOROBUTADIENE	15	15.2	1		101	20	7
91-20-3	NAPHTHALENE	15	17.3	1		115	20	5
87-61-6	1,2,3-TRICHLOROBENZENE	15	17.2	1		115	20	2

Surrogate Recovery LCS/LCSD

CASNO	Target Analyte	Spike Added	LCS % Rec.	LCS Flag	LCSD % Rec.	LCSD Flag	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	10	90		90		78 - 129
1868-53-7	DIBROMOFLUOROMETHANE	10	92		93		80 - 124
2037-26-5	TOLUENE-D8	10	90		90		81 - 119

Data Package ID: *VL0703027-1*

UNIVERSITY OF Miami
THE ROSENSTIEL SCHOOL

April 3, 2007

TRITIUM LABORATORY

Data Release #07-045
Job # 2316

PARAGON ANALYTICS, INC.
TRITIUM SAMPLES

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Associate Research Professor

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Revised 1 January 2002

GENERAL COMMENTS ON TRITIUM RESULTS

Tritium Scale New Half-life

Tritium concentrations are expressed in TU, where 1 TU indicates a T/H abundance ratio of 10^{-18}. The values refer to the tritium scale recommended by U.S. National Institute of Science and Technology (NIST, formerly NBS), and International Atomic Energy Agency (IAEA). The TU-numbers are based on the NIST tritium water standard #4926E. Age corrections and conversions are made using the recommended half-life of **12.32 years**, i.e., a decay rate of $\lambda = 5.626\%$ year^{-1}. In this scale, 1 TU is equivalent to 7.151 dpm/kg H_2O, or 3.222 pCi/kg H_2O, or 0.1192 Bq/kg H_2O (Bq = disint/sec).

TU values are calculated for date of sample collection, REFDATE in the table, as provided by the submitter. If no such date is available, date of sample arrival at our laboratory is used.

The stated errors, eTU, are one standard deviation (1 sigma) including all conceivable contributions. In the table, QUANT is quantity of sample received, and ELYS is the amount of water taken for electrolytic enrichment. DIR means direct run (no enrichment).

Remark: From 1 Jan 1994 through 31 Dec 2001 we used the previously recommended value for the half-life, 12.43 years. The use of the new number, 12.32 years will in practice increase the reported TU-values by 0.9 %. This is insignificant since our reported values carry 1 sigma uncertainties of 3 % or more.

It is interesting to note that before 1994 we used the older, then recommended value of 12.26 years.

Very low tritium values

In some cases, negative TU values are listed. Such numbers can occur because the net tritium count rate is, in principle the difference between the count rate of the sample and that of a tritium-free sample (background count or blank sample). Given a set of "unknown" samples with no tritium, the distribution of net results should become symmetrical around 0 TU. The negative values are reported as such for the benefit of allowing the user unbiased statistical treatment of sets of the data. For other applications, 0 TU should be used.

Additional information

Refer to Services Rendered (Tritium), Section II.8, in the "Tritium Laboratory Price Schedule; Procedures and Standards; Advice on Sampling", and our Web-site www.rsmas.edu/groups/tritium.

Tritium efficiencies and background values are somewhat different in each of the nine counters and values are corrected for cosmic intensity, gas pressure and other parameters. For tritium, the efficiency is typically 1.00 cpm per 100 TU (direct counting). At 50x enrichment, the efficiency is equivalent to 1.00 cpm per 2.4 TU. The background is typically 0.3 cpm, known to about ± 0.02 cpm. Our reported results include not only the Poisson statistics, but also other experimental uncertainties such as enrichment error, etc.

End

Client: PARAGON ANALYTICS, INC
Recvd : 07/03/06
Job# : 2316
Final : 07/03/29 Report to M. Dale

Purchase Order: 62760
Contact: Lance Steere, 970/490-1511
225 Commerce Dr., (F)-1522
Fort Colline, CO 80524

Cust LABEL INFO	JOB.SX	REFDATE	QUANT	ELYS	TU	eTU
PARAGON - R-23i-Screen 3-2-26	2316.01	070226	500	DIR	7	2
PARAGON - R-23i-Screen 1-2-28	2316.02	070228	500	DIR	8	3