

Friday, February 03, 2012

REQUEST NUMBER: 12-720

**LOS ALAMOS  
NATIONAL LABORATORY**

ATTN: Mike Franks

Severn Trent Laboratories, Inc., St. Louis  
13715 Rider Trail N.  
Earth City, MO 63045

These Samples are on:

LANL Request Number: 12-720  
Per Agreement Number: 63639-001-10  
Project Cost Code: MR1A015AGWH0

Please analyse the enclosed samples  
according to the schedule indicated:

**SHIP DATE: 2/3/2012****TURNAROUND/REPORT DUE: 3/4/2012****TURNAROUND REQ'D: 30 Days****RAD SCREENING: Yes, Below Background****LAB REQUEST COMMENTS:**

LANL ER SMO CONTACT:

Signature: 

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8330	1	CAWA-12-2018	WG	2/3/2012	
		2	CAWA-12-2018	WG	2/3/2012	

Final Page of REQUEST NUMBER 12-720

Friday, February 03, 2012

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 12-720C

LOS ALAMOS

REQUEST NUMBER: 12-720

NATIONAL LABORATORY

ATTN: Mike Franks

TURNAROUND/REPORT DUE: 3/4/2012

Severn Trent Laboratories, Inc., St. Louis

TURNAROUND REQ'D: 30

13715 Rider Trail N.

Earth City, MO 63045

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
CAWA-12-2018	1	AMBER GLASS	WSP-HEXMOD	Ice	WG
CAWA-12-2018	2	AMBER GLASS	WSP-HEXMOD	Ice	WG

Relinquished By:


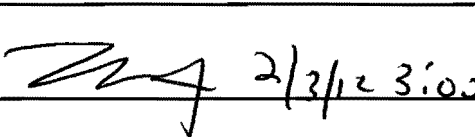
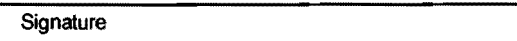
Date

Time

Received By:

Date

Time

		
Signature	2/3/12 3:00	Signature
Signature		Signature

Signature

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Signature

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 3733

EVENT NAME: Water/CdV, MDA AB Mon. Group Sampling Q2, January 2012, 2011  
Interim Plan rev. 1

SAMPLE ID: CAWA-12-2018

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/03/2012		MEDIA:	WGI		OK
TIME COLLECTED (HH:MM)		1137		SUB-MEDIA:	UA		
PRS ID:	Water	OK		SAMPLE TECH CODE:	RSP		
LOCATION ID:	R-27i			FIELD QC TYPE:	NA		
LOCATION TYPE:	MON			FIELD PREP:	UF		
PORT:	SINGLE COMPLETION			SAMPLE USAGE:	INV		
		↓		SCREEN/PORT DESC:			↓
FIELD MATRIX:	WG			EXCAVATED: YES/NO	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO	NA		
BOREHOLE: YES/NO	NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
2	NA	WSP-8260B-VOA	40 ML SEPTUM AMBER GLASS	Hydrochloric Acid (HCL)	Y	NA
3		WSP-8270C-SVOA	1 LITER AMBER GLASS	Ice		
3		WSP-8321A-NMED HEXP	1 LITER AMBER GLASS	Ice		
1		WSP-GrossA/B	1 LITER POLY	None		
2		WSP-HEXMOD	1 LITER AMBER GLASS	Ice		
1		WSP-LL-H-3	1 LITER POLY	None		
1		WSP-RAD	1 GAL POLY	Nitric Acid (HNO3)		
1		WSP-TKN+TOC	500 ML AMBER GLASS	Sulfuric Acid (H2SO4)		
<del>1</del>		<del>Ra226+228</del>	<del>1 GAL POLY</del>	<del>Nitric Acid (HNO3)</del>	<del>NA</del>	<del></del>

SAMPLE DESC:

NA

SAMPLE COMMENTS:

NA

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

pH   Temp °C   SC<sup>m</sup>/cm   DO mg/L   Turb(NTU)   ORP mV   Q gpm  
 7.08   12.93   102   8.16   0.45   193.1   0.55

COLLECTED BY (PRINT) W. Shaw

REVIEWED BY (PRINT) D. Fellenz

RELINQUISHED BY

Date/Time

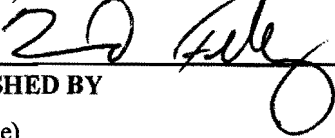
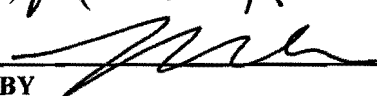
RECEIVED BY

Date/Time

**SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY**

EVENT ID: 3733

EVENT NAME: Water/CdV, MDA AB Mon. Group Sampling Q2, January 2012, 2011

(Printed Name) David Fellenz	2/3/12	Interim Plan rev. 1 (Printed Name) M. Martyn	2/3/12
(Signature) 	1305	(Signature) 	1305
<b>RELINQUISHED BY</b>	<b>Date/Time</b>	<b>RECEIVED BY</b>	<b>Date/Time</b>
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

CAWA-12-2018

**DATA VALIDATION COVER SHEET****5117-1****Data Validation Cover Sheet**

Records Use only

**Section I.**REQUEST NUMBER: 12-720 VALIDATION DATE: 3/7/12 LAB CODE: STSLCONTRACT LABORATORY NAME: TestAmerica Laboratories, Inc. - St. LouisVALIDATOR: Larry Fukui ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> TPH-GRO           | <input checked="" type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS          | <input type="checkbox"/> LCMSMS PERCHLORATES                  |
| <input type="checkbox"/> TPH-DRO           | <input type="checkbox"/> METALS                     | <input type="checkbox"/> PCB CONGENERS          | <input type="checkbox"/> ORGANOCHLORINE                       |
| <input type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY             | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | <input type="checkbox"/> PESTICIDES/POLYCHLORINATED BIPHENYLS |
- ☐ OTHER (DESCRIBE): \_\_\_\_\_

**Section II. Completeness Check**

- | YES                                 | NO                       | N/A                                 | (CHECK ONE)                 | YES                                 | NO                       | N/A                                 | (CHECK ONE)              |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 6. RAW/BSS DATA          |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 2. CASE NARRATIVE           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 3. SAMPLE RESULT FORMS      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 8. QUANTITATION REPORTS  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 4. SAMPLE CHROMATOGRAMS     | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS            |
| <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA    |

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

- The surrogate %R was < the laboratory LAL but  $\geq 10\%$  in the LCS. This was a QC sample and, thus, no sample data were qualified as a result.
- The MS/MSD RPD did not meet laboratory acceptance criteria for MNX. It should be noted that the MS and MSD parent sample was from another LANL RN. Since MS/MSD analyses were not required, no sample results were qualified.

Reviewed by: Eric T. MinkLevel: 1Date: 3/8/12

VALIDATOR'S SIGNATURE: \_\_\_\_\_

A handwritten signature in cursive script, appearing to read 'Larry Fukui'.

DATE: 3/7/12

# HIGH EXPLOSIVE (HE) ANALYTICAL DATA VALIDATION CHECKLIST

5117-2

## High Explosive (HE) Analytical Data Validation Checklist

Records Use only



Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, H9	J-, H9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, H9a	J-, H9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. The affected analytes are regarded as Rejected because the analytical holding time was exceeded.	R, H9b	R, H9b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, H7	J, H7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multi-point calibration correlation coefficient is <0.995.	UJ, H7a	J, H7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method limits.	UJ, H7c	J, H7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, H7d	J, H7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, H7f	R, H7f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The sample result is ≤5 times the concentration of the related analyte in the method blank.	U, H4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5x.	N/A	J, H4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. The sample result is ≤5 times the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, H4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, H4e	R, H4e

**HIGH EXPLOSIVE (HE) ANALYTICAL DATA VALIDATION CHECKLIST****5117-2****High Explosive (HE) Analytical Data Validation Checklist**

Records Use only



Yes   No   N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, H0	J, H0
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided (hexp – diode array detector).	N/A	J, H0a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, H0b	R, H0b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The surrogate is <10%R. Follow the external laboratory limits located within the associated data package.	R, H3	J-, H3
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17. The surrogate is < the Lower Acceptance Limit (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, H3a	J-, H3a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The surrogate %R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	N/A	J+, H3b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, H3c	J, H3c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, H3d	R, H3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The LCS percent recover was <10%. Follow the external laboratory limits located within the associated data package.	R, H12	J-, H12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, H12a	J-, H12a

**HIGH EXPLOSIVE (HE) ANALYTICAL DATA VALIDATION CHECKLIST****5117-2****High Explosive (HE) Analytical Data Validation Checklist**

Records Use only



Yes   No   N/A  (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, H12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, H12c	R, H12c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	25. The analyte was not confirmed on a second dissimilar column.	N/A	R, H8
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	26. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, H8a	R, H8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. Duplicate, dilution, or reanalysis.	UJ, H88	J, H88
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	28. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for cleanup or matrix interference.	UJ, R, H15	R, H15
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	29. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, H19	J, R, H19



## Los Alamos National Laboratory

Client Sample ID: CAWA-12-2018

## HPLC

Lot-Sample #....: F2B040402-001    Work Order #....: MQL1Q1AA    Matrix.....: WATER  
 Date Sampled....: 02/03/12    Date Received...: 02/04/12  
 Prep Date.....: 02/06/12    Analysis Date...: 02/14/12  
 Prep Batch #....: 2037080    Analysis Time...: 04:15  
 Dilution Factor: 1  
 Method.....: SW846 8330/8330A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
DNX	ND	0.50	ug/L
TNX	ND	0.50	ug/L
MNX	ND	0.50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dinitrobenzene	88	(65 - 128)

LMF  
3/7/12

Hard Copy Required

Page 1 of 1

Friday, February 03, 2012

**LOS ALAMOS**  
NATIONAL LABORATORY**LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 12-720C****REQUEST NUMBER: 12-720**

ATTN: Mike Franks

Severn Trent Laboratories, Inc., St. Louis

13715 Rider Trail N.


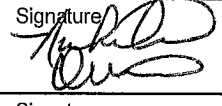
Earth City, MO 63045

TURNAROUND/REPORT DUE: 3/4/2012

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
CAWA-12-2018	1	AMBER GLASS	WSP-HEXMOD	Ice	WG
CAWA-12-2018	2	AMBER GLASS	WSP-HEXMOD	Ice	WG

Relinquished By:	Date	Time	Received By:	Date	Time
				2/4/12	0820
Signature			Signature		

Signature

Signature

Received for DISPOSAL By: Date Time Remarks:

Signature

Friday, February 03, 2012

REQUEST NUMBER: 12-720

**LOS ALAMOS**  
**NATIONAL LABORATORY**

ATTN: Mike Franks

Severn Trent Laboratories, Inc., St. Louis  
13715 Rider Trail N.  
Earth City, MO 63045

These Samples are on:

LANL Request Number: 12-720

Per Agreement Number: 63639-001-10

Project Cost Code: MR1A015AGWH0

Please analyse the enclosed samples  
according to the schedule indicated:

**SHIP DATE: 2/3/2012****TURNAROUND/REPORT DUE: 3/4/2012****TURNAROUND REQ'D: 30 Days****RAD SCREENING: Yes, Below Background****LAB REQUEST COMMENTS:**

LANL ER SMO CONTACT:

Signature: 

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8330	1	CAWA-12-2018	WG	2/3/2012	
		2	CAWA-12-2018	WG	2/3/2012	

Final Page of REQUEST NUMBER 12-720



TestAmerica Laboratories, Inc.

## ANALYTICAL REPORT

PROJECT NO. 12-720

Groundwater

Lot #: F2B040402

Joylene Valdez or Keith Greene

Los Alamos National Laboratory  
SMO TA-00 Bldg 1237  
DP: 03U; MS: 707  
Los Alamos, NM 87545

TESTAMERICA LABORATORIES, INC.

A handwritten signature in black ink, appearing to read 'Michael C. Franks', with a stylized 'for' written below it.

Michael C. Franks  
Project Manager

February 21, 2012

# Table of Contents - 12-720

COVER PAGE.....	1
CLIENT CHAIN OF CUSTODY.....	3
HPLC.....	14
HPLC Additional Forms.....	21
HPLC Standards Data.....	28
HPLC Raw Sample Data.....	84
HPLC Raw QC Data.....	89
HPLC Miscellaneous Data.....	98
TOTAL # OF PAGES IN PACKAGE.....	103

**Case Narrative**  
**LOT NUMBER: F2B040402**  
**LANL Request Number: 12-720**

This report contains the analytical results for the sample received under chain of custody number 12-720 by TestAmerica St. Louis on February 4, 2012. This sample is associated with your Groundwater project.

All applicable quality control procedures met method-specified acceptance criteria except as noted in the following case narrative.

This report shall not be reproduced, except in full, without the written approval of the laboratory.

This report is incomplete without the case narrative. All chemical analysis results are based upon dry weight correction as required per the statement of work. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

**Sample Receiving**

Samples were received at 4 °C. No problems were noted at the time of sample receipt.

**Explosives Method 8330**

In accordance with method 8330, samples are air dried under normal laboratory conditions for a period of time prior to extraction. Explosive results for soil samples, requesting results reported on a dry weight, will be adjusted for the % moisture result.

**QC Batch: 2037080**

The Method Blank shows no contamination above the reporting limit. Surrogate recovery is within laboratory stated limits.

The LCS is within stated limits. The LCS Surrogate recovery (82%) is outside the lower acceptance limit (83%). LCS spike recoveries are within QC limits demonstrating acceptable sample extraction and instrument performance.

The Batch QC Matrix Spike and Matrix Spike Duplicate were performed on F2B030441-002 (request 12-702). The Matrix Spike and Matrix Spike Duplicate recoveries are within stated limits. The MS/MSD RPD value is not within method acceptance criteria for MNX. MS/MSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix. The samples associated with this QC were not detected in the samples for this analyte. Surrogate is in control for both the MS and MSD.

I certify that this data is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the signature on the front page, has authorized release of the data contained in this hardcopy.

**F2B040402****CLIENT ANALYSIS SUMMARY**

Storage Loc: **3-88**  
 Date Received: 2012-02-04  
 Analytical Due Date: 2012-02-24  
 Report Due Date: 2012-02-28  
 Report Type: D Expanded Deliverable  
 EDD Code: 99

Project Manager: MCF Quote #: 85724 SDG: F2B040402  
 Project: 12-720 Groundwater  
 PO#: 63639-001-10 Report to: Joylene Valdez or Keith  
 Client: 108581 Los Alamos National Laboratory

#SMPS in LOT: 1

Sample Receiving: LOS ALAMOS CLIENT REQUIREMENTS Enter COC NUMBER in the COC Field; SDG = "Lot Number" Project Name = "Request number"

LOG QC AS DETAILED BELOW FOR EACH DEPT. EXCEPT RAD \*\*\*\*\* METALS AND WETCHEMISTRY \*\*\*\*\* Can batch multiple Lots together and report Client sp

Batch QC: Matrix Spike and Sample Duplicate Met Prep: GFAA Spike Level and Standard Spike Level Sb spike at 100 ppb

Pb - Spike Solids at 100 ppb, spike Waters at 20 - Perform analytical spike when matrix spike is swamped with indigenous analyte.

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I
1	CAWA-12-2018			2012-02-03 / 0	MQL1Q	WATER
<b>SAMPLE COMMENTS:</b>						
XX A0	SW846 8330/8330A	WATER, 8330, WSP-HEXMOD (MN/DNX/TNX)	20	EXTRACTION, SOLID PHASE	9Q	ORG FLAGS FOR INORG; STANDARD
D XX A0	SW846 8330/8330A	WATER, 8330, WSP-HEXMOD (MN/DNX/TNX)	20	EXTRACTION, SOLID PHASE	9Q	ORG FLAGS FOR INORG; STANDARD
S XX A0	SW846 8330/8330A	WATER, 8330, WSP-HEXMOD (MN/DNX/TNX)	20	EXTRACTION, SOLID PHASE	9Q	ORG FLAGS FOR INORG; STANDARD
					PROT: O	WRK LOC 06
					PROT: O	WRK LOC 06
					PROT: O	WRK LOC 06

Hard Copy Required

Page 1 of 1

Friday, February 03, 2012

**LOS ALAMOS**  
NATIONAL LABORATORY**LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 12-720C****REQUEST NUMBER: 12-720**

ATTN: Mike Franks

Severn Trent Laboratories, Inc., St. Louis

13715 Rider Trail N.


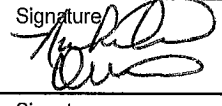
Earth City, MO 63045

TURNAROUND/REPORT DUE: 3/4/2012

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
CAWA-12-2018	1	AMBER GLASS	WSP-HEXMOD	Ice	WG
CAWA-12-2018	2	AMBER GLASS	WSP-HEXMOD	Ice	WG

Relinquished By:	Date	Time	Received By:	Date	Time
				2/4/12	0820
Signature			Signature		

Signature

Signature

Received for DISPOSAL By: Date Time Remarks:

Signature



Friday, February 03, 2012

REQUEST NUMBER: 12-720

**LOS ALAMOS  
NATIONAL LABORATORY**

ATTN: Mike Franks

Severn Trent Laboratories, Inc., St. Louis  
13715 Rider Trail N.  
Earth City, MO 63045

These Samples are on:

LANL Request Number: 12-720  
Per Agreement Number: 63639-001-10  
Project Cost Code: MR1A015AGWH0

Please analyse the enclosed samples  
according to the schedule indicated:

**SHIP DATE: 2/3/2012****TURNAROUND/REPORT DUE: 3/4/2012****TURNAROUND REQ'D: 30 Days****RAD SCREENING: Yes, Below Background****LAB REQUEST COMMENTS:**

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8330	1	CAWA-12-2018	WG	2/3/2012	
		2	CAWA-12-2018	WG	2/3/2012	

**Final Page of REQUEST NUMBER 12-720**

**TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s):

F2B040401  
F2B040402

CUR Form #: 3 1 1

**CONDITION UPON RECEIPT FORM**

Client: LANL

Quote No: 85724

COC/RFA No: 12-7202/12-713C

Initiated By: NVO

Date: 2/4/12

Time: 0820

**Shipping Information**Shipper: FedEx UPS DHL Courier Client Other:Multiple Packages: Y N

Shipping #(s):\*

1. 7209 7856 3262

Sample Temperature (s):\*\*

2. \_\_\_\_\_

1. 4

3. \_\_\_\_\_

2. \_\_\_\_\_

4. \_\_\_\_\_

3. \_\_\_\_\_

5. \_\_\_\_\_

4. \_\_\_\_\_

10. \_\_\_\_\_

5. \_\_\_\_\_

10. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines

\*\*Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid; Rad tests- Liquid or Solids; Perchlorate

**Condition** (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <u>Y</u> N	Are there custody seals present on the cooler?	8. <u>Y</u> N	Are there custody seals present on bottles?
2. Y <u>N</u> N/A	Do custody seals on cooler appear to be tampered with?	9. Y <u>N</u> N/A	Do custody seals on bottles appear to be tampered with?
3. <u>Y</u> N	Were contents of cooler frisked after opening, but before unpacking?	10. <u>Y</u> N N/A	Was sample received with proper pH? (If not, make note below)
4. <u>Y</u> N	Sample received with Chain of Custody?	11. Y N <u>N/A</u>	Containers for C-14, H-3 & I-129/131 marked with "Do Not Preserve" label?
5. <u>Y</u> N N/A	Does the Chain of Custody match sample ID's on the container(s)?	12. <u>Y</u> N	Sample received in proper containers?
6. Y <u>N</u>	Was sample received broken?	13. Y N <u>N/A</u>	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
7. <u>Y</u> N	Is sample volume sufficient for analysis?	14. Y N <u>N/A</u>	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX, Oil & Grease and soils.

Notes:

Corrective Action:

☐ Client Contact Name: \_\_\_\_\_

Informed by: \_\_\_\_\_

☐ Sample(s) processed "as is"☐ Sample(s) on hold until: \_\_\_\_\_

If released, notify: \_\_\_\_\_

Project Management Review: AMS

Date: 12-07-12

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

ADMIN-0004 rev13, REVISED 05/27/11 \\slsvr01\QA\FORMS\ST-LOUIS\ADMIN\Admin-0004 CUR.doc

## METHODS SUMMARY

F2B040402

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Nitroaromatics and Nitramines by HPLC	SW846 8330/8330	SW846 3535

### References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

**SAMPLE SUMMARY****F2B040402**

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT</u>	<u>SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
MQL1Q	001	CAWA-12-2018		02/03/12	

**NOTE(S) :**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

**QC DATA ASSOCIATION SUMMARY****F2B040402**

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WATER	SW846 8330/8330A		2037080	2037042

## Los Alamos National Laboratory

Client Sample ID: CAWA-12-2018

## HPLC

Lot-Sample #....: F2B040402-001    Work Order #....: MQL1Q1AA    Matrix.....: WATER  
 Date Sampled....: 02/03/12    Date Received...: 02/04/12  
 Prep Date.....: 02/06/12    Analysis Date...: 02/14/12  
 Prep Batch #....: 2037080    Analysis Time...: 04:15  
 Dilution Factor: 1  
 Method.....: SW846 8330/8330A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
DNX	ND	0.50	ug/L
TNX	ND	0.50	ug/L
MNX	ND	0.50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dinitrobenzene	88	(65 - 128)

## METHOD BLANK REPORT

## HPLC

Client Lot #....: F2B040402      Work Order #....: MQMAV1AA      Matrix.....: WATER  
 MB Lot-Sample #: F2B060000-080      Prep Date.....: 02/06/12      Analysis Time...: 23:02  
 Analysis Date...: 02/13/12      Prep Batch #....: 2037080  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
MNX	ND	0.50	ug/L	SW846 8330/8330A
DNX	ND	0.50	ug/L	SW846 8330/8330A
TNX	ND	0.50	ug/L	SW846 8330/8330A

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
1,2-Dinitrobenzene	89	(65 - 128)

**NOTE(S) :**

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

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## HPLC

Client Lot #....: F2B040402      Work Order #....: MQMAV1AC      Matrix.....: WATER  
 LCS Lot-Sample#: F2B060000-080  
 Prep Date.....: 02/06/12      Analysis Date...: 02/13/12  
 Prep Batch #....: 2037080      Analysis Time...: 23:37  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
<b>TNX</b>	<b>57</b>	<b>(46 - 110)</b>	<b>SW846 8330/8330A</b>
<b>MNX</b>	<b>73</b>	<b>(66 - 122)</b>	<b>SW846 8330/8330A</b>
<b>DNX</b>	<b>67</b>	<b>(55 - 116)</b>	<b>SW846 8330/8330A</b>

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dinitrobenzene	82 *	(83 - 110)

**NOTE(S) :**

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

Bold print denotes control parameters

\* Surrogate recovery is outside stated control limits.



## MATRIX SPIKE SAMPLE EVALUATION REPORT

## HPLC

Client Lot #...: F2B040402      Work Order #...: MQLGP1AC-MS      Matrix.....: WATER  
 MS Lot-Sample #: F2B030441-002      MQLGP1AD-MSD  
 Date Sampled...: 02/01/12      Date Received...: 02/03/12  
 Prep Date.....: 02/06/12      Analysis Date...: 02/14/12  
 Prep Batch #...: 2037080      Analysis Time...: 01:21  
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
<b>MNX</b>	<b>74</b>	<b>(36 - 150)</b>			<b>SW846 8330/8330A</b>
	<b>91 p</b>	<b>(36 - 150)</b>	<b>21</b>	<b>(0-20)</b>	<b>SW846 8330/8330A</b>
<b>DNX</b>	<b>69</b>	<b>(35 - 149)</b>			<b>SW846 8330/8330A</b>
	<b>83</b>	<b>(35 - 149)</b>	<b>18</b>	<b>(0-20)</b>	<b>SW846 8330/8330A</b>
<b>TNX</b>	<b>62</b>	<b>(24 - 150)</b>			<b>SW846 8330/8330A</b>
	<b>75</b>	<b>(24 - 150)</b>	<b>19</b>	<b>(0-30)</b>	<b>SW846 8330/8330A</b>

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dinitrobenzene	75	(65 - 128)
	90	(65 - 128)

**NOTE (S) :**

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

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

# **HPLC SAMPLE AND QC DATA**

**Form I (s)**

Explosives

## Los Alamos National Laboratory

Lab Name:TestAmerica Laboratories, Inc.      SDG Number:F2B040402

Matrix: (soil/water) WATER      Lab Sample ID:F2B030441 002

Method: SW846 8330/8330A

Nitroaromatics &amp; Nitramines: Explosives (8330/A)

Sample WT/Vol: 500.5 / mL

Date Received: 02/03/12

Work Order: MQLGP1AA

Date Extracted:02/06/12

Dilution factor: 1

Date Analyzed: 02/14/12

Moisture %:NA

QC Batch: 2037080

Client Sample Id: INTRA-LAB QC

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/L	Q
5755-27-1	MNX	0.50	U
80251-29-2	DNX	0.50	U
13980-04-6	TNX	0.50	U

<u>SURROGATE RECOVERY</u>	<u>%</u>	<u>ACCEPTABLE LIMITS</u>
1,2-Dinitrobenzene	86	(65 - 128 )

## Los Alamos National Laboratory

Lab Name:TestAmerica Laboratories, Inc.      SDG Number:F2B040402

Matrix: (soil/water) WATER      Lab Sample ID:F2B040402 001

Method: SW846 8330/8330A

Nitroaromatics &amp; Nitramines: Explosives (8330/A)

Sample WT/Vol: 500.9 / mL

Date Received: 02/04/12

Work Order: MQL1Q1AA

Date Extracted:02/06/12

Dilution factor: 1

Date Analyzed: 02/14/12

Moisture %:NA

QC Batch: 2037080

Client Sample Id: CAWA-12-2018

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/L	Q
5755-27-1	MNX	0.50	U
80251-29-2	DNX	0.50	U
13980-04-6	TNX	0.50	U

<u>SURROGATE RECOVERY</u>	<u>%</u>	<u>ACCEPTABLE LIMITS</u>
1,2-Dinitrobenzene	88	(65 - 128 )

Los Alamos National Laboratory  
METHOD BLANK COMPOUNDS

Lab Name: TestAmerica Laboratories, Inc.      SDG Number: F2B040402

Matrix: (soil/water) WATER      Lab Sample ID: F2B060000 080

Method: SW846 8330/8330A

Nitroaromatics & Nitramines: Explosives (8330/A)

Sample WT/Vol: 500 / mL      Date Received: 02/03/12

Work Order: MQMAV1AA      Date Extracted: 02/06/12

Dilution factor: 1      Date Analyzed: 02/13/12

Moisture %: NA

QC Batch: 2037080

Client Sample Id: INTRA-LAB BLANK

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/L	Q
5755-27-1	MNX	0.50	U
80251-29-2	DNX	0.50	U
13980-04-6	TNX	0.50	U

<u>SURROGATE RECOVERY</u>	<u>%</u>	<u>ACCEPTABLE LIMITS</u>
1,2-Dinitrobenzene	89	( 65      - 128    )

Los Alamos National Laboratory  
CHECK SAMPLE COMPOUNDS

Lab Name: TestAmerica Laboratories, Inc.      SDG Number: F2B040402

Matrix: (soil/water) WATER      Lab Sample ID: F2B060000 080

Method: SW846 8330/8330A

Nitroaromatics & Nitramines: Explosives (8330/A)

Sample WT/Vol: 500 / mL      Date Received: 02/03/12

Work Order: MQMAV1AC      Date Extracted: 02/06/12

Dilution factor: 1      Date Analyzed: 02/13/12

Moisture %: NA

QC Batch: 2037080

Client Sample Id: CHECK SAMPLE

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/L	Q
5755-27-1	MNX	0.528	
80251-29-2	DNX	0.364	
13980-04-6	TNX	0.449	

<u>SURROGATE RECOVERY</u>	<u>%</u>	<u>ACCEPTABLE LIMITS</u>
1,2-Dinitrobenzene	82	(83 - 110 )

Los Alamos National Laboratory  
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: TestAmerica Laboratories, Inc.      SDG Number: F2B040402

Matrix: (soil/water) WATER      Lab Sample ID: F2B030441 002

Method: SW846 8330/8330A

Nitroaromatics & Nitramines: Explosives (8330/A)

Sample WT/Vol: 500.5 / mL      Date Received: 02/03/12

Work Order: MQLGP1AD      Date Extracted: 02/06/12

Dilution factor: 1      Date Analyzed: 02/14/12

Moisture %: NA

QC Batch: 2037080

Client Sample Id: LAB MS/MSD

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/L	Q
5755-27-1	MNX	0.657	p
80251-29-2	DNX	0.451	
13980-04-6	TNX	0.595	

<u>SURROGATE RECOVERY</u>	<u>%</u>	<u>ACCEPTABLE LIMITS</u>
1,2-Dinitrobenzene	90	( 65      - 128    )

Los Alamos National Laboratory  
MATRIX SPIKE COMPOUNDS

Lab Name: TestAmerica Laboratories, Inc.      SDG Number: F2B040402

Matrix: (soil/water) WATER      Lab Sample ID: F2B030441 002

Method: SW846 8330/8330A

Nitroaromatics & Nitramines: Explosives (8330/A)

Sample WT/Vol: 500.5 / mL      Date Received: 02/03/12

Work Order: MQLGP1AC      Date Extracted: 02/06/12

Dilution factor: 1      Date Analyzed: 02/14/12

Moisture %: NA

QC Batch: 2037080

Client Sample Id: LAB MS/MSD

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/L	Q
5755-27-1	MNX	0.533	
80251-29-2	DNX	0.377	
13980-04-6	TNX	0.491	

<u>SURROGATE RECOVERY</u>	<u>%</u>	<u>ACCEPTABLE LIMITS</u>
1,2-Dinitrobenzene	75	( 65      - 128    )



# **HPLC ADDITIONAL FORMS**

## SW846 8330/8330A SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Los Alamos National Laboratory

Lab Code: TALSTL

SDG No: F2B040402

Lot #: F2B040402

Extraction: XXI20A09Q

	CLIENT ID.	SRG01	TOT OUT
	=====	=====	=====
01	INTRA-LAB QC	86	00
02	CAWA-12-2018	88	00
03	METHOD BLK. MQMAV1AA	89	00
04	LCS MQMAV1AC	82 *	01
05	LAB MS/MSD D	90	00
06	LAB MS/MSD S	75	00

SURROGATES

SRG01 = 1,2-Dinitrobenzene

QC LIMITS

( 65-128)

- # Column to be used to flag recovery values  
 \* Values outside of required QC Limits  
 D System monitoring Compound diluted out

FORM II

## SW846 8330/8330A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Los Alamos National Laboratory

Lab Code: TALSTL

SDG No: F2B040402

Matrix Spike ID: LAB MS/MSD

Lot #: F2B030441

WO #: MQLGP1AC

BATCH: 2037080

COMPOUND	SPIKE ADDED (ug/L )	SAMPLE CONCENT. (ug/L )	MS CONCENT. (ug/L )	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
DNX	0.545	ND	0.377	69	35- 149	
TNX	0.789	ND	0.491	62	24- 150	
MNX	0.719	ND	0.533	74	36- 150	

## NOTES(S):

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: \_\_\_\_0 out of \_\_\_\_0 outside limits

Spike Recovery: \_\_\_\_0 out of \_\_\_\_3 outside limits

COMMENTS:

## SW846 8330/8330A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Los Alamos National Laboratory

Lab Code: TALSTL

SDG No: F2B040402

Matrix Spike ID: LAB MS/MSD

Lot #: F2B030441

WO #: MQLGP1AD

BATCH: 2037080

COMPOUND	SPIKE ADDED (ug/L )	MSD CONCENT. (ug/L )	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
=====	=====	=====	=====	=====	=====	=====	=====
MNX	0.719	0.657	91	21	*	20	36 - 150
DNX	0.545	0.451	83	18	-	20	35 - 149
TNX	0.789	0.595	75	19	-	30	24 - 150

## NOTES(S) :

---

p Relative percent difference (RPD) is outside stated control limits.

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD:   1   out of   3   outside limitsSpike Recovery:   0   out of   3   outside limits

COMMENTS:

## SW846 8330/8330A CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Los Alamos National Laboratory

Lab Code: TALSTL

SDG No: F2B040402

Lot #: F2B060000

WO #: MQMAV1AC

BATCH: 2037080

COMPOUND	SPIKE ADDED (ug/L )	SAMPLE CONCENT. (ug/L )	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
TNX	0.790	0.449	57	46 - 110	
MNX	0.720	0.528	73	66 - 122	
DNX	0.546	0.364	67	55 - 116	

## NOTES(S):

\* Values outside of QC limits

Spike Recovery:   0   out of   3   outside limits

COMMENTS:

SW846 8330/8330A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

MQMAV1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALSTL

SDG Number:F2B040402

Lab File ID: EBLK531.

Lot Number: F2B040402

Date Analyzed: 02/13/12

Time Analyzed: 23:02

Matrix: WATER

Date Extracted:02/06/12

GC Column: C-18 ID: 4.60

Extraction Method: 3535

Instrument ID: LCE

Level:(low/med)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS, LCSD, MS , MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	=====	=====	=====	=====	=====
01	INTRA-LAB QC	MQLGP1AA	ESMP534.	02/14/12	00:46
02	LAB MS/MSD	MQLGP1AC S	ESMP535.	02/14/12	01:21
03	LAB MS/MSD	MQLGP1AD D	ESMP536.	02/14/12	01:56
04	CAWA-12-2018	MQL1Q1AA	ESMP540.	02/14/12	04:15
05	CHECK SAMPLE	MQMAV1AC C	ELCS532.	02/13/12	23:37
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM 8  
8330 ANALYTICAL SEQUENCE

Lab Name: Contract: 108581

Lab Code: Case No.: SAS No.: SDG No.: F2B040402

GC Column: ALLURE C-18 ID: 4.60 (mm) Init. Calib. Date(s): 02/13/12 02/13/12

Instrument ID: LCE

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 8.09							
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #	
	=====	=====	=====	=====	=====	=====	
01	8330 CCV	8330 CCV	02/13/12	2227	8.07		
02	ZZZZZ	ZZZZZ	02/13/12	2302	8.11		
03	ZZZZZ	ZZZZZ	02/13/12	2337	8.11		
04	ZZZZZ	ZZZZZ	02/14/12	0046	8.10		
05	ZZZZZ	ZZZZZ	02/14/12	0121	8.11		
06	ZZZZZ	ZZZZZ	02/14/12	0156	8.10		
07	CAWA-12-2018	MQL1Q1AA	02/14/12	0415	8.11		
08	8330 CCV	8330 CCV	02/14/12	0450	8.08		
09							
10							
11							
12							

QC LIMITS

S1 = 1,2-Dinitrobenzene (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

# **HPLC STANDARDS DATA**

## **INITIAL CALIBRATION DATA**

## **CALIBRATION VERIFICATION DATA**



Report Date : 14-Feb-2012 12:50

## TestAmerica St. Louis

## INITIAL CALIBRATION DATA

Start Cal Date : 13-FEB-2012 13:06  
 End Cal Date : 13-FEB-2012 17:48  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 4.14  
 Integrator : HP Genie  
 Method file : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Last Edit : 14-Feb-2012 12:49 Lce.i  
 Curve Type : Average

## Calibration File Names:

Level 1: \\slsvr01\HPLC\Lce.i\E120213.b\EICL514B.D  
 Level 2: \\slsvr01\HPLC\Lce.i\E120213.b\EICL515B.D  
 Level 3: \\slsvr01\HPLC\Lce.i\E120213.b\EICL516B.D  
 Level 4: \\slsvr01\HPLC\Lce.i\E120213.b\EICL517B.D  
 Level 5: \\slsvr01\HPLC\Lce.i\E120213.b\EICL518B.D  
 Level 6: \\slsvr01\HPLC\Lce.i\E120213.b\EICL519B.D  
 Level 7: \\slsvr01\HPLC\Lce.i\E120213.b\EICL520B.D  
 Level 8: \\slsvr01\HPLC\Lce.i\E120213.b\EICL521B.D  
 Level 9: \\slsvr01\HPLC\Lce.i\E120213.b\EICL522B.D

AF  
2/14/12

Compound	10.000 Level 1	20.000 Level 2	50.000 Level 3	200.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	2500.000 Level 7	5000.000 Level 8	1.000e+04 Level 9					
1 HMX	315 302	317 304	317 296	307	303	305	307	2.389
2 TNX	745 ++++	691 ++++	720 ++++	688	683	550	680	10.003
3 DNX	534 ++++	558 ++++	582 ++++	569	570	458	545	8.352
4 MNX	411 ++++	425 ++++	466 ++++	467	465	374	435	8.752
6 RDX	438 366	397 368	376 360	367	363	368	378	6.580
8 1,3,5-Trinitrobenzene	828 860	851 867	873 847	868	863	874	859	1.730
9 1,3-Dinitrobenzene	1031 1043	1052 1050	1057 1027	1043	1043	1050	1044	0.944
10 Tetryl	652 605	646 610	639 595	628	624	611	623	3.128

Report Date : 14-Feb-2012 12:50

## TestAmerica St. Louis

## INITIAL CALIBRATION DATA

Start Cal Date : 13-FEB-2012 13:06  
 End Cal Date : 13-FEB-2012 17:48  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 4.14  
 Integrator : HP Genie  
 Method file : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Last Edit : 14-Feb-2012 12:49 Lce.i  
 Curve Type : Average

Compound	10.000	20.000	50.000	200.000	500.000	1000.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	2500.000	5000.000	1.000e+04					
	Level 7	Level 8	Level 9					
=====								
11 Nitrobenzene	845	806	799	799	805	818		
	811	819	801				811	1.801
-----								
12 Nitroglycerin	332	248	266	237	235	239		
	237	239	233				252	12.560
-----								
13 2,4,6-Trinitrotoluene	828	748	816	780	773	774		
	769	774	755				780	3.348
-----								
14 4-Amino-2,6-Dinitrotoluene	570	563	581	546	545	552		
	548	552	540				555	2.419
-----								
15 2-Amino-4,6-Dinitrotoluene	857	815	857	806	804	810		
	805	811	793				817	2.840
-----								
16 2,6-Dinitrotoluene	541	536	556	533	535	536		
	534	538	526				537	1.532
-----								
17 2,4-Dinitrotoluene	1058	1054	1095	1058	1060	1068		
	1064	1071	1046				1064	1.320
-----								
18 2-Nitrotoluene	503	550	520	495	499	500		
	497	501	490				506	3.637
-----								
19 4-Nitrotoluene	565	451	485	429	429	434		
	429	434	424				453	10.106
-----								
20 3-Nitrotoluene	624	598	579	548	544	552		
	545	550	540				564	5.200
-----								
21 PETN	228	254	269	271	267	274		
	273	275	269				265	5.660
=====								

Report Date : 14-Feb-2012 12:50

## TestAmerica St. Louis

## INITIAL CALIBRATION DATA

Start Cal Date : 13-FEB-2012 13:06  
 End Cal Date : 13-FEB-2012 17:48  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 4.14  
 Integrator : HP Genie  
 Method file : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Last Edit : 14-Feb-2012 12:49 Lce.i  
 Curve Type : Average

Compound	10.000	20.000	50.000	200.000	500.000	1000.000		
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	% RSD
	-----	-----	-----	-----	-----	-----		
	2500.000	5000.000	1.000e+04					
	Level 7	Level 8	Level 9					
=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 7 1,2-Dinitrobenzene	449	459	493	485	483	442		
	487	490	480				474	4.027
-----	-----	-----	-----	-----	-----	-----	-----	-----

Report Date : 14-Feb-2012 12:50

## TestAmerica St. Louis

## COMPOUND LISTING

Method file : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Quant Method : ESTD Target Version : 4.14  
 Last Update : 14-Feb-2012 12:49 Number of Cpnds : 20  
 Data Type : LC DATA

Global Integrator : HP Genie

Chromat Events Values

```

-----
Initial:Thresh Units      5.000000
Initial:Peak Width       0.100000
Initial:Area Reject      20.000000
Initial:Solvent Slope    100000.000000
Initial:Split Solvent    2000.000000
  3.000:Baseline Now      n/a
  4.720:Baseline Now      n/a
  7.600:Baseline Now      n/a
  9.800:Baseline Now      n/a
 11.000:Baseline Now      n/a
 19.500:Baseline Next Valley ON
  
```

AF  
2/14/12

Compound	RT	RT Window	RF
1 HMX	3.359	3.159-3.559	3.07e+002
2 TNX	3.696	3.496-3.896	6.80e+002
3 DNX	4.139	3.939-4.339	5.45e+002
4 MNX	4.989	4.789-5.189	4.35e+002
6 RDX	5.842	5.642-6.042	3.78e+002
\$ 7 1,2-Dinitrobenzene	8.087	7.887-8.287	4.74e+002
8 1,3,5-Trinitrobenzene	8.461	8.261-8.661	8.59e+002
9 1,3-Dinitrobenzene	10.390	10.190-10.590	1.04e+003
10 Tetryl	11.730	11.530-11.930	6.23e+002
11 Nitrobenzene	12.141	11.941-12.341	8.11e+002
12 Nitroglycerin	13.761	13.561-13.961	2.52e+002
13 2,4,6-Trinitrotoluene	14.240	14.040-14.440	7.80e+002
14 4-Amino-2,6-Dinitrotolu	14.741	14.541-14.941	5.55e+002
15 2-Amino-4,6-Dinitrotolu	15.482	15.222-15.742	8.17e+002
16 2,6-Dinitrotoluene	16.498	16.158-16.838	5.37e+002
17 2,4-Dinitrotoluene	17.095	16.765-17.425	1.06e+003
18 2-Nitrotoluene	20.656	20.156-21.156	5.06e+002
19 4-Nitrotoluene	22.406	21.876-22.936	4.53e+002
20 3-Nitrotoluene	24.097	23.497-24.697	5.64e+002
21 PETN	26.945	26.545-27.345	2.65e+002

Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL514.D

Report Date: 14-Feb-2012 12:53

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL514.D  
 Lab Smp Id: 8330 ICAL-1 Client Smp ID: 8330 ICAL-1  
 Inj Date : 13-FEB-2012 13:06  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-1  
 Misc Info : 8330 ICAL-1  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: FULL8330ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

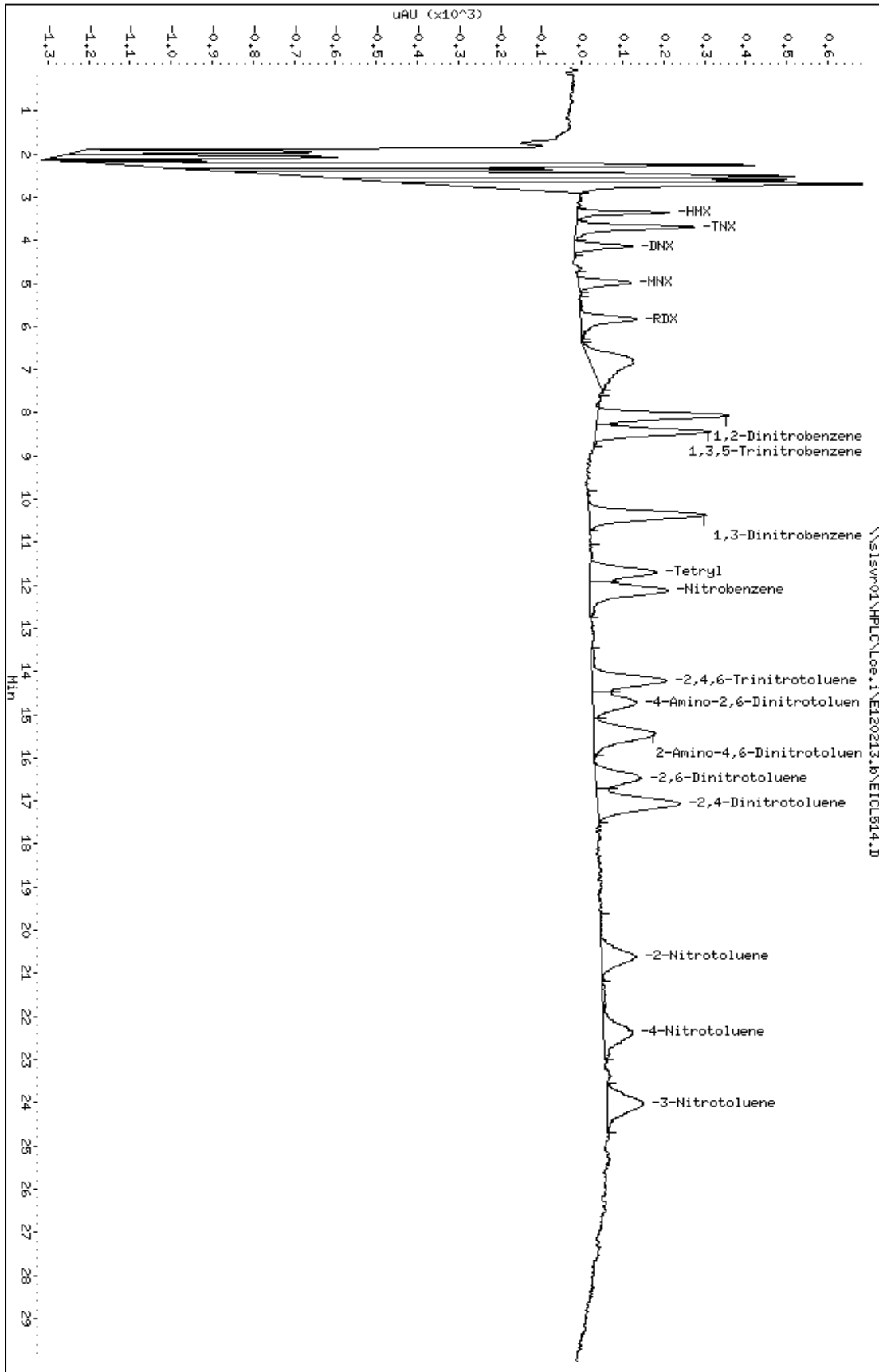
Concentration Formula: Amt \* DF \* (2\*Vt/UF)/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 HMX	3.360	3.358	0.002	3147	10.0000	10.25
2 TNX	3.696	3.695	0.001	5887	7.90000	8.661
3 DNX	4.141	4.138	0.003	2935	5.50000	5.384
4 MNX	4.988	4.988	0.000	2960	7.20000	6.809
6 RDX	5.835	5.842	-0.007	4377	10.0000	11.58
\$ 7 1,2-Dinitrobenzene	8.066	8.086	-0.020	8988	20.0000	18.95
8 1,3,5-Trinitrobenzene	8.447	8.460	-0.013	8277	10.0000	9.636
9 1,3-Dinitrobenzene	10.373	10.389	-0.016	10308	10.0000	9.872
10 Tetryl	11.701	11.729	-0.028	6518	10.0000	10.46
11 Nitrobenzene	12.122	12.141	-0.019	8447	10.0000	10.41
13 2,4,6-Trinitrotoluene	14.211	14.239	-0.028	8279	10.0000	10.62
14 4-Amino-2,6-Dinitrotoluene	14.719	14.740	-0.021	5701	10.0000	10.27
15 2-Amino-4,6-Dinitrotoluene	15.432	15.481	-0.049	8570	10.0000	10.48
16 2,6-Dinitrotoluene	16.469	16.497	-0.028	5410	10.0000	10.07
17 2,4-Dinitrotoluene	17.065	17.094	-0.029	10575	10.0000	9.941
18 2-Nitrotoluene	20.612	20.655	-0.043	5029	10.0000	9.937
19 4-Nitrotoluene	22.371	22.405	-0.034	5646	10.0000	12.46
20 3-Nitrotoluene	24.003	24.097	-0.094	6235	10.0000	11.05

Data File: \\sisvr01\HPLC\Loc.i\VE120213.b\EICL514.D  
Date : 13-FEB-2012 13:06  
Client ID: 8330 ICAL-1  
Sample Info: 8330 ICAL-1  
Purge Volume: 500.0  
Column Phase: Allure C-18

Instrument: Loc.i  
Operator: AF  
Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL514B.D  
 Report Date: 14-Feb-2012 12:53

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL514B.D  
 Lab Smp Id: 8330 ICAL-1 Client Smp ID: 8330 ICAL-1  
 Inj Date : 13-FEB-2012 13:06  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-1  
 Misc Info : 8330 ICAL-1  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: NGPETN\_ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

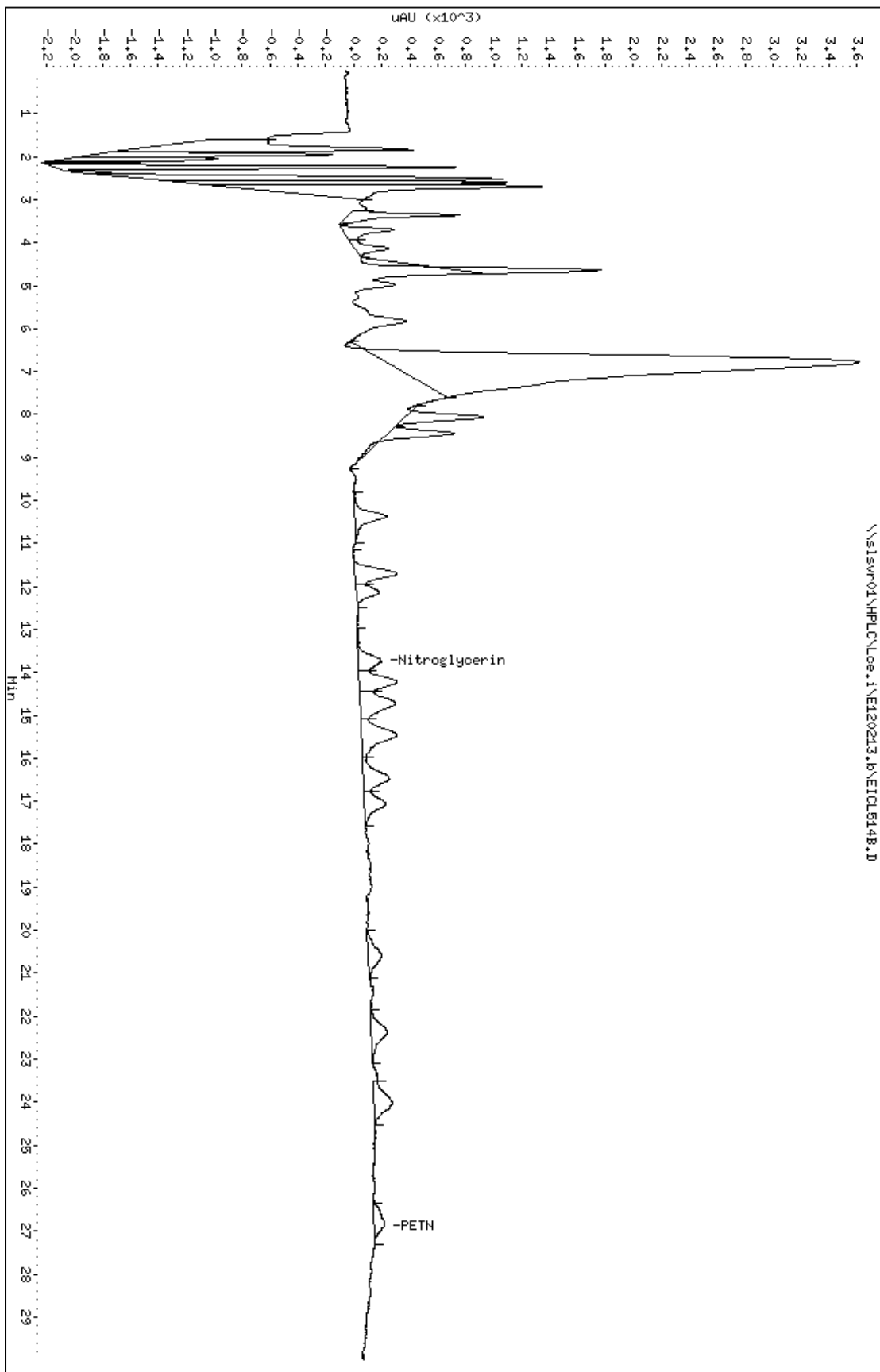
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
12 Nitroglycerin	13.741	13.760	-0.019	8295	25.0000	32.93
21 PETN	26.880	26.945	-0.065	5706	25.0000	21.57

Data File: \\slswr01\HPLC\Loc.i\NEL20213.b\NELCL514B.D  
 Date : 13-FEB-2012 13:06  
 Client ID: 8330 ICAL-1  
 Sample Info: 8330 ICAL-1  
 Purge Volume: 500.0  
 Column phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60





Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL515.D

Report Date: 14-Feb-2012 12:53

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL515.D  
 Lab Smp Id: 8330 ICAL-2 Client Smp ID: 8330 ICAL-2  
 Inj Date : 13-FEB-2012 13:41  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-2  
 Misc Info : 8330 ICAL-2  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: FULL8330ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

Concentration Formula: Amt \* DF \* (2\*Vt/UF)/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
					( ug/L)	( ug/L)
Compounds	RT	EXP RT	DLT RT	RESPONSE		
=====	====	=====	=====	=====	=====	=====
1 HMX	3.356	3.358	-0.002	6330	20.0000	20.61
2 TNX	3.691	3.695	-0.004	10924	15.8000	16.07
3 DNX	4.135	4.138	-0.003	6141	11.0000	11.26
4 MNX	4.980	4.988	-0.008	6116	14.4000	14.07
6 RDX	5.832	5.842	-0.010	7937	20.0000	21.00
\$ 7 1,2-Dinitrobenzene	8.070	8.086	-0.016	18350	40.0000	38.69
8 1,3,5-Trinitrobenzene	8.445	8.460	-0.015	17024	20.0000	19.82
9 1,3-Dinitrobenzene	10.373	10.389	-0.016	21042	20.0000	20.15
10 Tetryl	11.702	11.729	-0.027	12911	20.0000	20.72
11 Nitrobenzene	12.124	12.141	-0.017	16125	20.0000	19.87
13 2,4,6-Trinitrotoluene	14.218	14.239	-0.021	14966	20.0000	19.20
14 4-Amino-2,6-Dinitrotoluene	14.716	14.740	-0.024	11262	20.0000	20.29
15 2-Amino-4,6-Dinitrotoluene	15.460	15.481	-0.021	16299	20.0000	19.94
16 2,6-Dinitrotoluene	16.464	16.497	-0.033	10714	20.0000	19.94
17 2,4-Dinitrotoluene	17.070	17.094	-0.024	21072	20.0000	19.81
18 2-Nitrotoluene	20.600	20.655	-0.055	10998	20.0000	21.73(M)
19 4-Nitrotoluene	22.374	22.405	-0.031	9020	20.0000	19.90
20 3-Nitrotoluene	24.047	24.097	-0.050	11965	20.0000	21.20

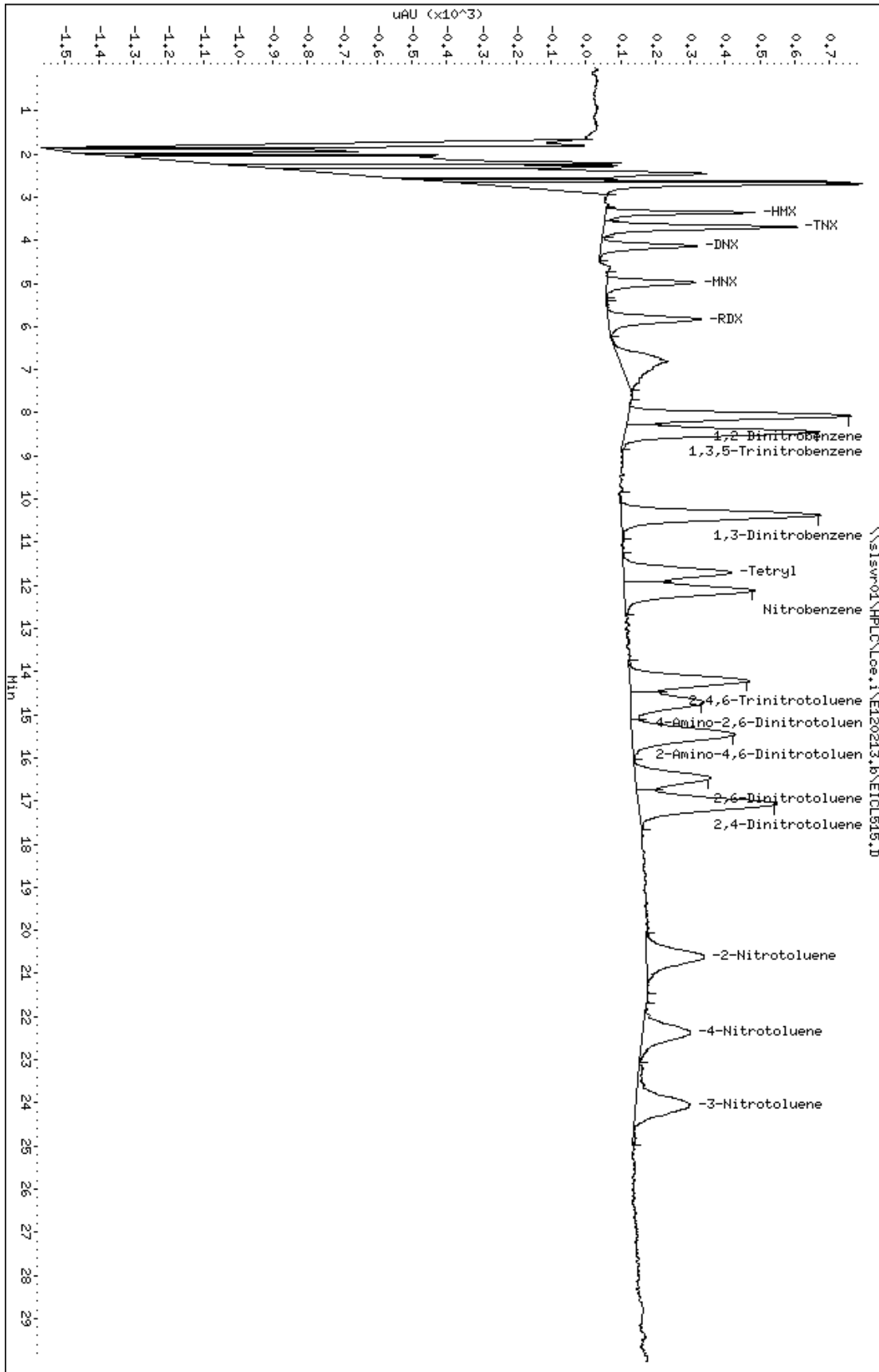
Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL515.D  
Report Date: 14-Feb-2012 12:53

#### QC Flag Legend

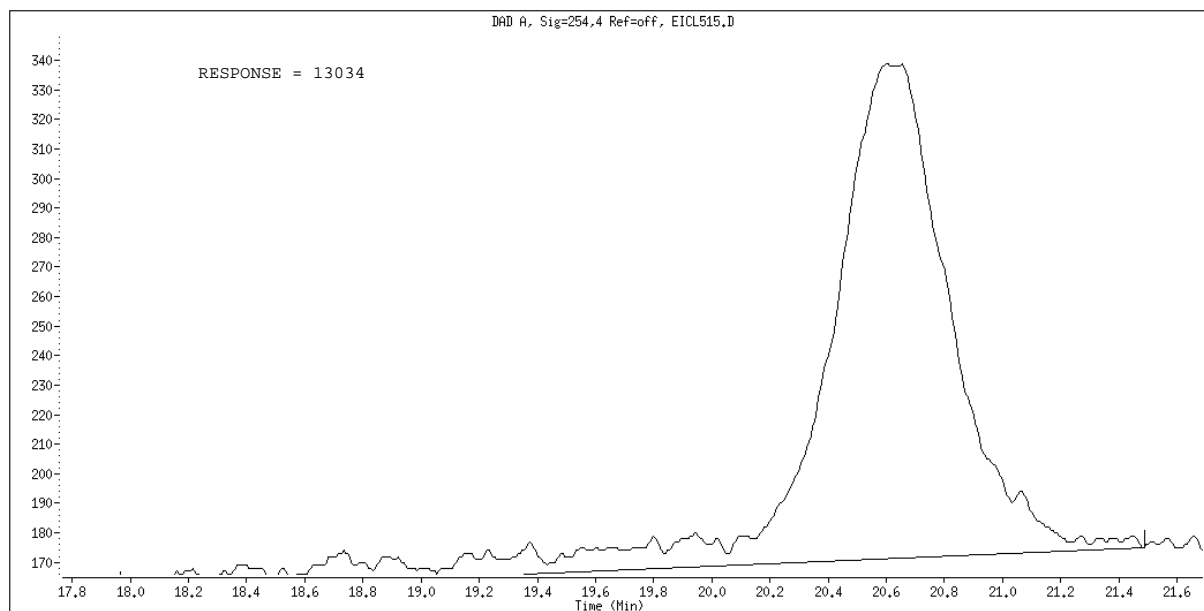
M - Compound response manually integrated.

Data File: \\sisvr01\HPLC\Loc.i\VE120213.b\EICL515.D  
 Date : 13-FEB-2012 13:41  
 Client ID: 8330 ICAL-2  
 Sample Info: 8330 ICAL-2  
 Purge Volume: 500.0  
 Column Phase: Allure C-18

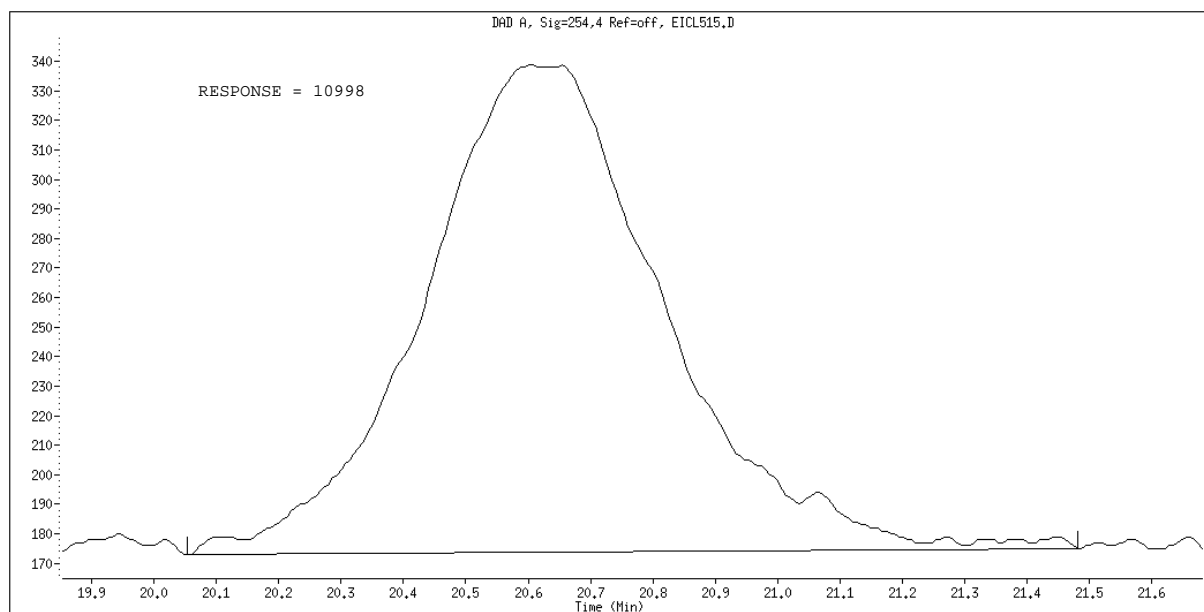
Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60



Data File Name: EICL515.D  
Inj. Date and Time: 13-FEB-2012 13:41  
Instrument ID: Lce.i  
Client ID: 8330 ICAL-2  
Compound Name: 2-Nitrotoluene  
CAS #: 88-72-2



Original Integration



Manual Integration

Manually Integrated By: flakera  
Manual Integration Reason: Baseline Event

Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL515B.D  
 Report Date: 14-Feb-2012 12:53

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL515B.D  
 Lab Smp Id: 8330 ICAL-2 Client Smp ID: 8330 ICAL-2  
 Inj Date : 13-FEB-2012 13:41  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-2  
 Misc Info : 8330 ICAL-2  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: NGPETN\_ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

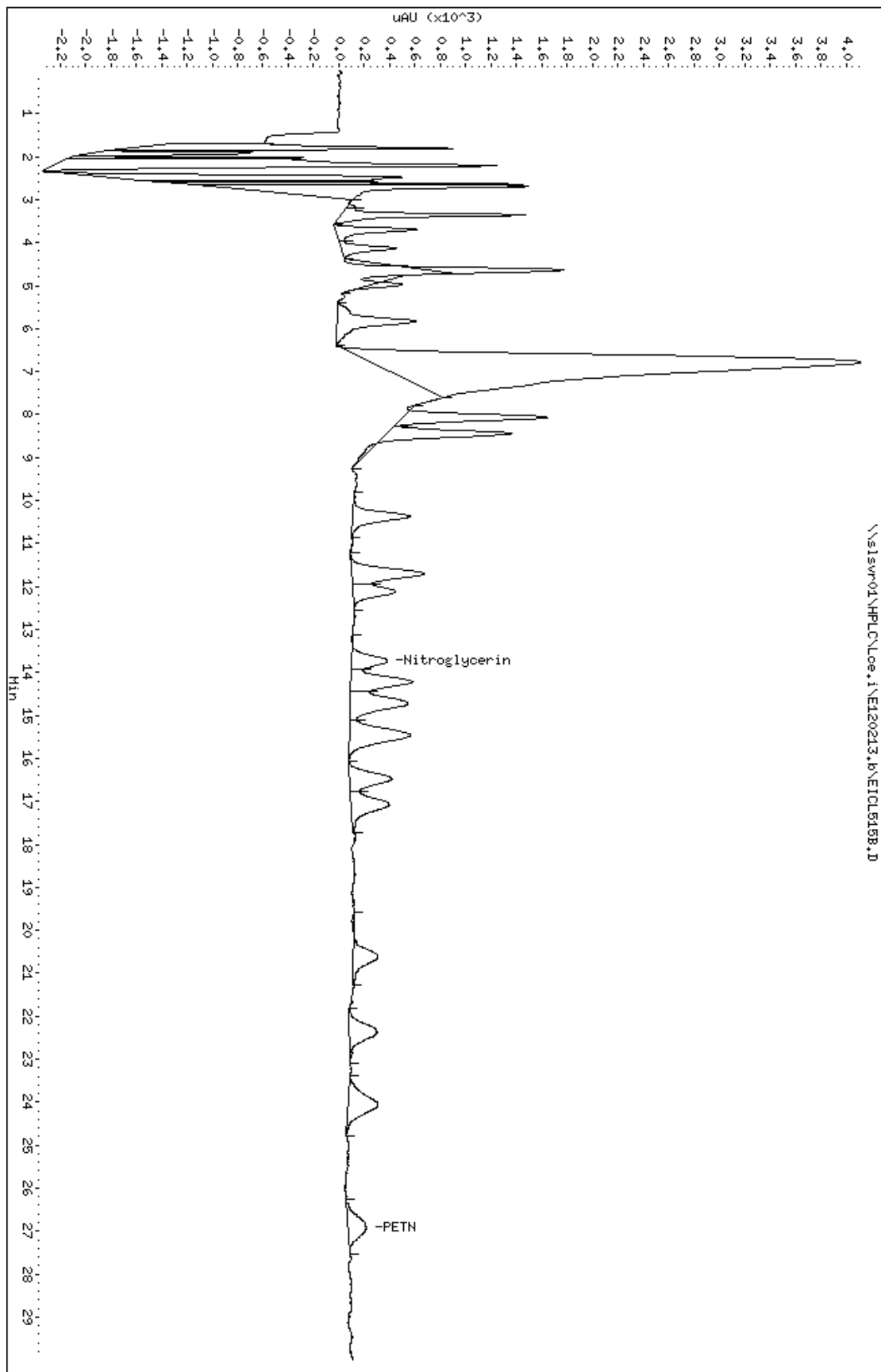
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
12 Nitroglycerin	13.741	13.760	-0.019	12423	50.0000	49.32
21 PETN	26.925	26.945	-0.020	12694	50.0000	47.99

Data File: \\slswr01\HPLC\Loc.i\NEL20213.b\NELCL515B.D  
Date : 13-FEB-2012 13:41  
Client ID: 8330 ICAL-2  
Sample Info: 8330 ICAL-2  
Purge Volume: 500.0  
Column phase: Allure C-18

Instrument: Loc.i  
Operator: AF  
Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL516.D

Report Date: 14-Feb-2012 12:53

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL516.D  
 Lab Smp Id: 8330 ICAL-3 Client Smp ID: 8330 ICAL-3  
 Inj Date : 13-FEB-2012 14:16  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-3  
 Misc Info : 8330 ICAL-3  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: FULL8330ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

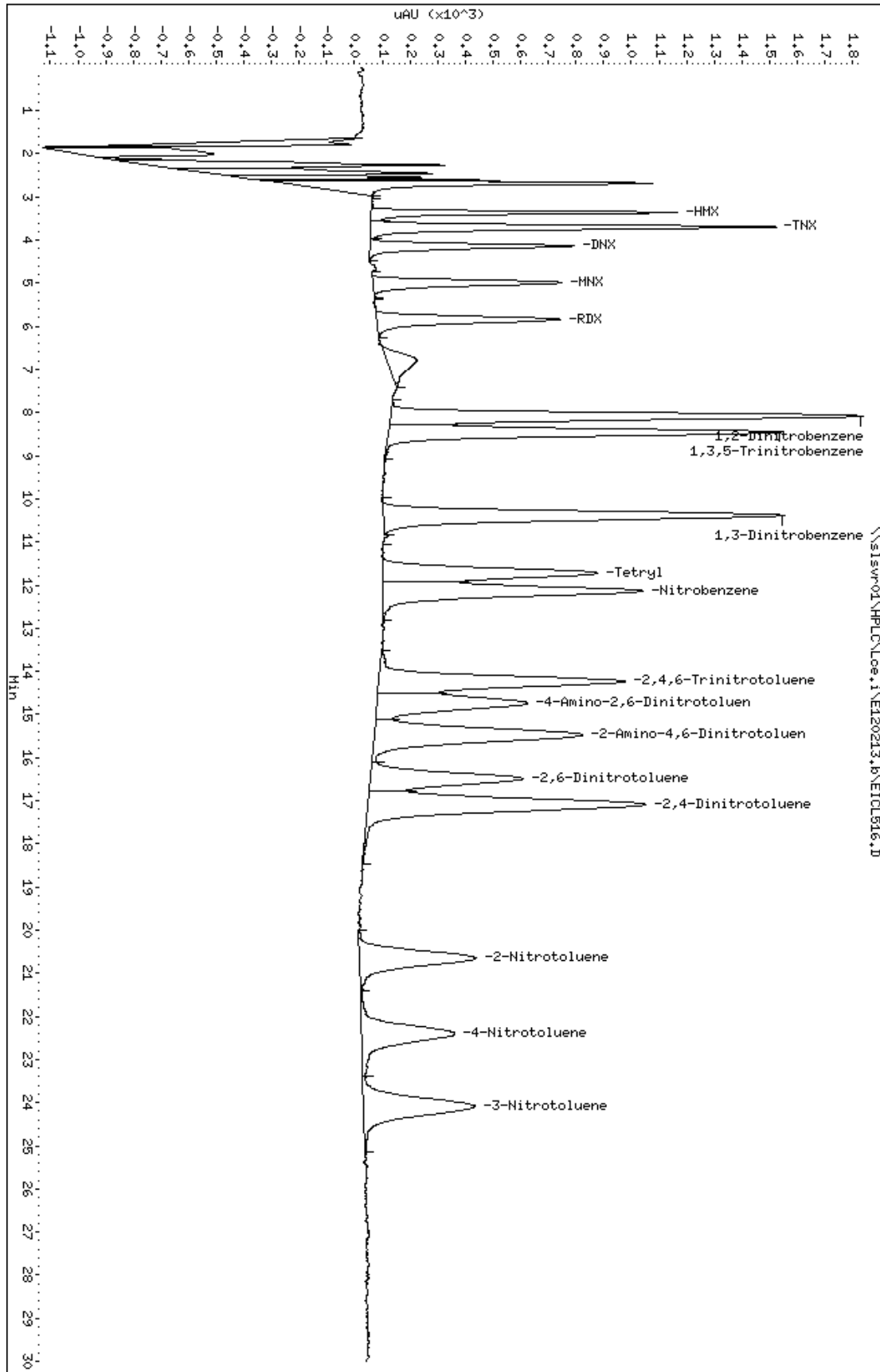
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$ 

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 HMX	3.360	3.358	0.002	15853	50.0000	51.62
2 TNX	3.696	3.695	0.001	28455	39.5000	41.86
3 DNX	4.137	4.138	-0.001	16000	27.5000	29.35
4 MNX	4.988	4.988	0.000	16774	36.0000	38.59
6 RDX	5.840	5.842	-0.002	18803	50.0000	49.74
\$ 7 1,2-Dinitrobenzene	8.081	8.086	-0.005	49334	100.000	104.0
8 1,3,5-Trinitrobenzene	8.454	8.460	-0.006	43658	50.0000	50.82
9 1,3-Dinitrobenzene	10.383	10.389	-0.006	52854	50.0000	50.62
10 Tetryl	11.721	11.729	-0.008	31934	50.0000	51.25
11 Nitrobenzene	12.137	12.141	-0.004	39931	50.0000	49.21
13 2,4,6-Trinitrotoluene	14.234	14.239	-0.005	40801	50.0000	52.33
14 4-Amino-2,6-Dinitrotoluene	14.738	14.740	-0.002	29034	50.0000	52.30
15 2-Amino-4,6-Dinitrotoluene	15.473	15.481	-0.008	42835	50.0000	52.40
16 2,6-Dinitrotoluene	16.490	16.497	-0.007	27813	50.0000	51.77
17 2,4-Dinitrotoluene	17.087	17.094	-0.007	54768	50.0000	51.49
18 2-Nitrotoluene	20.650	20.655	-0.005	26009	50.0000	51.39
19 4-Nitrotoluene	22.401	22.405	-0.004	24253	50.0000	53.51
20 3-Nitrotoluene	24.085	24.097	-0.012	28951	50.0000	51.30

Data File: \\sisvr01\HPLC\Loc.i\VE120213.b\EICL516.D  
 Date : 13-FEB-2012 14:16  
 Client ID: 8330 ICAL-3  
 Sample Info: 8330 ICAL-3  
 Purge Volume: 500.0  
 Column Phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60





Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL516B.D  
 Report Date: 14-Feb-2012 12:53

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL516B.D  
 Lab Smp Id: 8330 ICAL-3 Client Smp ID: 8330 ICAL-3  
 Inj Date : 13-FEB-2012 14:16  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-3  
 Misc Info : 8330 ICAL-3  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: NGPETN\_ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

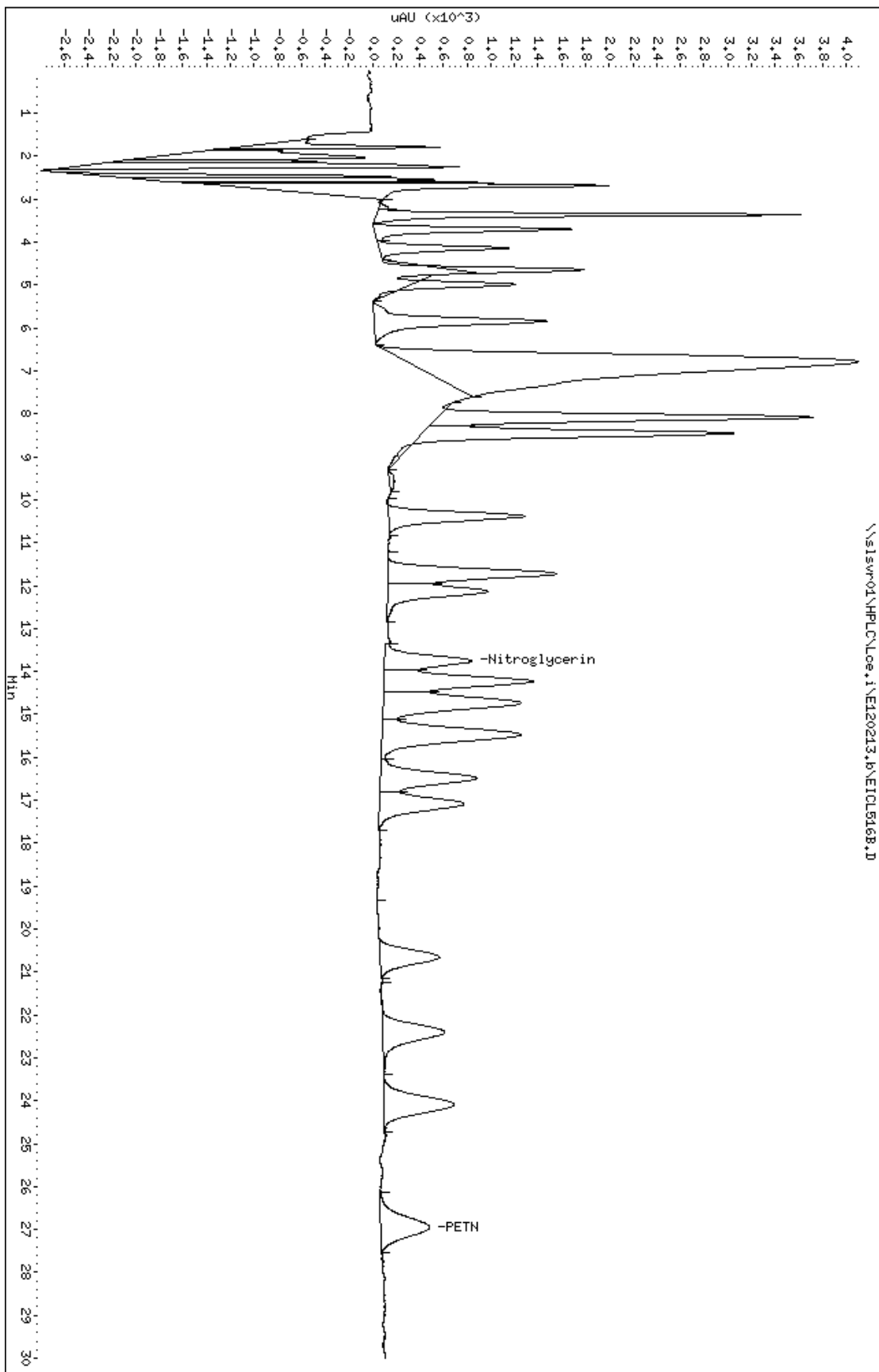
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
12 Nitroglycerin	13.755	13.760	-0.005	33283	125.000	132.1
21 PETN	26.952	26.945	0.007	33642	125.000	127.2

Data File: \\sisvr01\HPLC\Loc.i\NEL20213.b\NELCL516B.D  
 Date : 13-FEB-2012 14:16  
 Client ID: 8330 ICAL-3  
 Sample Info: 8330 ICAL-3  
 Purge Volume: 500.0  
 Column phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL517.D

Report Date: 14-Feb-2012 12:53

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL517.D  
 Lab Smp Id: 8330 ICAL-4 Client Smp ID: 8330 ICAL-4  
 Inj Date : 13-FEB-2012 14:51  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-4  
 Misc Info : 8330 ICAL-4  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: FULL8330ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

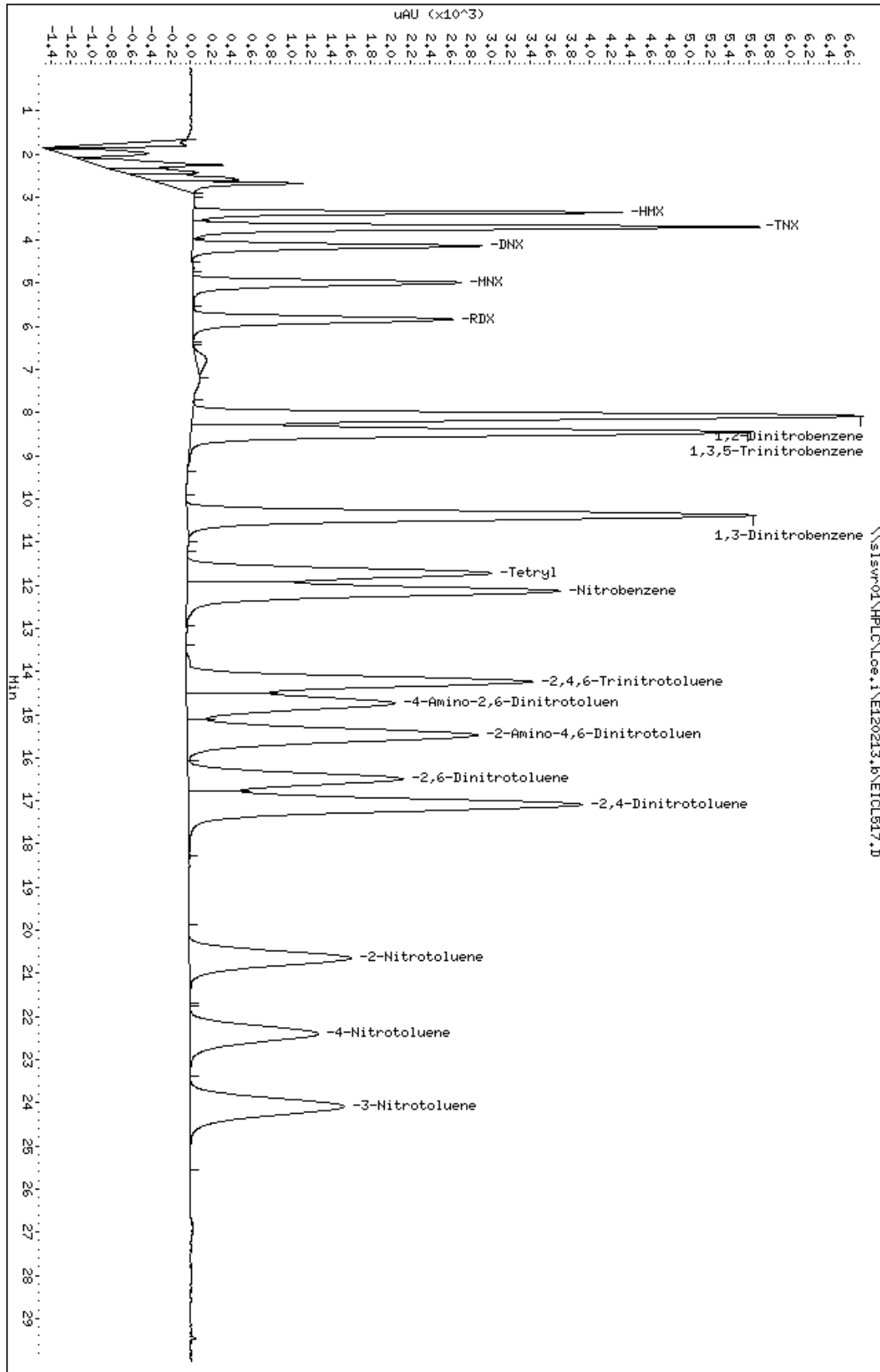
Concentration Formula: Amt \* DF \* (2\*Vt/UF)/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 HMX	3.357	3.358	-0.001	61321	200.000	199.7
2 TNX	3.694	3.695	-0.001	108759	158.000	160.0
3 DNX	4.136	4.138	-0.002	62633	110.000	114.9
4 MNX	4.985	4.988	-0.003	67273	144.000	154.8
6 RDX	5.838	5.842	-0.004	73449	200.000	194.3
\$ 7 1,2-Dinitrobenzene	8.078	8.086	-0.008	194133	400.000	409.3
8 1,3,5-Trinitrobenzene	8.453	8.460	-0.007	173640	200.000	202.1
9 1,3-Dinitrobenzene	10.381	10.389	-0.008	208661	200.000	199.8
10 Tetryl	11.723	11.729	-0.006	125522	200.000	201.4
11 Nitrobenzene	12.138	12.141	-0.003	159796	200.000	196.9
13 2,4,6-Trinitrotoluene	14.238	14.239	-0.001	155911	200.000	200.0
14 4-Amino-2,6-Dinitrotoluene	14.737	14.740	-0.003	109186	200.000	196.7
15 2-Amino-4,6-Dinitrotoluene	15.476	15.481	-0.005	161159	200.000	197.2
16 2,6-Dinitrotoluene	16.493	16.497	-0.004	106631	200.000	198.5
17 2,4-Dinitrotoluene	17.090	17.094	-0.004	211557	200.000	198.9
18 2-Nitrotoluene	20.648	20.655	-0.007	98906	200.000	195.4
19 4-Nitrotoluene	22.400	22.405	-0.005	85872	200.000	189.4
20 3-Nitrotoluene	24.087	24.097	-0.010	109612	200.000	194.2

Data File: \\slswr01\HPLC\Loc.i\EA120213.b\EICL517.D  
Date : 13-FEB-2012 14:51  
Client ID: 8330 ICAL-4  
Sample Info: 8330 ICAL-4  
Purge Volume: 500.0  
Column Phase: Allure C-18

Instrument: Loc.i  
Operator: AF  
Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL517B.D  
 Report Date: 14-Feb-2012 12:53

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL517B.D  
 Lab Smp Id: 8330 ICAL-4 Client Smp ID: 8330 ICAL-4  
 Inj Date : 13-FEB-2012 14:51  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-4  
 Misc Info : 8330 ICAL-4  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: NGPETN\_ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

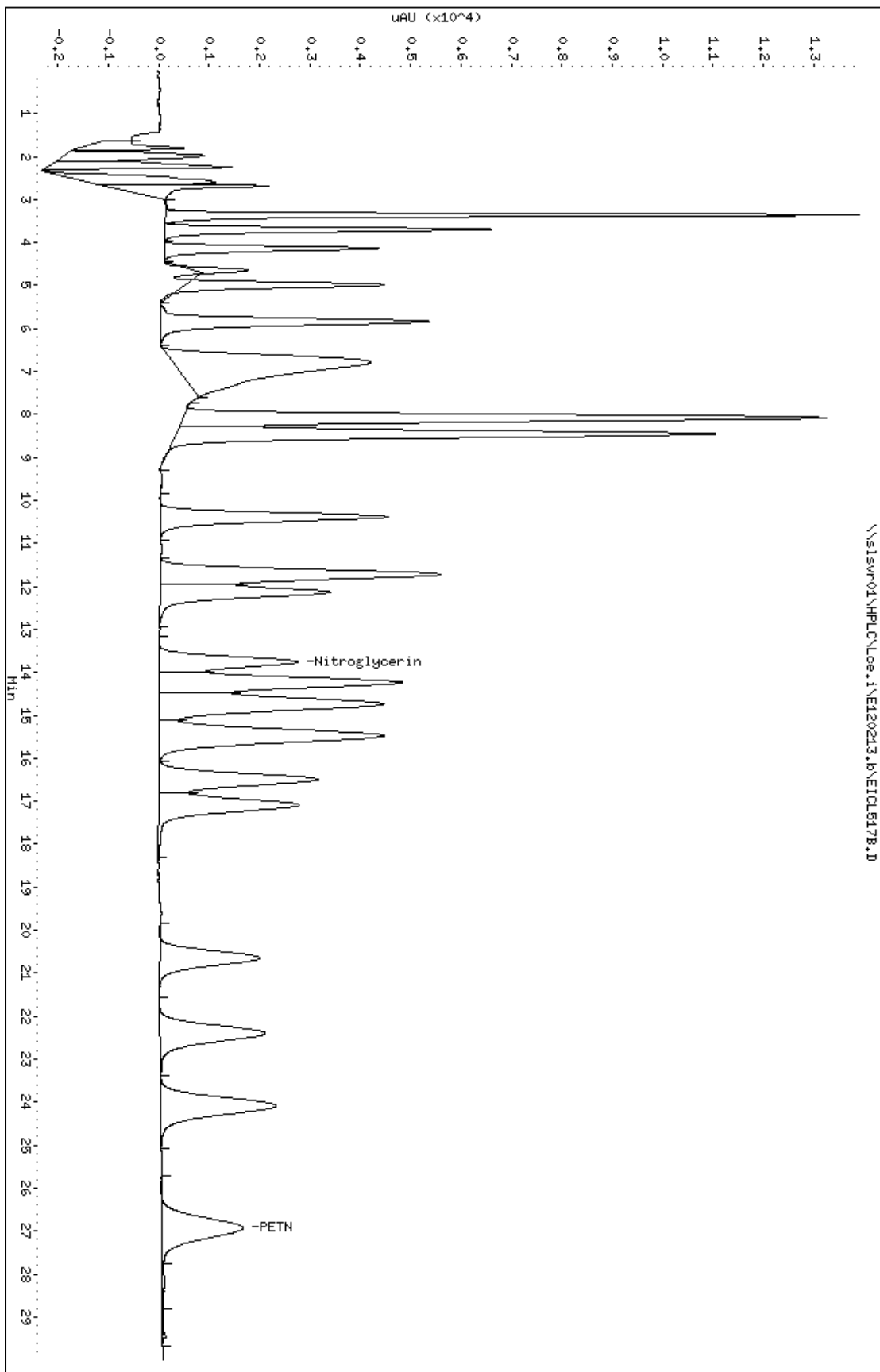
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
12 Nitroglycerin	13.759	13.760	-0.001	118646	500.000	471.0
21 PETN	26.928	26.945	-0.017	135314	500.000	511.6

Data File: \\slswr01\HPLC\Loc.i\NEL20213.b\NELCL517B.D  
 Date : 13-FEB-2012 14:51  
 Client ID: 8330 ICAL-4  
 Sample Info: 8330 ICAL-4  
 Purge Volume: 500.0  
 Column phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL518.D

Report Date: 14-Feb-2012 12:53

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL518.D  
 Lab Smp Id: 8330 ICAL-5 Client Smp ID: 8330 ICAL-5  
 Inj Date : 13-FEB-2012 15:25  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-5  
 Misc Info : 8330 ICAL-5  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: FULL8330ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

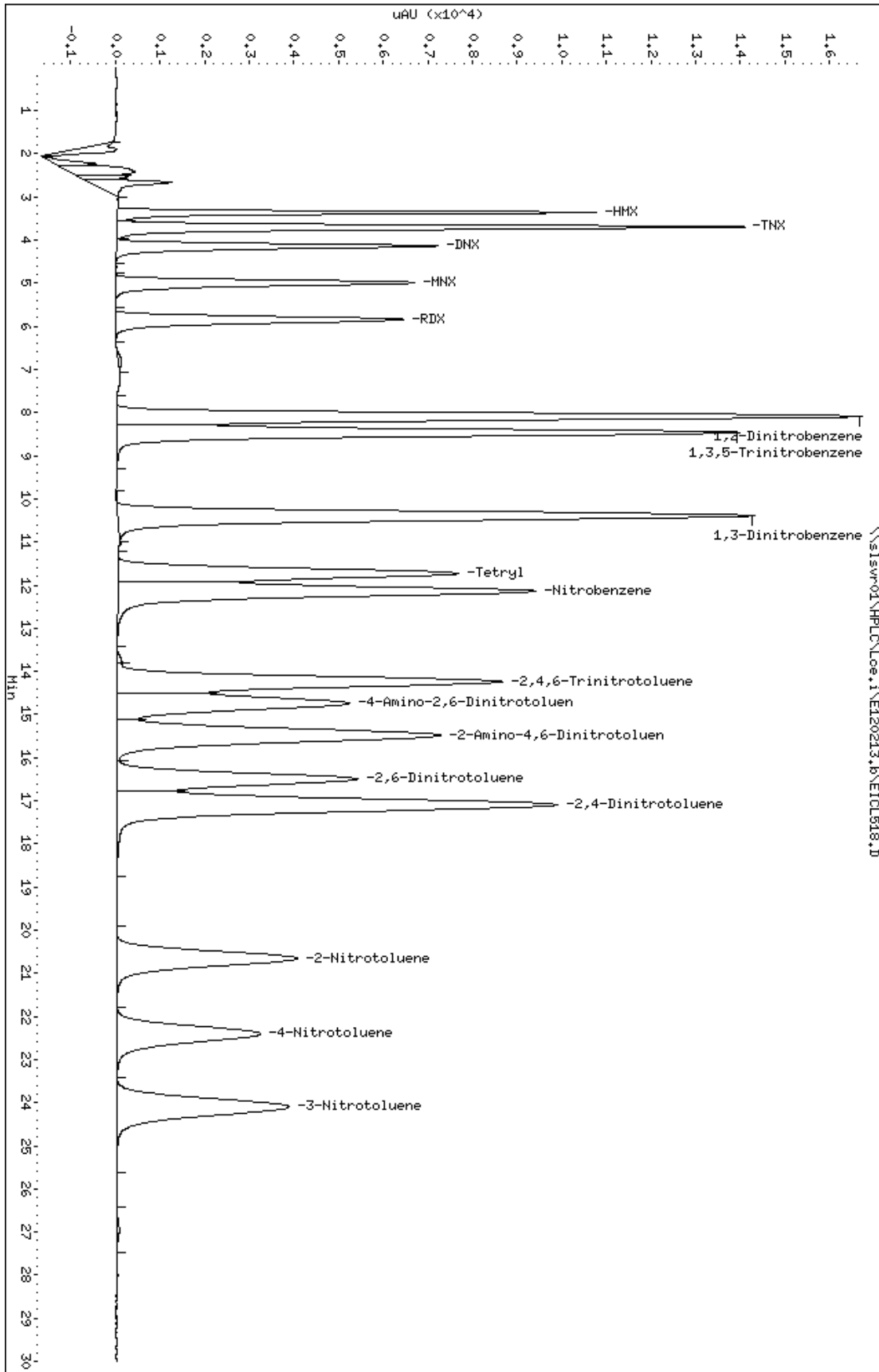
Concentration Formula: Amt \* DF \* (2\*Vt/UF)/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 HMX	3.358	3.358	0.000	151277	500.000	492.6
2 TNX	3.695	3.695	0.000	269946	395.000	397.1
3 DNX	4.138	4.138	0.000	156634	275.000	287.3
4 MNX	4.988	4.988	0.000	167355	360.000	385.0
6 RDX	5.842	5.842	0.000	181544	500.000	480.2
\$ 7 1,2-Dinitrobenzene	8.086	8.086	0.000	482820	1000.00	1018
8 1,3,5-Trinitrobenzene	8.460	8.460	0.000	431529	500.000	502.4
9 1,3-Dinitrobenzene	10.389	10.389	0.000	521673	500.000	499.6
10 Tetryl	11.729	11.729	0.000	312005	500.000	500.7
11 Nitrobenzene	12.141	12.141	0.000	402432	500.000	496.0
13 2,4,6-Trinitrotoluene	14.239	14.239	0.000	386355	500.000	495.5
14 4-Amino-2,6-Dinitrotoluene	14.740	14.740	0.000	272396	500.000	490.7
15 2-Amino-4,6-Dinitrotoluene	15.481	15.481	0.000	401843	500.000	491.6
16 2,6-Dinitrotoluene	16.497	16.497	0.000	267473	500.000	497.8
17 2,4-Dinitrotoluene	17.094	17.094	0.000	529983	500.000	498.2
18 2-Nitrotoluene	20.655	20.655	0.000	249599	500.000	493.2
19 4-Nitrotoluene	22.405	22.405	0.000	214513	500.000	473.3
20 3-Nitrotoluene	24.097	24.097	0.000	271991	500.000	482.0

Data File: \\sisvr01\HPLC\Loc.i\VE120213.b\EICL518.D  
Date : 13-FEB-2012 15:25  
Client ID: 8330 ICAL-5  
Sample Info: 8330 ICAL-5  
Purge Volume: 500.0  
Column phase: Allure C-18

Instrument: Loc.i  
Operator: AF  
Column diameter: 4.60





Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL518B.D  
 Report Date: 14-Feb-2012 12:53

TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL518B.D  
 Lab Smp Id: 8330 ICAL-5 Client Smp ID: 8330 ICAL-5  
 Inj Date : 13-FEB-2012 15:25  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-5  
 Misc Info : 8330 ICAL-5  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: NGPETN\_ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

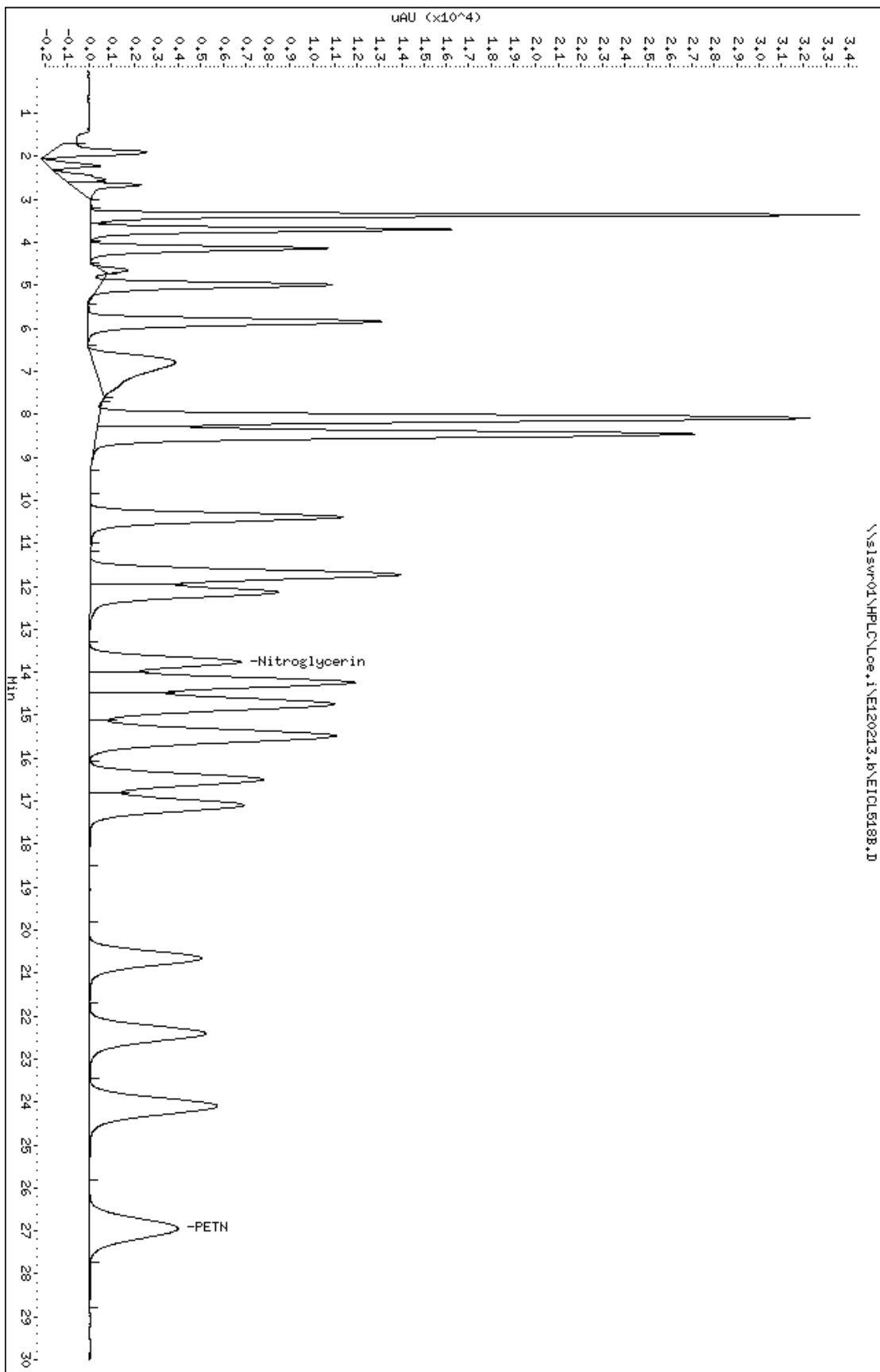
Concentration Formula: Amt \* DF \* (2\*Vt/UF)/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
12 Nitroglycerin	13.760	13.760	0.000	293252	1250.00	1164
21 PETN	26.945	26.945	0.000	334191	1250.00	1263

Data File: \\slswr01\HPLC\Loc.i\EI20213.b\EICL518B.D  
 Date : 13-FEB-2012 15:25  
 Client ID: 8330 ICAL-5  
 Sample Info: 8330 ICAL-5  
 Purge Volume: 500.0  
 Column phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL519.D

Report Date: 14-Feb-2012 12:54

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL519.D  
 Lab Smp Id: 8330 ICAL-6 Client Smp ID: 8330 ICAL-6  
 Inj Date : 13-FEB-2012 16:04  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-6  
 Misc Info : 8330 ICAL-6  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: FULL8330ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

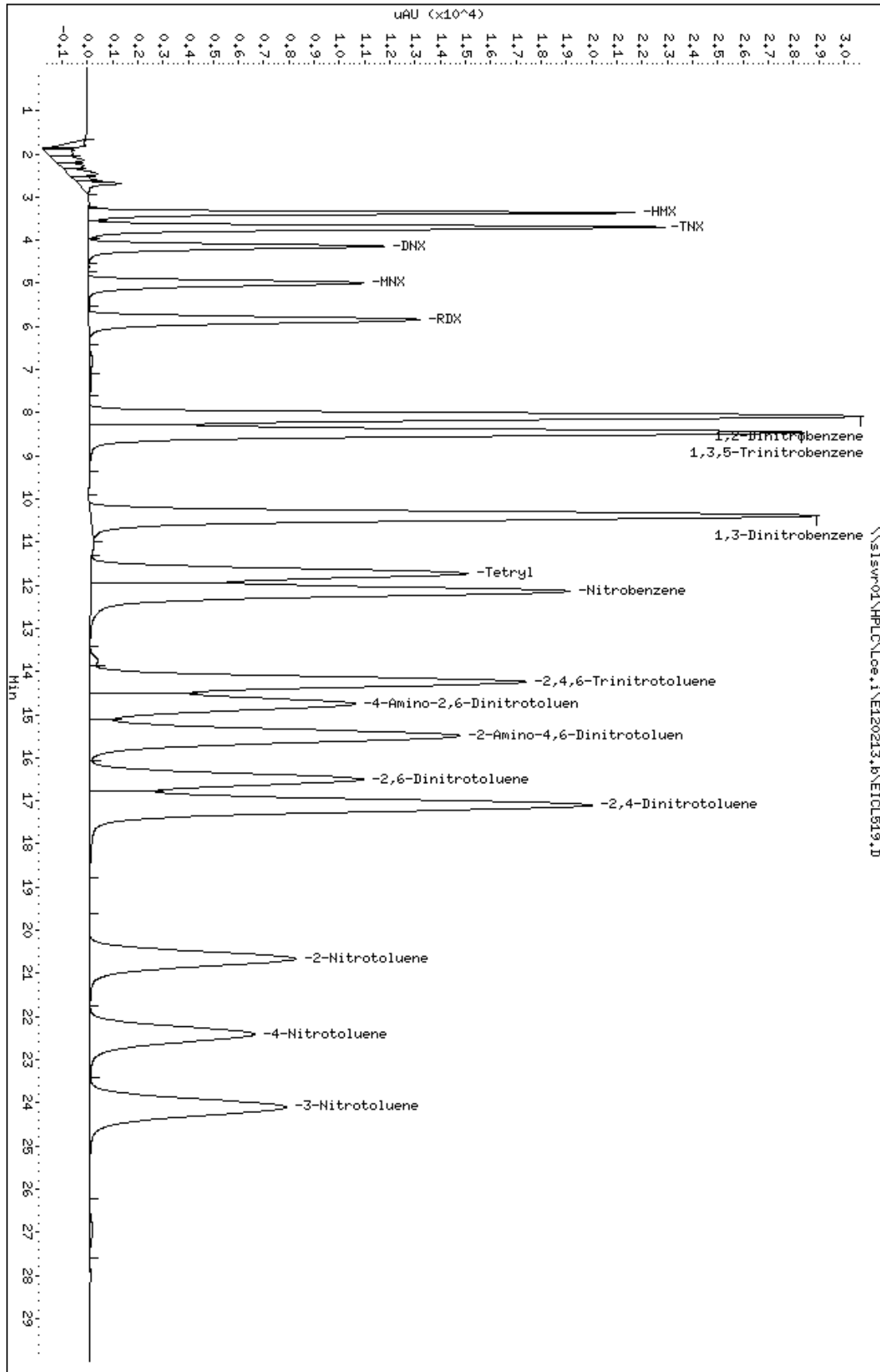
Concentration Formula: Amt \* DF \* (2\*Vt/UF)/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 HMX	3.362	3.358	0.004	304676	1000.00	992.0
2 TNX	3.699	3.695	0.004	434133	790.000	638.7
3 DNX	4.142	4.138	0.004	252100	550.000	462.4
4 MNX	4.991	4.988	0.003	269550	720.000	620.1
6 RDX	5.843	5.842	0.001	368037	1000.00	973.5
\$ 7 1,2-Dinitrobenzene	8.081	8.086	-0.005	883843	2000.00	1863
8 1,3,5-Trinitrobenzene	8.456	8.460	-0.004	873769	1000.00	1017
9 1,3-Dinitrobenzene	10.386	10.389	-0.003	1050293	1000.00	1006
10 Tetryl	11.728	11.729	-0.001	610915	1000.00	980.4
11 Nitrobenzene	12.140	12.141	-0.001	818350	1000.00	1008
13 2,4,6-Trinitrotoluene	14.242	14.239	0.003	774239	1000.00	993.0
14 4-Amino-2,6-Dinitrotoluene	14.750	14.740	0.010	551574	1000.00	993.7
15 2-Amino-4,6-Dinitrotoluene	15.492	15.481	0.011	810058	1000.00	991.0
16 2,6-Dinitrotoluene	16.502	16.497	0.005	536454	1000.00	998.5
17 2,4-Dinitrotoluene	17.101	17.094	0.007	1067808	1000.00	1004
18 2-Nitrotoluene	20.660	20.655	0.005	499808	1000.00	987.6
19 4-Nitrotoluene	22.410	22.405	0.005	433608	1000.00	956.6
20 3-Nitrotoluene	24.102	24.097	0.005	551522	1000.00	977.3

Data File: \\sisvr01\HPLC\Loc.i\VE120213.b\EICL519.D  
 Date : 13-FEB-2012 16:04  
 Client ID: 8330 ICAL-6  
 Sample Info: 8330 ICAL-6  
 Purge Volume: 500.0  
 Column Phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL519B.D  
 Report Date: 14-Feb-2012 12:54

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL519B.D  
 Lab Smp Id: 8330 ICAL-6 Client Smp ID: 8330 ICAL-6  
 Inj Date : 13-FEB-2012 16:04  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-6  
 Misc Info : 8330 ICAL-6  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: NGPETN\_ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

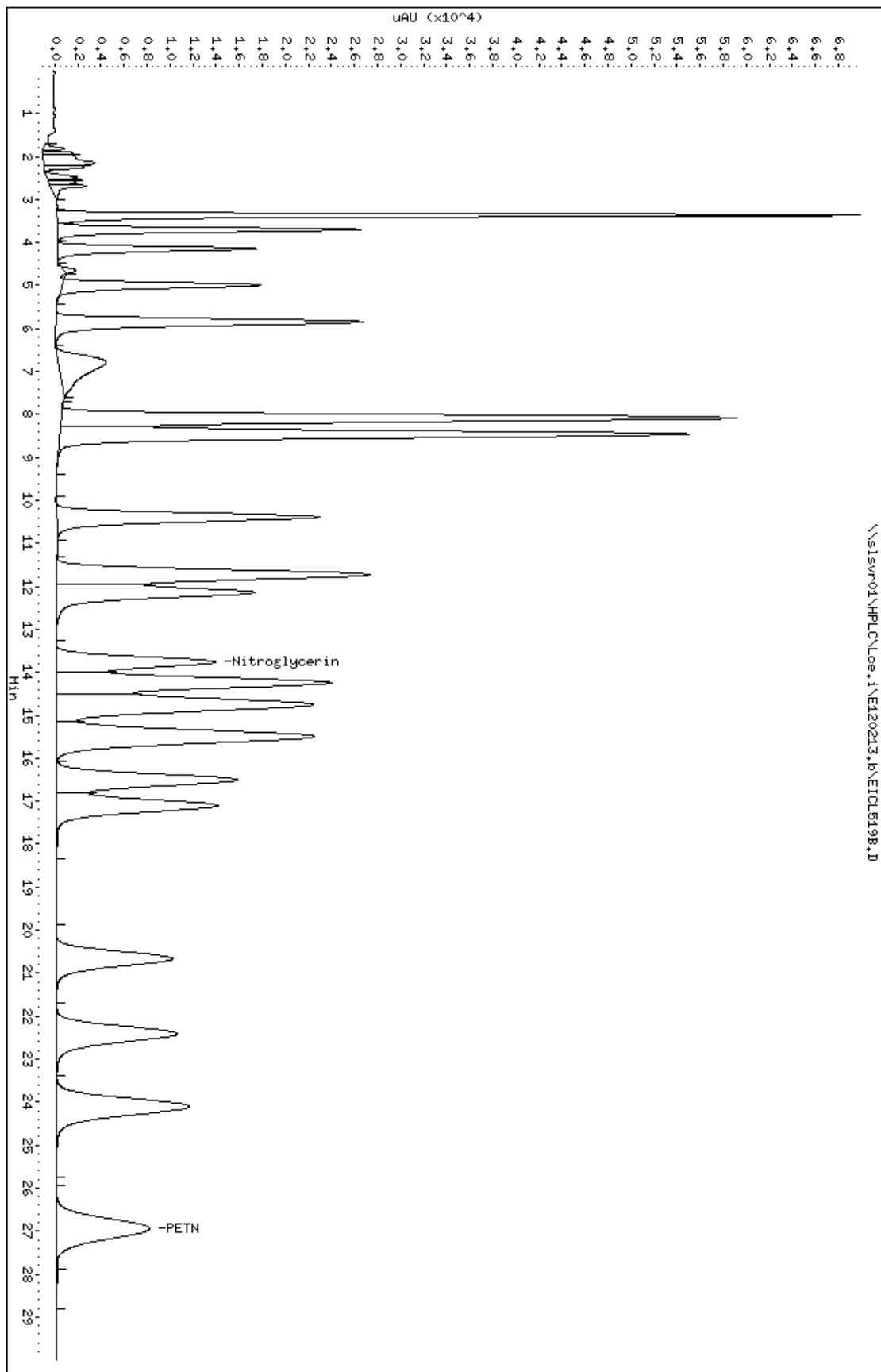
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
12 Nitroglycerin	13.760	13.760	0.000	598062	2500.00	2374
21 PETN	26.942	26.945	-0.003	685460	2500.00	2591

Data File: \\slswr01\HPLC\Loc.i\NEL20213.b\NELCL519B.D  
Date : 13-FEB-2012 16:04  
Client ID: 8330 ICAL-6  
Sample Info: 8330 ICAL-6  
Purge Volume: 500.0  
Column phase: Allure C-18

Instrument: Loc.i  
Operator: AF  
Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL520.D  
 Report Date: 14-Feb-2012 12:54

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL520.D  
 Lab Smp Id: 8330 ICAL-7 Client Smp ID: 8330 ICAL-7  
 Inj Date : 13-FEB-2012 16:39  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-7  
 Misc Info : 8330 ICAL-7  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 7  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: FULL8330ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

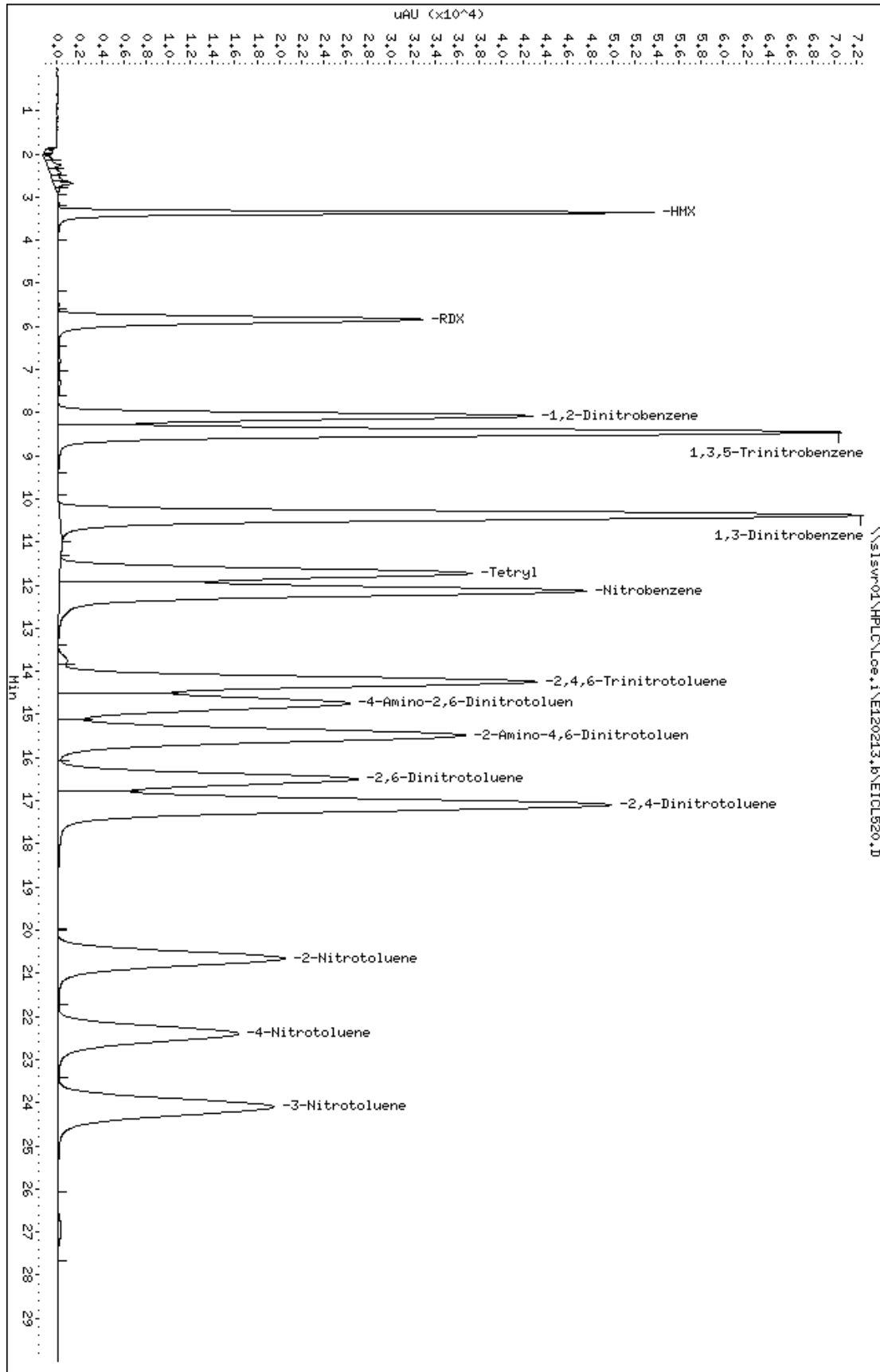
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 HMX	3.359	3.358	0.001	755968	2500.00	2461
6 RDX	5.841	5.842	-0.001	913805	2500.00	2417
\$ 7 1,2-Dinitrobenzene	8.080	8.086	-0.006	1217300	2500.00	2566
8 1,3,5-Trinitrobenzene	8.455	8.460	-0.005	2150868	2500.00	2504
9 1,3-Dinitrobenzene	10.382	10.389	-0.007	2606613	2500.00	2496
10 Tetryl	11.724	11.729	-0.005	1513663	2500.00	2429
11 Nitrobenzene	12.137	12.141	-0.004	2026814	2500.00	2498
13 2,4,6-Trinitrotoluene	14.241	14.239	0.002	1921928	2500.00	2465
14 4-Amino-2,6-Dinitrotoluene	14.742	14.740	0.002	1368833	2500.00	2466
15 2-Amino-4,6-Dinitrotoluene	15.482	15.481	0.001	2012401	2500.00	2462
16 2,6-Dinitrotoluene	16.499	16.497	0.002	1334248	2500.00	2483
17 2,4-Dinitrotoluene	17.095	17.094	0.001	2659845	2500.00	2500
18 2-Nitrotoluene	20.656	20.655	0.001	1242568	2500.00	2455
19 4-Nitrotoluene	22.400	22.405	-0.005	1072332	2500.00	2366
20 3-Nitrotoluene	24.097	24.097	0.000	1363076	2500.00	2415

Data File: \\sisvr01\HPLC\Loc.i\VE120213.b\EICL520.D  
Date : 13-FEB-2012 16:39  
Client ID: 8330 ICAL-7  
Sample Info: 8330 ICAL-7  
Purge Volume: 500.0  
Column Phase: Allure C-18

Instrument: Loc.i  
Operator: AF  
Column diameter: 4.60





Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL520B.D  
 Report Date: 14-Feb-2012 12:54

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL520B.D  
 Lab Smp Id: 8330 ICAL-7 Client Smp ID: 8330 ICAL-7  
 Inj Date : 13-FEB-2012 16:39  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-7  
 Misc Info : 8330 ICAL-7  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 7  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: NGPETN\_ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

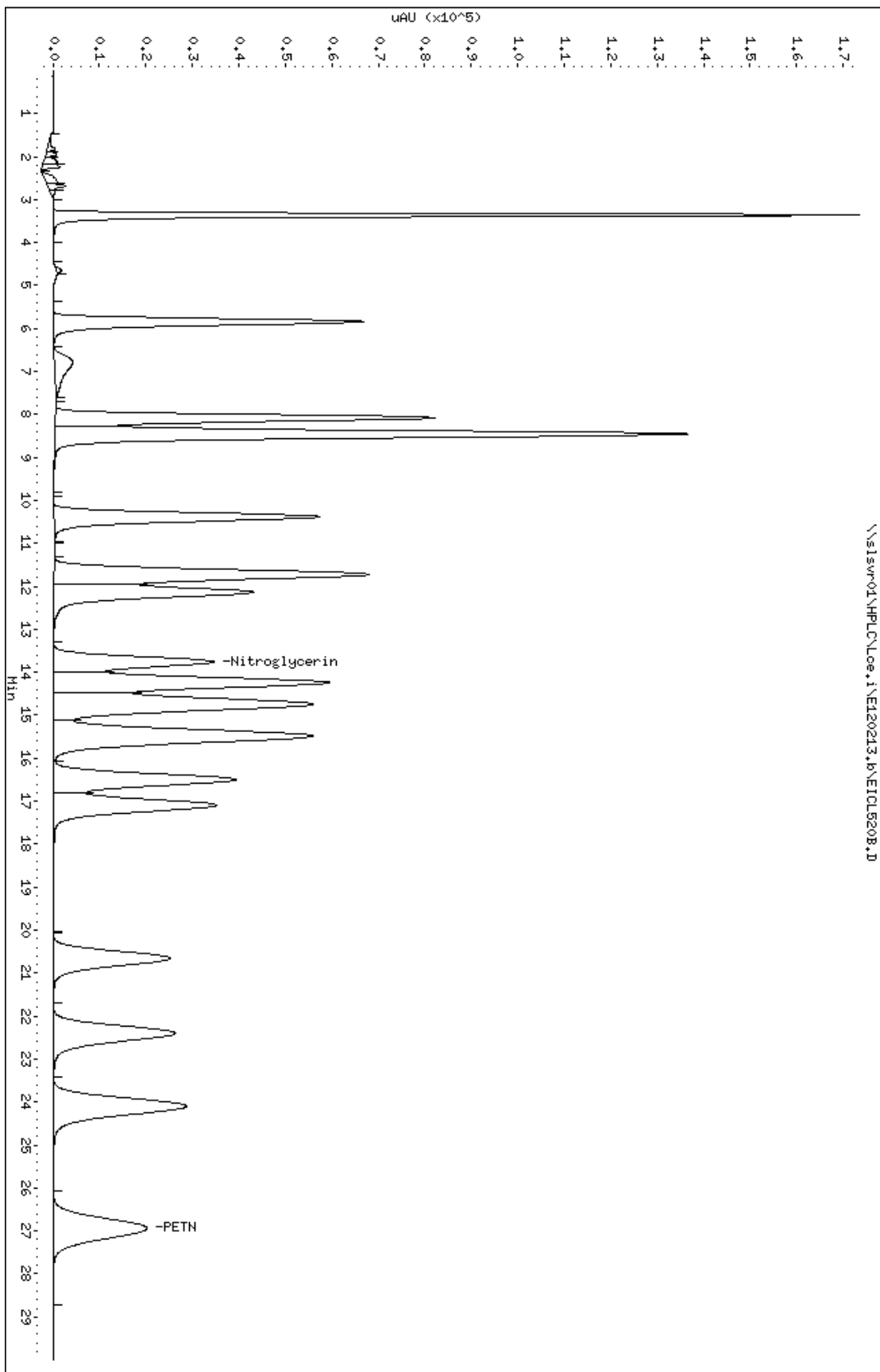
Concentration Formula: Amt \* DF \* (2\*Vt/UF)/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
12 Nitroglycerin	13.758	13.760	-0.002	1483726	6250.00	5890
21 PETN	26.939	26.945	-0.006	1706940	6250.00	6453

Data File: \\slswr01\HPLC\Loc.i\NEL20213.b\NELCL5208.D  
 Date : 13-FEB-2012 16:39  
 Client ID: 8330 ICAL-7  
 Sample Info: 8330 ICAL-7  
 Purge Volume: 500.0  
 Column phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL521.D  
 Report Date: 14-Feb-2012 12:54

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL521.D  
 Lab Smp Id: 8330 ICAL-8 Client Smp ID: 8330 ICAL-8  
 Inj Date : 13-FEB-2012 17:13  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-8  
 Misc Info : 8330 ICAL-8  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 8  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: FULL8330ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

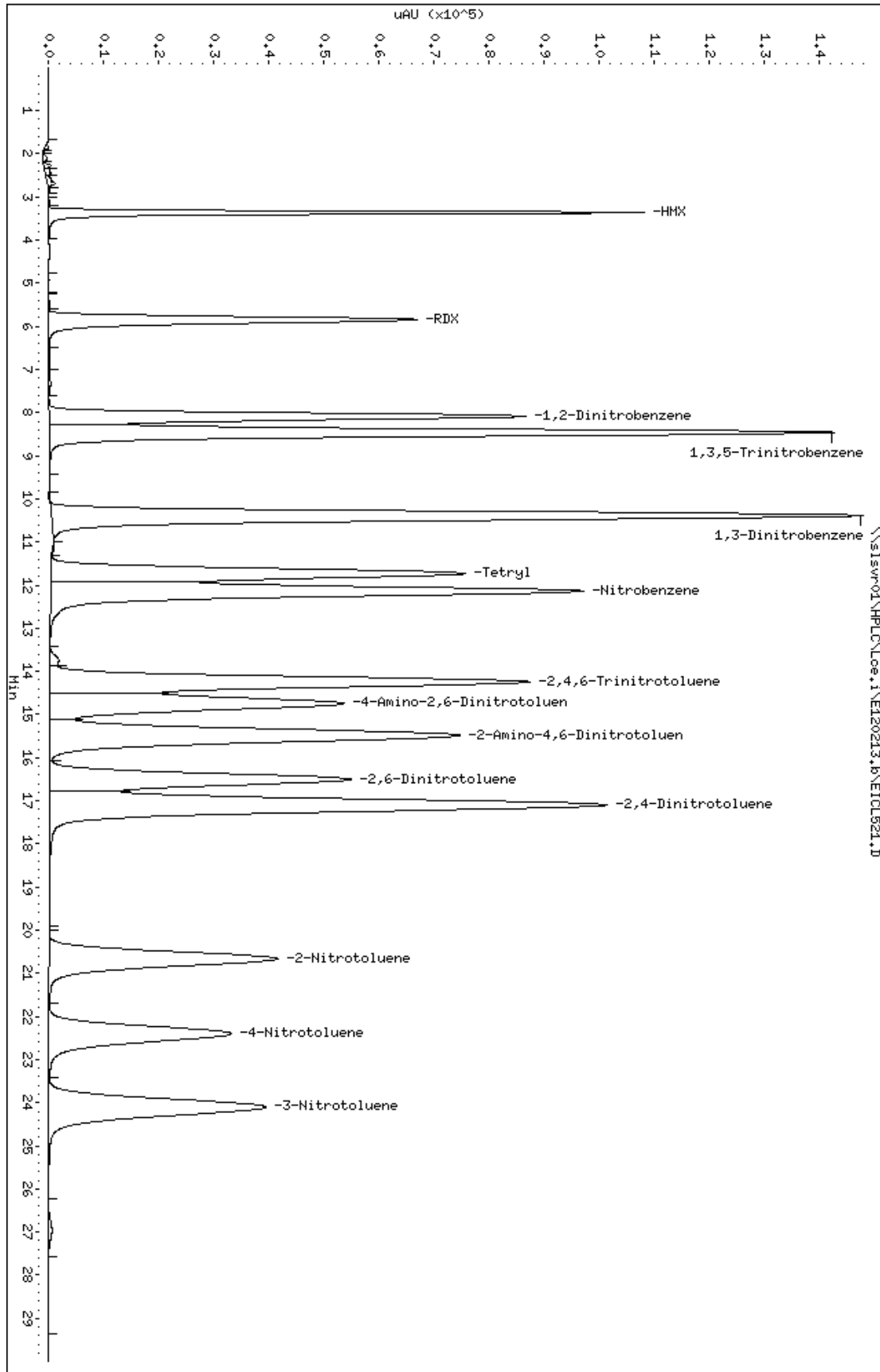
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 HMX	3.359	3.358	0.001	1518360	5000.00	4944
6 RDX	5.843	5.842	0.001	1841193	5000.00	4870
\$ 7 1,2-Dinitrobenzene	8.085	8.086	-0.001	2452092	5000.00	5170
8 1,3,5-Trinitrobenzene	8.459	8.460	-0.001	4332866	5000.00	5044
9 1,3-Dinitrobenzene	10.385	10.389	-0.004	5251985	5000.00	5030
10 Tetryl	11.730	11.729	0.001	3047673	5000.00	4891
11 Nitrobenzene	12.138	12.141	-0.003	4095677	5000.00	5047
13 2,4,6-Trinitrotoluene	14.244	14.239	0.005	3870600	5000.00	4964
14 4-Amino-2,6-Dinitrotoluene	14.744	14.740	0.004	2760471	5000.00	4973
15 2-Amino-4,6-Dinitrotoluene	15.482	15.481	0.001	4055222	5000.00	4961
16 2,6-Dinitrotoluene	16.504	16.497	0.007	2690543	5000.00	5008
17 2,4-Dinitrotoluene	17.097	17.094	0.003	5357256	5000.00	5036
18 2-Nitrotoluene	20.663	20.655	0.008	2506205	5000.00	4952
19 4-Nitrotoluene	22.400	22.405	-0.005	2167957	5000.00	4783
20 3-Nitrotoluene	24.101	24.097	0.004	2748807	5000.00	4871

Data File: \\sisvr01\HPLC\Loc.i\VE120213.b\EICL521.D  
Date : 13-FEB-2012 17:13  
Client ID: 8330 ICAL-8  
Sample Info: 8330 ICAL-8  
Purge Volume: 500.0  
Column Phase: Allure C-18

Instrument: Loc.i  
Operator: AF  
Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL521B.D  
 Report Date: 14-Feb-2012 12:54

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL521B.D  
 Lab Smp Id: 8330 ICAL-8 Client Smp ID: 8330 ICAL-8  
 Inj Date : 13-FEB-2012 17:13  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-8  
 Misc Info : 8330 ICAL-8  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 8  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: NGPETN\_ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

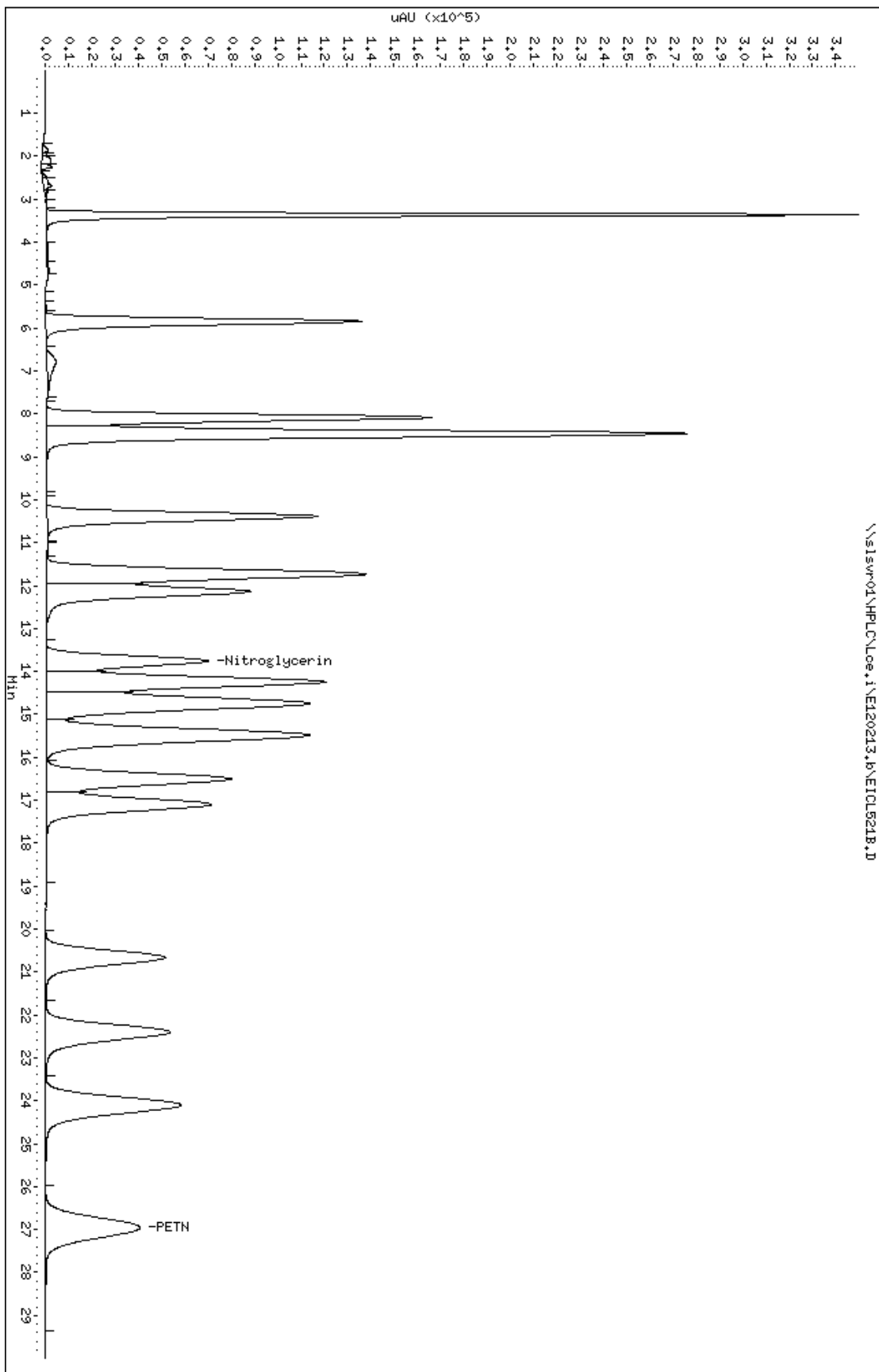
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
12 Nitroglycerin	13.757	13.760	-0.003	2985998	12500.0	11850
21 PETN	26.956	26.945	0.011	3437403	12500.0	13000

Data File: \\slswr01\HPLC\Loc.i\NEL20213.b\NEL521B.D  
 Date : 13-FEB-2012 17:13  
 Client ID: 8330 ICAL-8  
 Sample Info: 8330 ICAL-8  
 Purge Volume: 500.0  
 Column phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL522.D  
 Report Date: 14-Feb-2012 12:54

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL522.D  
 Lab Smp Id: 8330 ICAL-9 Client Smp ID: 8330 ICAL-9  
 Inj Date : 13-FEB-2012 17:48  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-9  
 Misc Info : 8330 ICAL-9  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 9  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: FULL8330ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

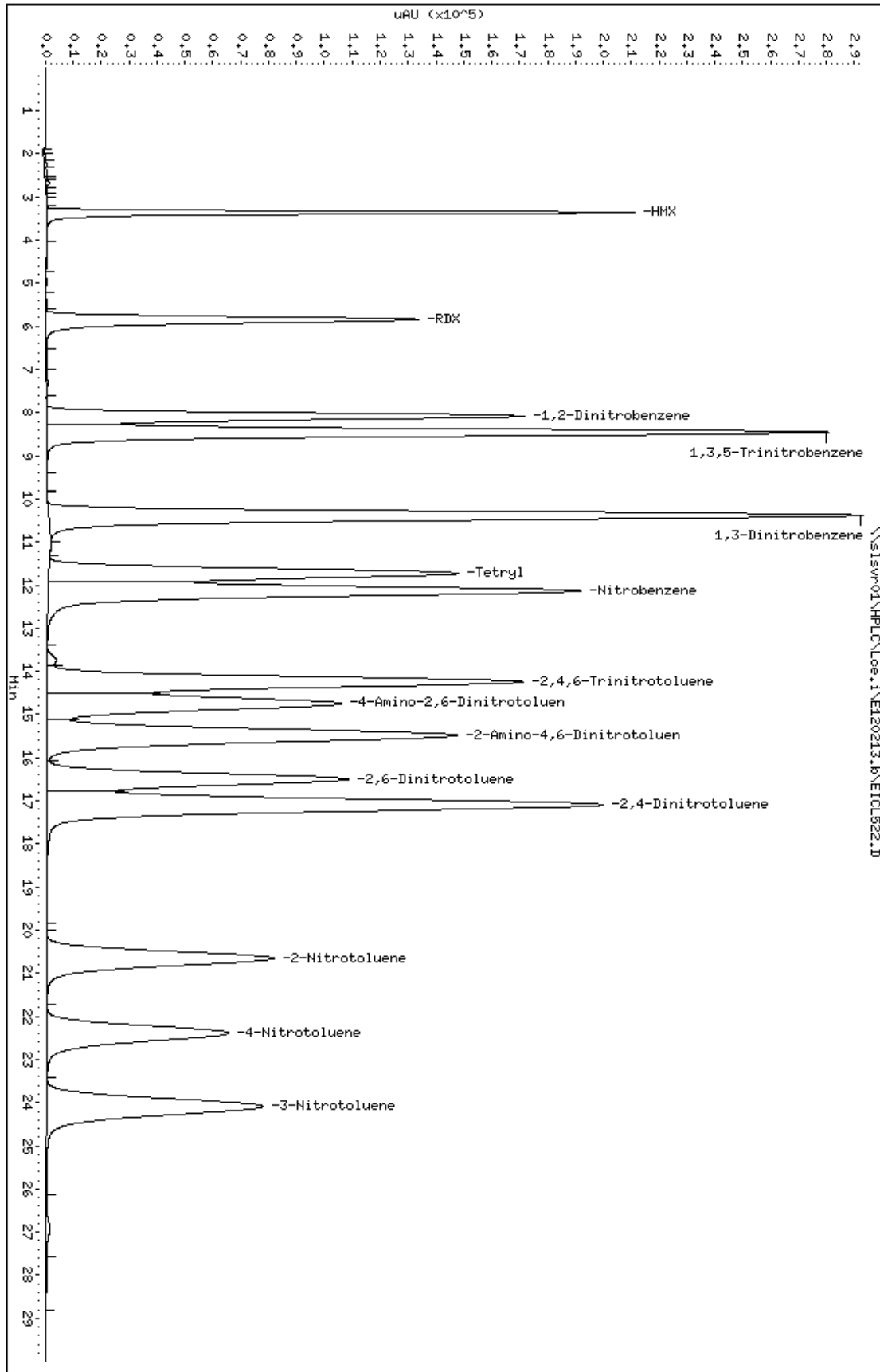
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 HMX	3.358	3.358	0.000	2959336	10000.0	9636
6 RDX	5.843	5.842	0.001	3596084	10000.0	9512
\$ 7 1,2-Dinitrobenzene	8.082	8.086	-0.004	4800047	10000.0	10120
8 1,3,5-Trinitrobenzene	8.456	8.460	-0.004	8468703	10000.0	9859
9 1,3-Dinitrobenzene	10.382	10.389	-0.007	10271490	10000.0	9837
10 Tetryl	11.729	11.729	0.000	5947354	10000.0	9544
11 Nitrobenzene	12.133	12.141	-0.008	8012241	10000.0	9874
13 2,4,6-Trinitrotoluene	14.243	14.239	0.004	7553602	10000.0	9688
14 4-Amino-2,6-Dinitrotoluene	14.744	14.740	0.004	5399495	10000.0	9727
15 2-Amino-4,6-Dinitrotoluene	15.481	15.481	0.000	7925062	10000.0	9695
16 2,6-Dinitrotoluene	16.501	16.497	0.004	5259338	10000.0	9789
17 2,4-Dinitrotoluene	17.093	17.094	-0.001	10461408	10000.0	9835
18 2-Nitrotoluene	20.654	20.655	-0.001	4901034	10000.0	9684
19 4-Nitrotoluene	22.387	22.405	-0.018	4241294	10000.0	9357
20 3-Nitrotoluene	24.089	24.097	-0.008	5397987	10000.0	9565

Data File: \\sisvr01\HPLC\Loc.i\VE120213.b\EICL522.D  
Date : 13-FEB-2012 17:48  
Client ID: 8330 ICAL-9  
Sample Info: 8330 ICAL-9  
Purge Volume: 500.0  
Column Phase: Allure C-18

Instrument: Loc.i  
Operator: AF  
Column diameter: 4.60





Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICL522B.D  
 Report Date: 14-Feb-2012 12:54

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICL522B.D  
 Lab Smp Id: 8330 ICAL-9 Client Smp ID: 8330 ICAL-9  
 Inj Date : 13-FEB-2012 17:48  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICAL-9  
 Misc Info : 8330 ICAL-9  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:52 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Calibration Sample, Level: 9  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: NGPETN\_ICAL.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

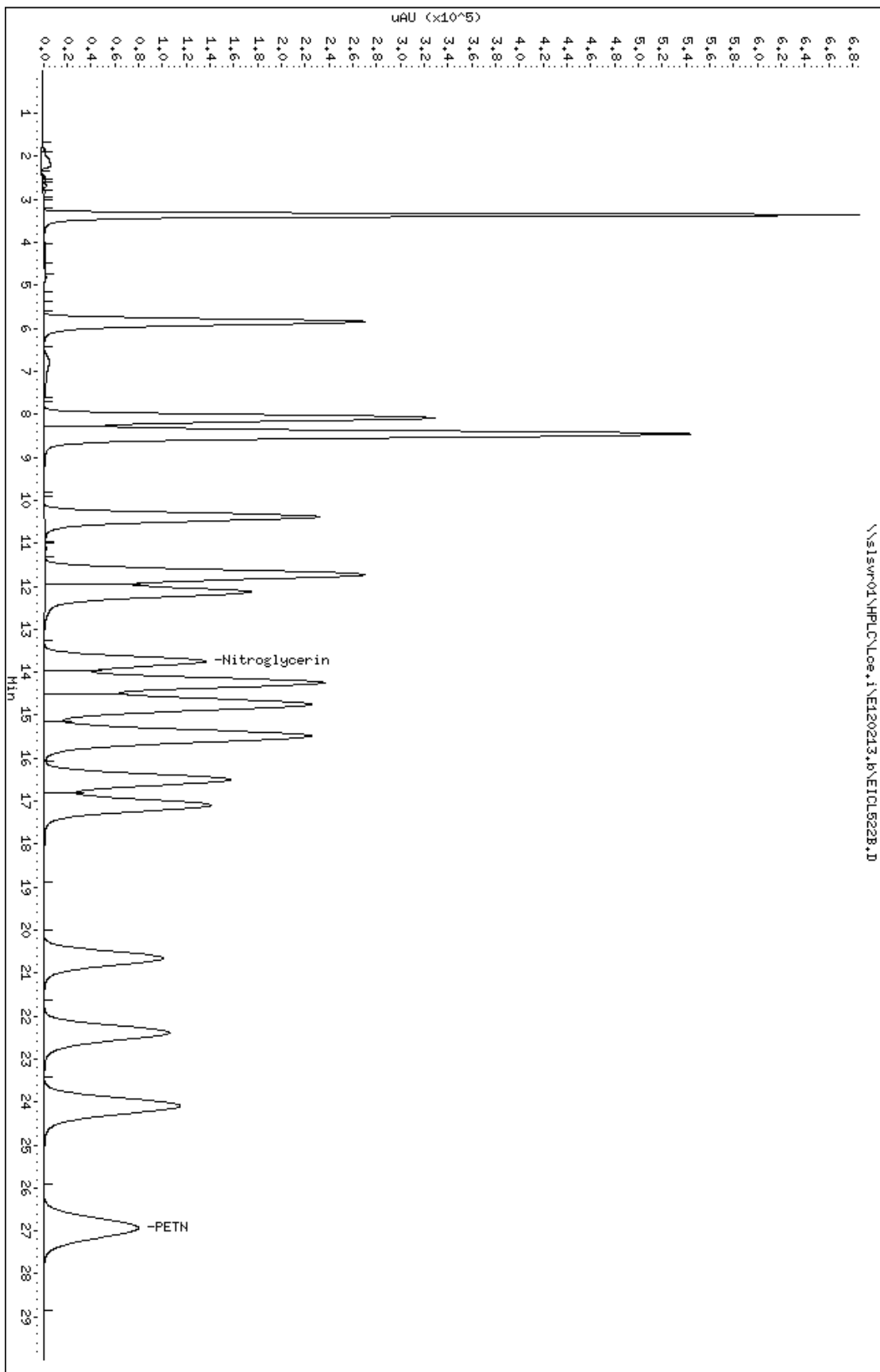
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
12 Nitroglycerin	13.746	13.760	-0.014	5828595	25000.0	23140
21 PETN	26.929	26.945	-0.016	6725480	25000.0	25430

Data File: \\slswr01\HPLC\Loc.i\120213.b\EICL522B.D  
 Date : 13-FEB-2012 17:48  
 Client ID: 8330 ICAL-9  
 Sample Info: 8330 ICAL-9  
 Purge Volume: 500.0  
 Column phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICV523.D

Report Date: 14-Feb-2012 12:54

TestAmerica St. Louis

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: Lce.i                      Injection Date: 13-FEB-2012 18:23  
 Lab File ID: EICV523.D                  Init. Cal. Date(s): 13-FEB-2012    13-FEB-2012  
 Analysis Type: WATER                    Init. Cal. Times:    13:06                  17:48  
 Lab Sample ID: 8330 ICV                  Quant Type:    ESTD  
 Method: \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m

COMPOUND	RRF / AMOUNT	RF500	MIN	MAX	CURVE TYPE
			RRF	%D / %DRIFT	
1 HMX	307	277	0.010	9.92667	Averaged
2 TNX	680	701	0.010	-3.08695	Averaged
3 DNX	545	587	0.010	-7.73822	Averaged
4 MNX	435	475	0.010	-9.24450	Averaged
6 RDX	378	370	0.010	2.24707	Averaged
\$ 7 1,2-Dinitrobenzene	474	479	0.010	-1.05729	Averaged
8 1,3,5-Trinitrobenzene	859	840	0.010	2.15794	Averaged
9 1,3-Dinitrobenzene	1044	1148	0.010	-9.98024	Averaged
10 Tetryl	623	606	0.010	2.72432	Averaged
11 Nitrobenzene	811	791	0.010	2.54708	Averaged
13 2,4,6-Trinitrotoluene	780	820	0.010	-5.21251	Averaged
14 4-Amino-2,6-Dinitrotoluene	555	568	0.010	-2.35718	Averaged
15 2-Amino-4,6-Dinitrotoluene	817	832	0.010	-1.79211	Averaged
16 2,6-Dinitrotoluene	537	546	0.010	-1.62034	Averaged
17 2,4-Dinitrotoluene	1064	1069	0.010	-0.52930	Averaged
18 2-Nitrotoluene	506	486	0.010	3.99816	Averaged
19 4-Nitrotoluene	453	420	0.010	7.44312	Averaged
20 3-Nitrotoluene	564	531	0.010	5.94619	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 4.42273

Maximun Average %D/Drift = 20.00000

\* Passed Average %D/Drift Test.

Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICV523.D  
 Report Date: 14-Feb-2012 12:54

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICV523.D  
 Lab Smp Id: 8330 ICV Client Smp ID: 8330 ICV  
 Inj Date : 13-FEB-2012 18:23  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICV  
 Misc Info : 8330 ICV  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:54 Lce.i Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: FULL8330.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

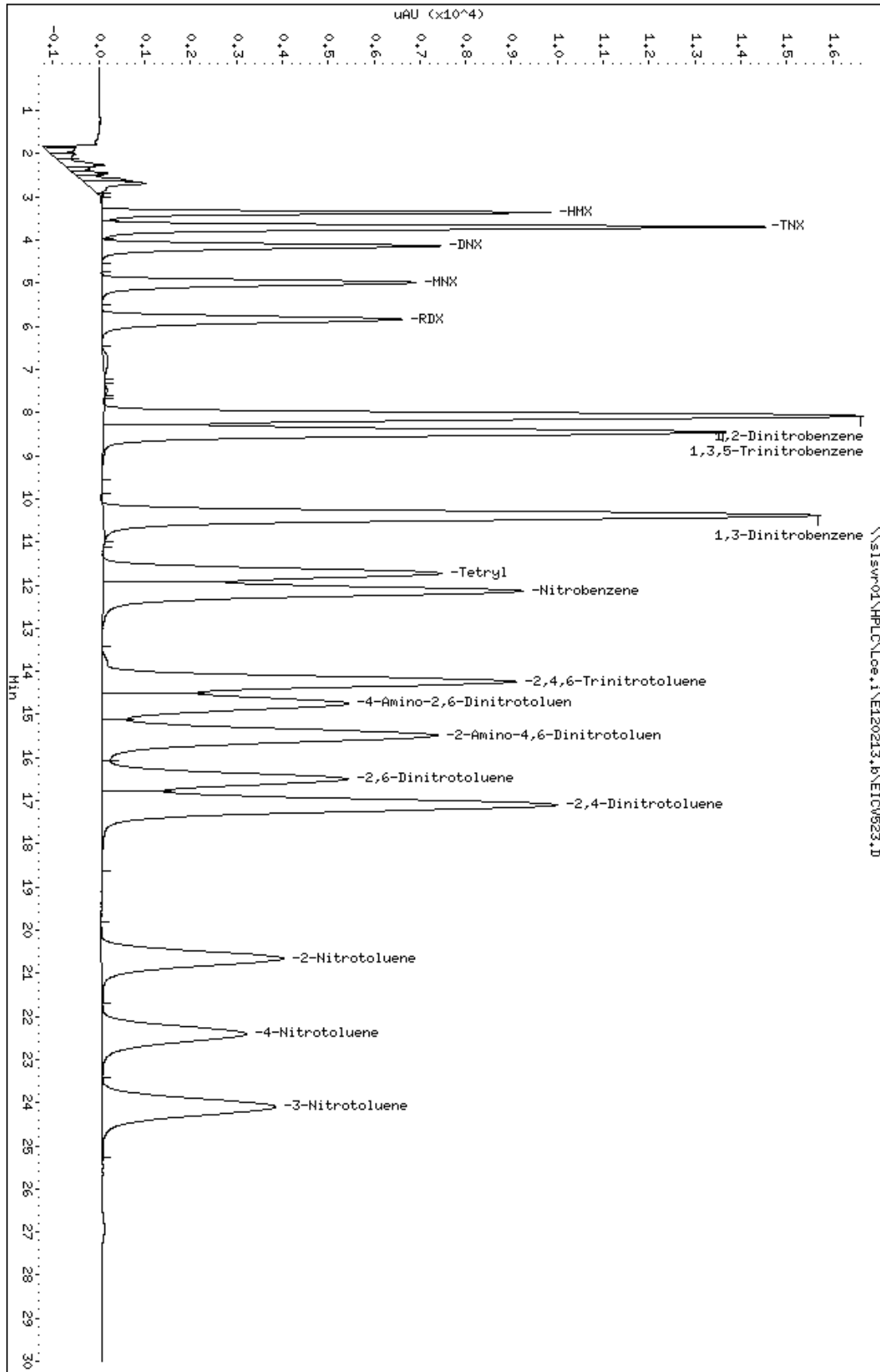
Concentration Formula: Amt \* DF \* (2\*Vt/UF)/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds						AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE		CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 HMX	3.359	3.358	0.001	138317		500.000	450.4
2 TNX	3.696	3.695	0.001	276773		395.000	407.2
3 DNX	4.138	4.138	0.000	161525		275.000	296.3
4 MNX	4.986	4.988	-0.002	170959		360.000	393.3
6 RDX	5.838	5.842	-0.004	184772		500.000	488.8
\$ 7 1,2-Dinitrobenzene	8.078	8.086	-0.008	479338		1000.00	1010
8 1,3,5-Trinitrobenzene	8.453	8.460	-0.007	420225		500.000	489.2
9 1,3-Dinitrobenzene	10.384	10.389	-0.005	574165		500.000	549.9
10 Tetryl	11.727	11.729	-0.002	303084		500.000	486.4
11 Nitrobenzene	12.139	12.141	-0.002	395380		500.000	487.3
13 2,4,6-Trinitrotoluene	14.239	14.239	0.000	410152		500.000	526.1
14 4-Amino-2,6-Dinitrotoluene	14.746	14.740	0.006	284084		500.000	511.8
15 2-Amino-4,6-Dinitrotoluene	15.485	15.481	0.004	416030		500.000	509.0
16 2,6-Dinitrotoluene	16.498	16.497	0.001	272978		500.000	508.1
17 2,4-Dinitrotoluene	17.097	17.094	0.003	534679		500.000	502.6
18 2-Nitrotoluene	20.657	20.655	0.002	242932		500.000	480.0
19 4-Nitrotoluene	22.407	22.405	0.002	209760		500.000	462.8
20 3-Nitrotoluene	24.098	24.097	0.001	265395		500.000	470.3

Data File: \\sisvr01\HPLC\Loc.i\120213.b\EICW523.D  
Date : 13-FEB-2012 18:23  
Client ID: 8330 ICV  
Sample Info: 8330 ICV  
Purge Volume: 500.0  
Column Phase: Allure C-18

Instrument: Loc.i  
Operator: AF  
Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICV523B.D  
 Report Date: 14-Feb-2012 12:54

TestAmerica St. Louis

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: Lce.i                      Injection Date: 13-FEB-2012 18:23  
 Lab File ID: EICV523B.D                Init. Cal. Date(s): 13-FEB-2012    13-FEB-2012  
 Analysis Type: WATER                   Init. Cal. Times:    13:06                17:48  
 Lab Sample ID: 8330 ICV                Quant Type:    ESTD  
 Method: \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF500	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
=====	=====	=====	=====	=====	=====	=====
12 Nitroglycerin	252	222	0.010	11.99726	20.00000	Averaged
21 PETN	265	267	0.010	-1.01233	20.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.50480

Maximun Average %D/Drift = 20.00000

\* Passed Average %D/Drift Test.

Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EICV523B.D  
 Report Date: 14-Feb-2012 12:54

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EICV523B.D  
 Lab Smp Id: 8330 ICV Client Smp ID: 8330 ICV  
 Inj Date : 13-FEB-2012 18:23  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 ICV  
 Misc Info : 8330 ICV  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:54 Lce.i Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: NGPETN.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

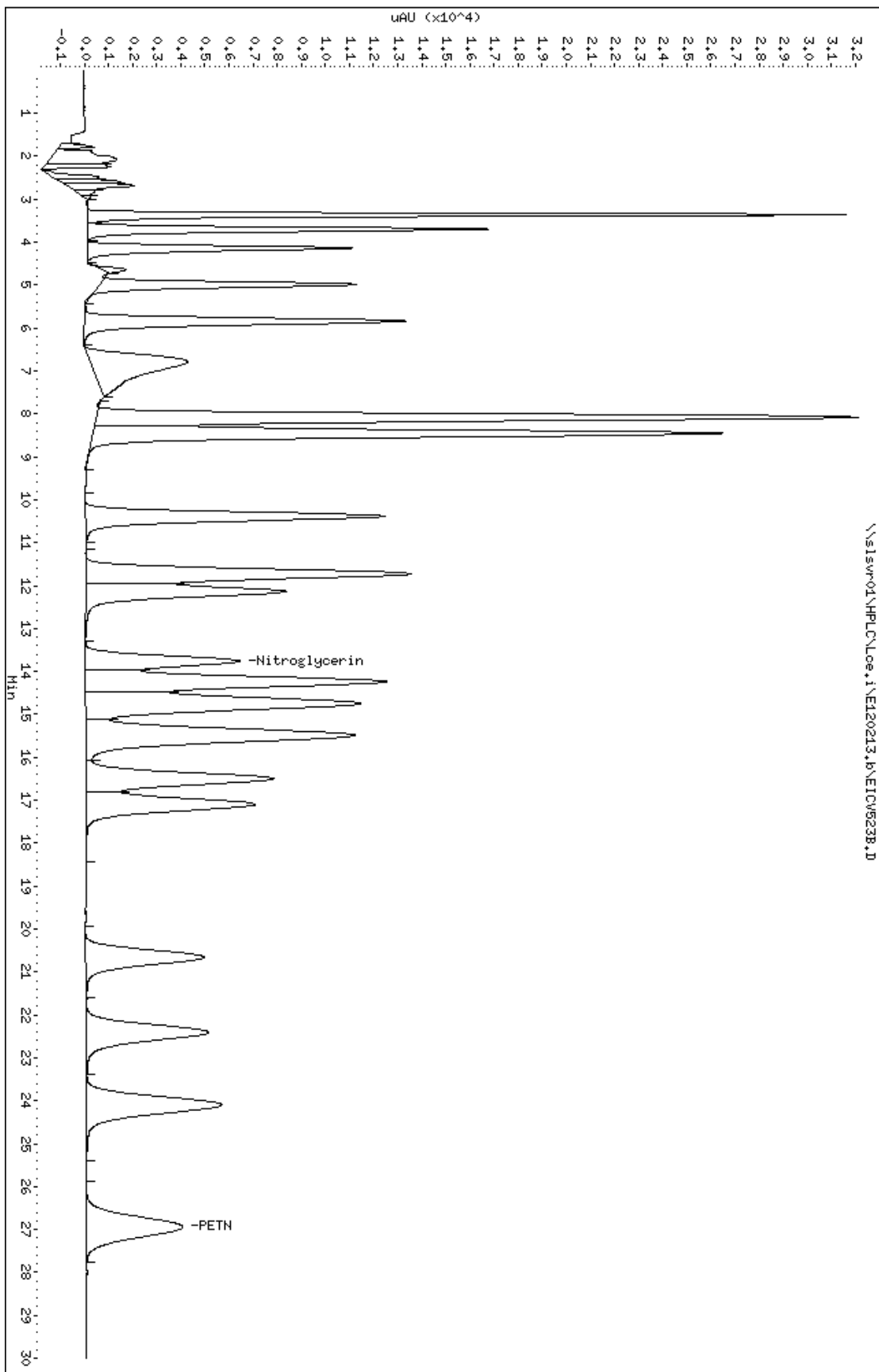
Concentration Formula: Amt \* DF \* (2\*Vt/UF)/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
12 Nitroglycerin	13.761	13.760	0.001	277094	1250.00	1100
21 PETN	26.942	26.945	-0.003	333978	1250.00	1263

Data File: \\slswr01\HPLC\Loc.i\NEL20213.b\EICW523B.D  
 Date : 13-FEB-2012 18:23  
 Client ID: 8330 ICV  
 Sample Info: 8330 ICV  
 Purge Volume: 500.0  
 Column phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60





Logbook No. 3760

Date: 2/13/12  
2/14/12

Instrument ID# LCE

# TestAmerica HPLC Runlog

Data File	Clock	Lab ID	Method	Lot Number	Matrix	STD #	Dil. Fact.	Oper	Batch	Comments
ECND 511	E120213	CONDITIONING	8330			AF 2/13/12 GC0017-12	4x	AF		AF 2/13/12 GC0017-12
ECUV 512		8330 CCV				AF 2/13/12 GC0017-12	4x			GC0017-12
ECND 513		CONDITIONING				AF 2/13/12 GC0017-12	4x			GC0017-12
EICL 514		8330 ICAL-1				AF 2/13/12 GC0017-12	200x			8330 ICAL 600D
515		-2				AF 2/13/12 GC0017-12	100x			
516		-3				AF 2/13/12 GC0017-12	40x			
517		-4				AF 2/13/12 GC0017-12	10x			
518		-5				AF 2/13/12 GC0017-12	4x			
519		-6				AF 2/13/12 GC0017-12	20x			
520		-7				AF 2/13/12 GC0017-12	8x			
521		-8				AF 2/13/12 GC0017-12	4x			
522		-9				AF 2/13/12 GC0017-12	2x			
EICV 523		8330 ICV				AF 2/13/12 GC0017-12				ICV 600D
EBIK 524		MQQTPIAA				AF 2/13/12 GC0017-12				
ELCS 525		PIAC C				AF 2/13/12 GC0017-12				
ESMP 526		MQMWFIAA				AF 2/13/12 GC0017-12				
527		WIAA				AF 2/13/12 GC0017-12				
528		WIACS				AF 2/13/12 GC0017-12				
529		WIADD				AF 2/13/12 GC0017-12				
ECUV 530		8330 CCV				AF 2/13/12 GC0017-12	4x			
EBIK 531		MQMAVIAA B				AF 2/13/12 GC0017-12				
ELCS 532		VIAC C				AF 2/13/12 GC0017-12				
ESMP 533		MLFPIAA				AF 2/13/12 GC0017-12				
534		MLGPIAA				AF 2/13/12 GC0017-12				
535		PIAC				AF 2/13/12 GC0017-12				

Reviewed By:

2/14/12

Form: SL-ORG-0009, Rev. 8/12/10

Data File: \\slsvr01\HPLC\Lce.i\E120213.b\ECCV530.D

Report Date: 14-Feb-2012 13:02

TestAmerica St. Louis

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: Lce.i                      Injection Date: 13-FEB-2012 22:27  
 Lab File ID: ECCV530.D                  Init. Cal. Date(s): 13-FEB-2012    13-FEB-2012  
 Analysis Type: WATER                    Init. Cal. Times:    13:06                  17:48  
 Lab Sample ID: 8330 CCV                Quant Type:    ESTD  
 Method: \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 HMX	307	303	0.010	1.27665	20.00000	Averaged
2 TNX	680	684	0.010	-0.63020	20.00000	Averaged
3 DNX	545	570	0.010	-4.47789	20.00000	Averaged
4 MNX	435	463	0.010	-6.52488	20.00000	Averaged
6 RDX	378	362	0.010	4.25056	20.00000	Averaged
\$ 7 1,2-Dinitrobenzene	474	483	0.010	-1.76883	20.00000	Averaged
8 1,3,5-Trinitrobenzene	859	863	0.010	-0.43675	20.00000	Averaged
9 1,3-Dinitrobenzene	1044	1043	0.010	0.09557	20.00000	Averaged
10 Tetryl	623	621	0.010	0.28219	20.00000	Averaged
11 Nitrobenzene	811	801	0.010	1.22496	20.00000	Averaged
13 2,4,6-Trinitrotoluene	780	779	0.010	0.14877	20.00000	Averaged
14 4-Amino-2,6-Dinitrotoluene	555	547	0.010	1.47791	20.00000	Averaged
15 2-Amino-4,6-Dinitrotoluene	817	803	0.010	1.74981	20.00000	Averaged
16 2,6-Dinitrotoluene	537	534	0.010	0.67840	20.00000	Averaged
17 2,4-Dinitrotoluene	1064	1054	0.010	0.92088	20.00000	Averaged
18 2-Nitrotoluene	506	490	0.010	3.10229	20.00000	Averaged
19 4-Nitrotoluene	453	421	0.010	7.13159	20.00000	Averaged
20 3-Nitrotoluene	564	540	0.010	4.40175	20.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 2.44520

Maximun Average %D/Drift = 20.00000

\* Passed Average %D/Drift Test.

Data File: \\slsvr01\HPLC\Lce.i\E120213.b\ECCV530.D  
 Report Date: 14-Feb-2012 13:02

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\ECCV530.D  
 Lab Smp Id: 8330 CCV Client Smp ID: 8330 CCV  
 Inj Date : 13-FEB-2012 22:27  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 CCV  
 Misc Info : 8330 CCV  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:59 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: FULL8330.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

Concentration Formula: Amt \* DF \* (2\*Vt/UF)/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 HMX	3.358	3.358	0.000	151600	500.000	493.6
2 TNX	3.694	3.695	-0.001	270177	395.000	397.5
3 DNX	4.136	4.138	-0.002	156637	275.000	287.3
4 MNX	4.984	4.988	-0.004	166703	360.000	383.5
6 RDX	5.836	5.842	-0.006	180985	500.000	478.7
\$ 7 1,2-Dinitrobenzene	8.074	8.086	-0.012	482713	1000.00	1018
8 1,3,5-Trinitrobenzene	8.448	8.460	-0.012	431369	500.000	502.2
9 1,3-Dinitrobenzene	10.378	10.389	-0.011	521563	500.000	499.5
10 Tetryl	11.719	11.729	-0.010	310693	500.000	498.6
11 Nitrobenzene	12.133	12.141	-0.008	400744	500.000	493.9
13 2,4,6-Trinitrotoluene	14.233	14.239	-0.006	389252	500.000	499.2
14 4-Amino-2,6-Dinitrotoluene	14.737	14.740	-0.003	273440	500.000	492.6
15 2-Amino-4,6-Dinitrotoluene	15.477	15.481	-0.004	401554	500.000	491.2
16 2,6-Dinitrotoluene	16.495	16.497	-0.002	266803	500.000	496.6
17 2,4-Dinitrotoluene	17.092	17.094	-0.002	526966	500.000	495.4
18 2-Nitrotoluene	20.656	20.655	0.001	245199	500.000	484.5
19 4-Nitrotoluene	22.407	22.405	0.002	210466	500.000	464.3
20 3-Nitrotoluene	24.100	24.097	0.003	269753	500.000	478.0



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\ECCV541.D

Report Date: 14-Feb-2012 13:02

TestAmerica St. Louis

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: Lce.i                      Injection Date: 14-FEB-2012 04:50  
 Lab File ID: ECCV541.D                  Init. Cal. Date(s): 13-FEB-2012    13-FEB-2012  
 Analysis Type: WATER                    Init. Cal. Times:    13:06                  17:48  
 Lab Sample ID: 8330 CCV                Quant Type:    ESTD  
 Method: \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m

COMPOUND	RRF / AMOUNT	RF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 HMX	307	302	0.010	1.67650	20.00000	Averaged
2 TNX	680	683	0.010	-0.55050	20.00000	Averaged
3 DNX	545	567	0.010	-3.98631	20.00000	Averaged
4 MNX	435	463	0.010	-6.52040	20.00000	Averaged
6 RDX	378	363	0.010	4.02836	20.00000	Averaged
\$ 7 1,2-Dinitrobenzene	474	483	0.010	-1.87488	20.00000	Averaged
8 1,3,5-Trinitrobenzene	859	866	0.010	-0.81300	20.00000	Averaged
9 1,3-Dinitrobenzene	1044	1053	0.010	-0.86044	20.00000	Averaged
10 Tetryl	623	621	0.010	0.39806	20.00000	Averaged
11 Nitrobenzene	811	804	0.010	0.90306	20.00000	Averaged
13 2,4,6-Trinitrotoluene	780	772	0.010	0.96066	20.00000	Averaged
14 4-Amino-2,6-Dinitrotoluene	555	547	0.010	1.53881	20.00000	Averaged
15 2-Amino-4,6-Dinitrotoluene	817	804	0.010	1.61181	20.00000	Averaged
16 2,6-Dinitrotoluene	537	552	0.010	-2.81270	20.00000	Averaged
17 2,4-Dinitrotoluene	1064	1067	0.010	-0.33395	20.00000	Averaged
18 2-Nitrotoluene	506	492	0.010	2.87624	20.00000	Averaged
19 4-Nitrotoluene	453	419	0.010	7.53622	20.00000	Averaged
20 3-Nitrotoluene	564	538	0.010	4.73169	20.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 2.44520

Maximun Average %D/Drift = 20.00000

\* Passed Average %D/Drift Test.

Data File: \\slsvr01\HPLC\Lce.i\E120213.b\ECCV541.D  
 Report Date: 14-Feb-2012 13:02

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\ECCV541.D  
 Lab Smp Id: 8330 CCV Client Smp ID: 8330 CCV  
 Inj Date : 14-FEB-2012 04:50  
 Operator : AF Inst ID: Lce.i  
 Smp Info : 8330 CCV  
 Misc Info : 8330 CCV  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:59 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: FULL8330.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

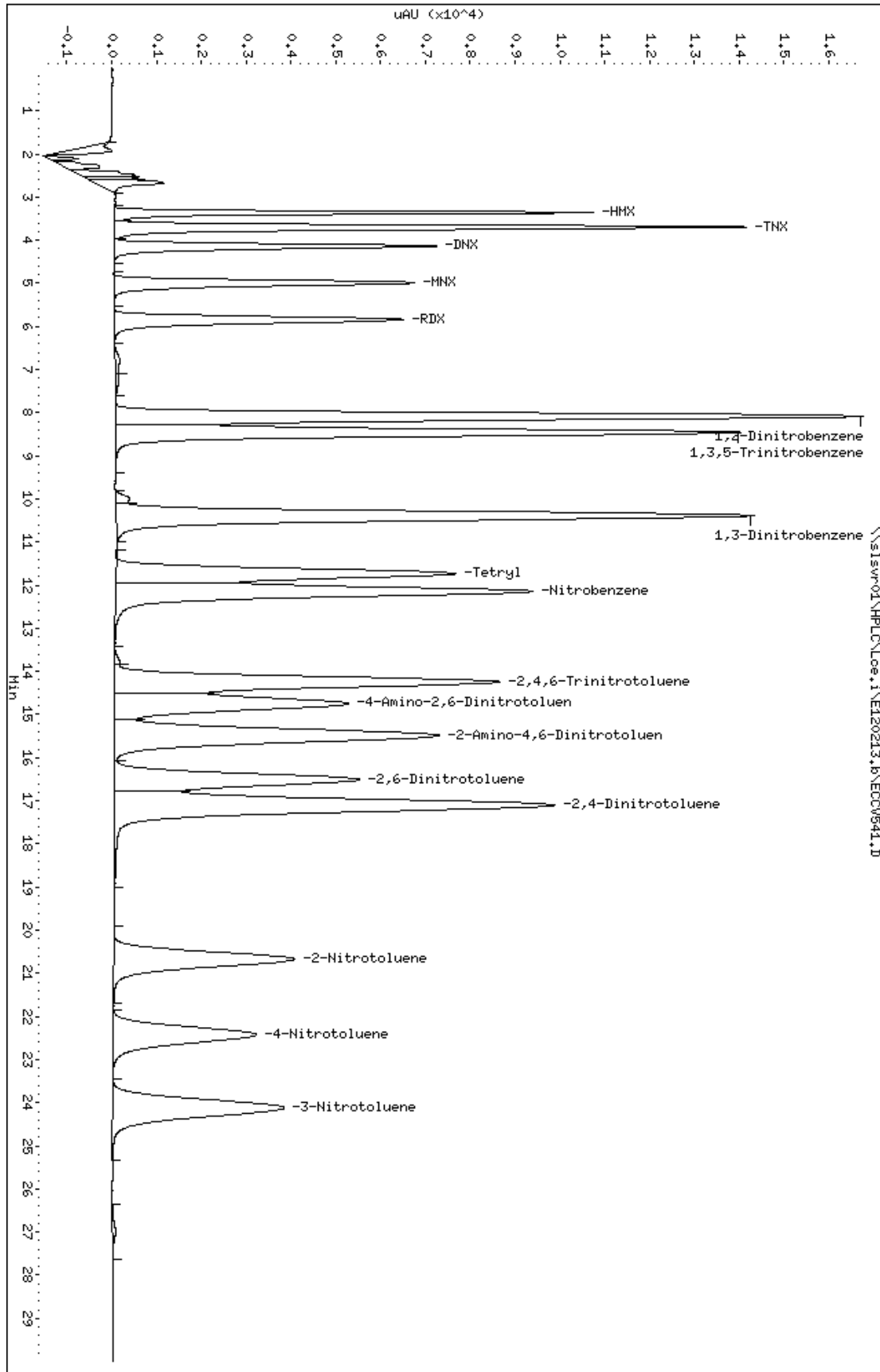
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT ( ug/L)	ON-COL ( ug/L)
1 HMX	3.359	3.358	0.001	150986	500.000	491.6
2 TNX	3.696	3.695	0.001	269963	395.000	397.2
3 DNX	4.138	4.138	0.000	155900	275.000	286.0
4 MNX	4.988	4.988	0.000	166696	360.000	383.5
6 RDX	5.842	5.842	0.000	181405	500.000	479.8
\$ 7 1,2-Dinitrobenzene	8.084	8.086	-0.002	483216	1000.00	1019
8 1,3,5-Trinitrobenzene	8.457	8.460	-0.003	432985	500.000	504.1
9 1,3-Dinitrobenzene	10.387	10.389	-0.002	526554	500.000	504.3
10 Tetryl	11.732	11.729	0.003	310332	500.000	498.0
11 Nitrobenzene	12.144	12.141	0.003	402050	500.000	495.5
13 2,4,6-Trinitrotoluene	14.244	14.239	0.005	386087	500.000	495.2
14 4-Amino-2,6-Dinitrotoluene	14.746	14.740	0.006	273271	500.000	492.3
15 2-Amino-4,6-Dinitrotoluene	15.485	15.481	0.004	402118	500.000	491.9
16 2,6-Dinitrotoluene	16.509	16.497	0.012	276181	500.000	514.1
17 2,4-Dinitrotoluene	17.101	17.094	0.007	533640	500.000	501.7
18 2-Nitrotoluene	20.672	20.655	0.017	245771	500.000	485.6
19 4-Nitrotoluene	22.424	22.405	0.019	209549	500.000	462.3
20 3-Nitrotoluene	24.120	24.097	0.023	268822	500.000	476.3

Data File: \\slswr01\HPLC\Loc.i\120213.b\ECV541.D  
Date : 14-FEB-2012 04:50  
Client ID: 8330 CCV  
Sample Info: 8330 CCV  
Purge Volume: 500.0  
Column phase: Allure C-18

Instrument: Loe.i  
Operator: AF  
Column diameter: 4.60



# **HPLC RAW SAMPLE DATA**



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\ESMP534.D  
 Report Date: 20-Feb-2012 09:20

TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\ESMP534.D  
 Lab Smp Id: MQLGP1AA Client Smp ID: CAAN-12-2035  
 Inj Date : 14-FEB-2012 00:46  
 Operator : AF Inst ID: Lce.i  
 Smp Info : MQLGP1AA  
 Misc Info : F2B030441-002  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:59 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: XNX.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

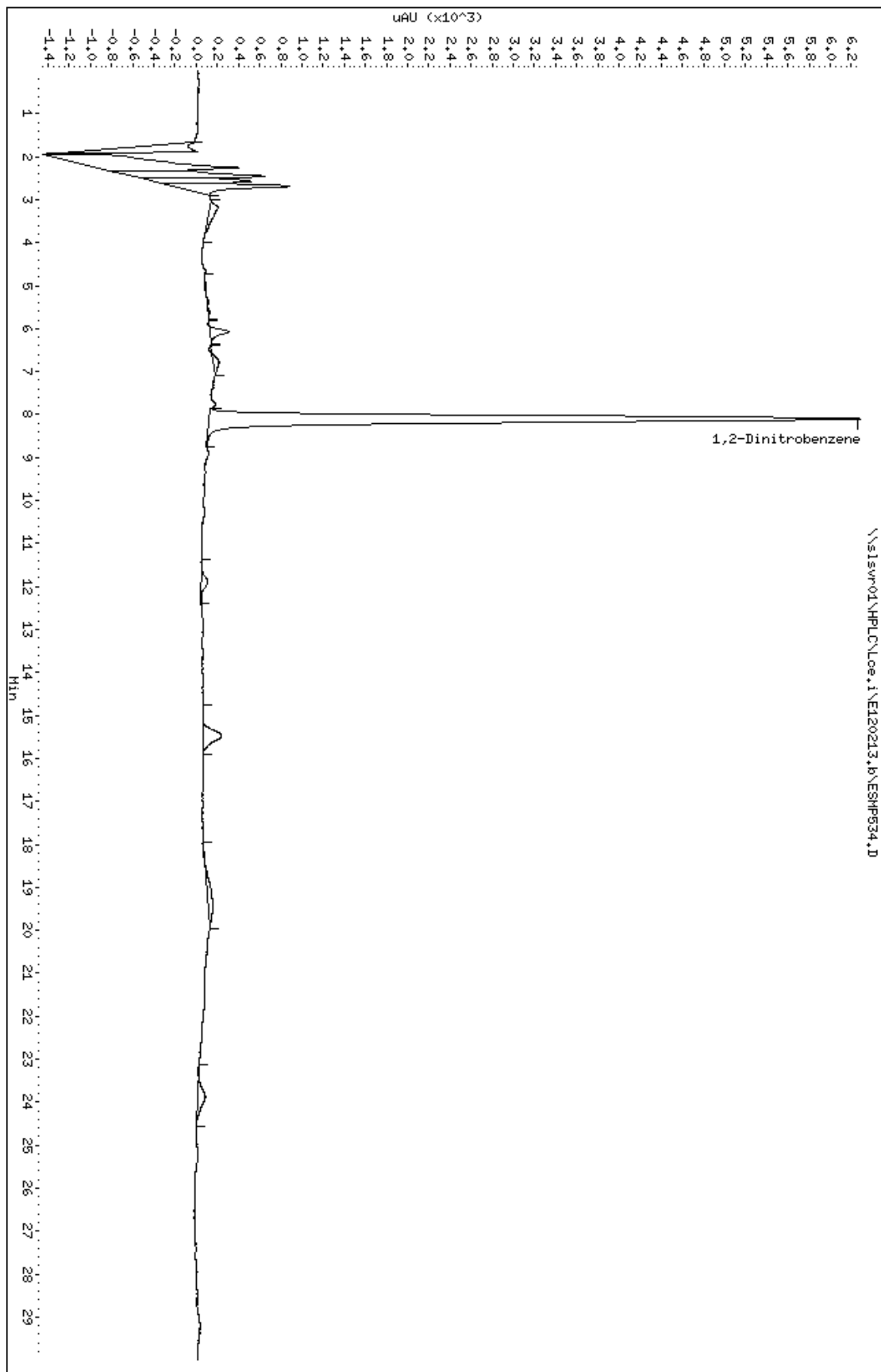
Concentration Formula: Amt \* DF \* (2\*Vt/UF)/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.500	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN ( ug/L)	FINAL ( ug/L)
\$ 7 1,2-Dinitrobenzene	8.099	8.086	0.013	163363	344.413	3.441

Data File: \\slswr01\\HPLC\\Loc.i\\E120213.b\\ESHP534.D  
Date : 14-FEB-2012 00:46  
Client ID: CAAH-12-2035  
Sample Info: HQLCP1A0  
Purge Volume: 500.5  
Column phase: Allure C-18

Instrument: Loc.i  
Operator: AF  
Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\ESMP540.D  
 Report Date: 20-Feb-2012 09:21

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\ESMP540.D  
 Lab Smp Id: MQL1Q1AA Client Smp ID: CAWA-12-2018  
 Inj Date : 14-FEB-2012 04:15  
 Operator : AF Inst ID: Lce.i  
 Smp Info : MQL1Q1AA  
 Misc Info : F2B040402-001  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:59 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: XNX.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

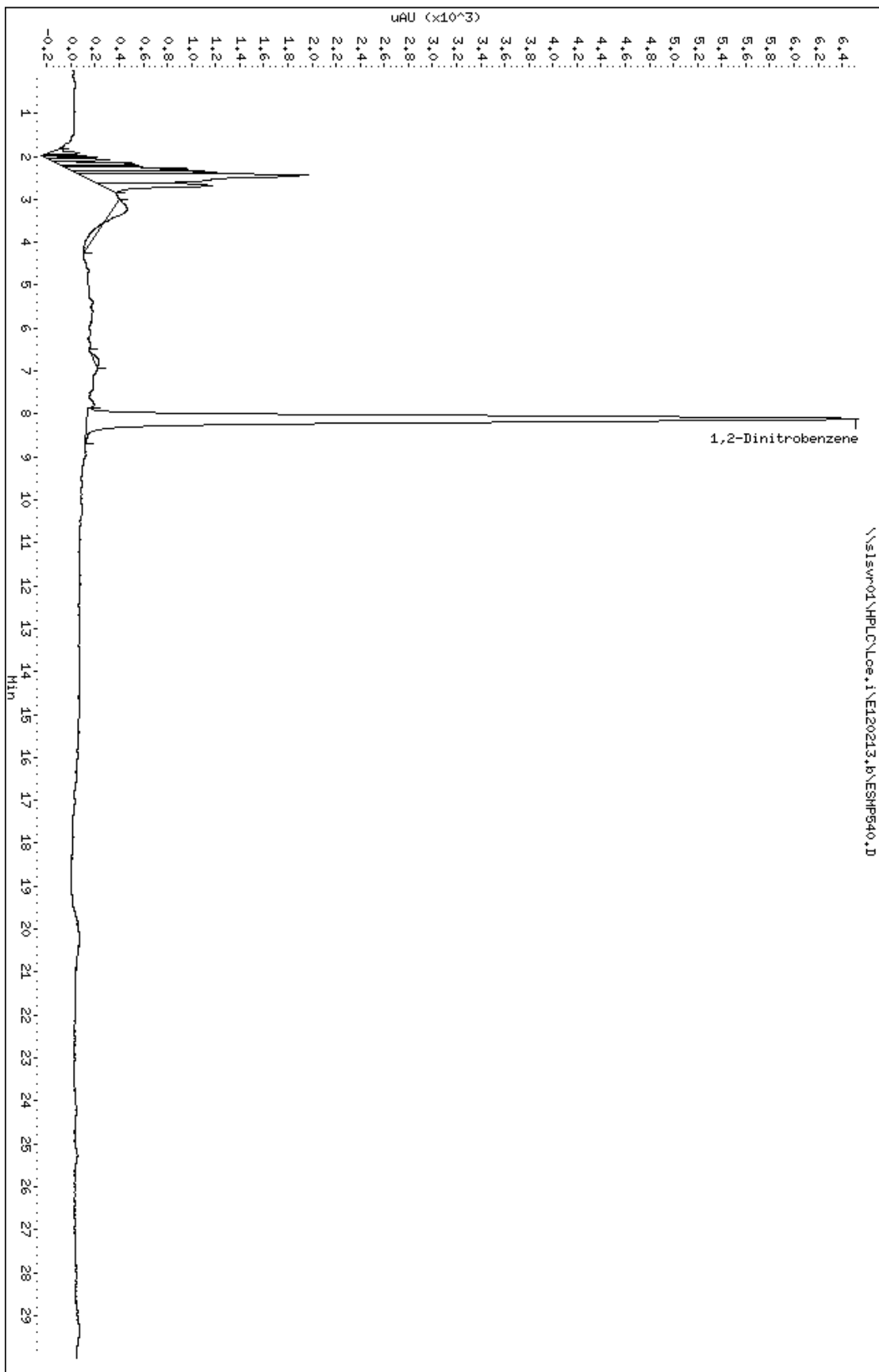
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.900	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN ( ug/L)	FINAL ( ug/L)
\$ 7 1,2-Dinitrobenzene	8.113	8.086	0.027	166776	351.608	3.510

Data File: \\slswr01\HPLC\Loc.i\120213.b\ESHP540.D  
 Date : 14-FEB-2012 04:15  
 Client ID: CMAA-12-2018  
 Sample Info: HCL101A0  
 Purge Volume: 500.9  
 Column phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60



# **HPLC RAW QC DATA**

Data File: \\slsvr01\HPLC\Lce.i\E120213.b\EBLK531.D  
 Report Date: 20-Feb-2012 09:19

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\EBLK531.D  
 Lab Smp Id: MQMAV1AA Client Smp ID: INTRA-LAB BLANK  
 Inj Date : 13-FEB-2012 23:02  
 Operator : AF Inst ID: Lce.i  
 Smp Info : MQMAV1AA  
 Misc Info : F2B060000-080B;2037080  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:59 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: XNX.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

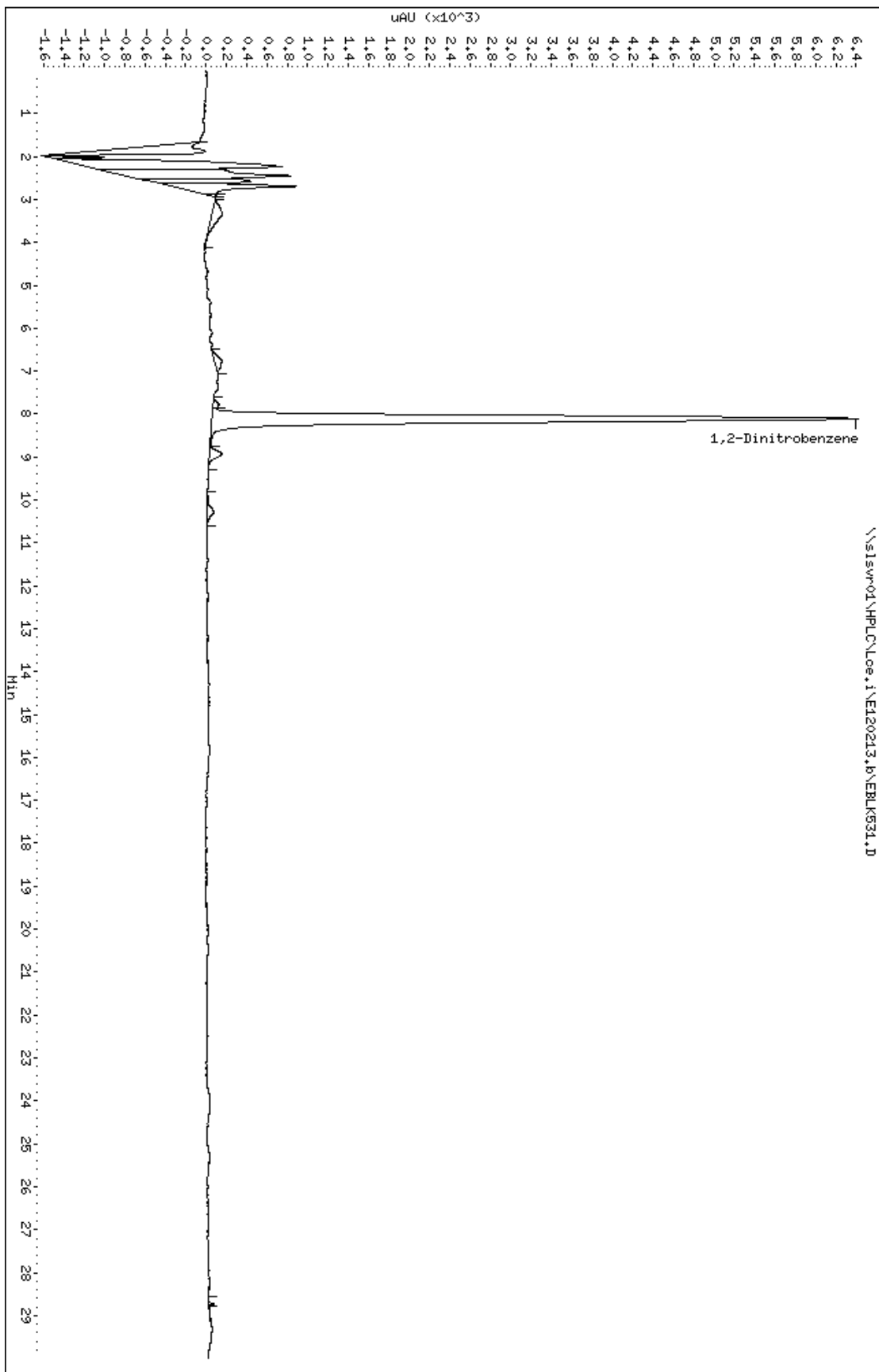
Concentration Formula: Amt \* DF \* (2\*Vt/UF)/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN ( ug/L)	FINAL ( ug/L)
\$ 7 1,2-Dinitrobenzene	8.109	8.086	0.023	169073	356.451	3.564

Data File: \\slswr01\HPLC\Loc.i\VE120213.b\EBLK531.D  
 Date : 13-FEB-2012 23:02  
 Client ID: INTRA-LAB BLANK  
 Sample Info: HQHAY1A0  
 Purge Volume: 500.0  
 Column Phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\ELCS532.D  
 Report Date: 20-Feb-2012 09:19

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\ELCS532.D  
 Lab Smp Id: MQMAV1AC Client Smp ID: INTRA-LAB CHECK  
 Inj Date : 13-FEB-2012 23:37  
 Operator : AF Inst ID: Lce.i  
 Smp Info : MQMAV1AC  
 Misc Info : F2B060000-080C;2037080  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:59 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: XNX.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

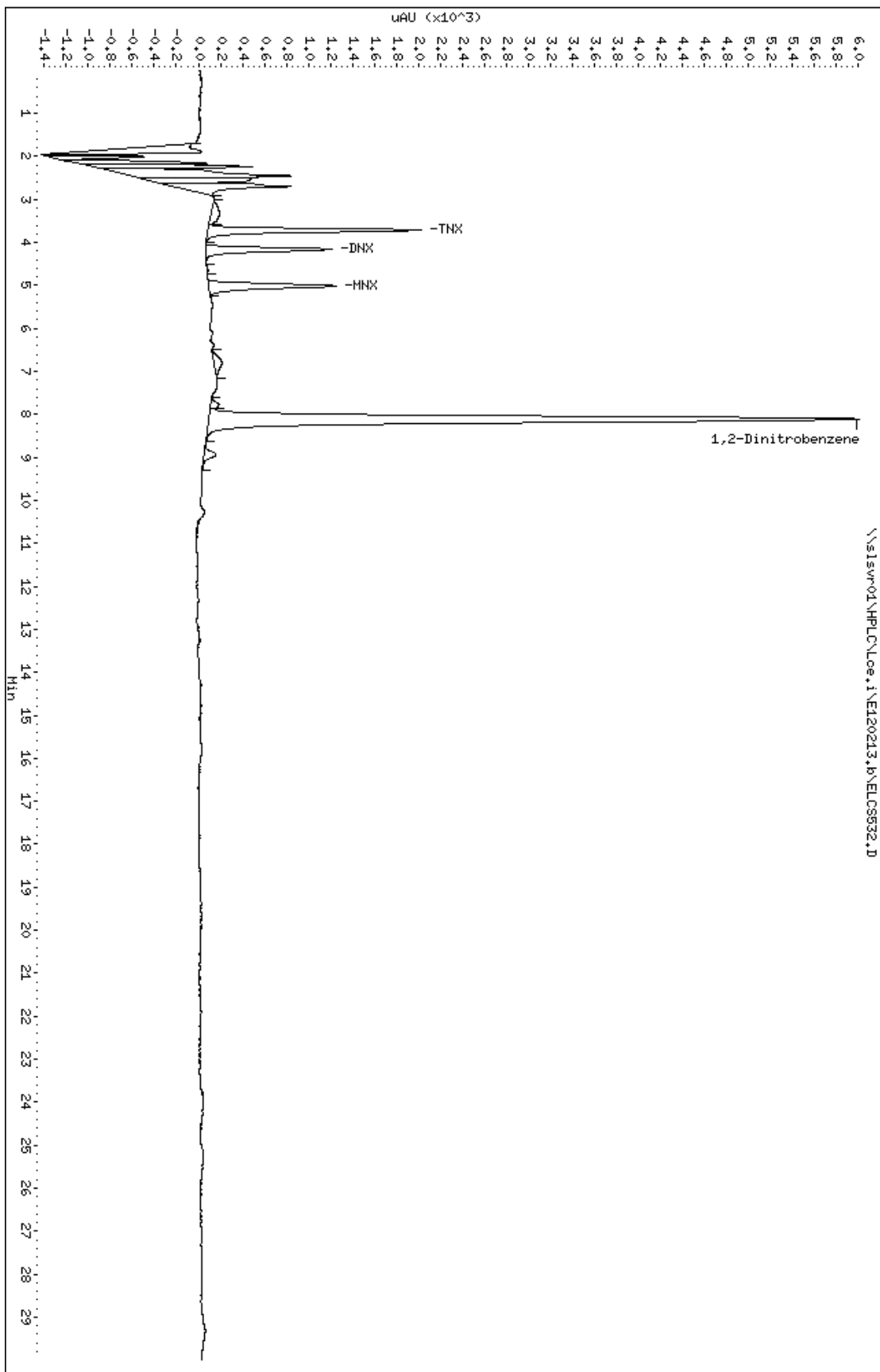
Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.000	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN ( ug/L)	FINAL ( ug/L)
2 TNX	3.715	3.695	0.020	30490	44.8574	0.4486
3 DNX	4.161	4.138	0.023	19847	36.4047	0.3640
4 MNX	5.013	4.988	0.025	22942	52.7766	0.5278
\$ 7 1,2-Dinitrobenzene	8.110	8.086	0.024	155181	327.163	3.272



Data File: \\slswr01\HPLC\Loc.i\EL20213.b\ELCS532.D  
 Date : 13-FEB-2012 23:37  
 Client ID: INTRA-LAB CHECK  
 Sample Info: HQHAYLAC  
 Purge Volume: 500.0  
 Column phase: Allure C-18

Instrument: Loc.i  
 Operator: AF  
 Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\ESMP535.D  
 Report Date: 20-Feb-2012 09:20

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\ESMP535.D  
 Lab Smp Id: MQLGP1AC Client Smp ID: CAAN-12-2035  
 Inj Date : 14-FEB-2012 01:21  
 Operator : AF Inst ID: Lce.i  
 Smp Info : MQLGP1AC  
 Misc Info : F2B030441-002S;2037080  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:59 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 QC Sample: MS  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: XNX.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

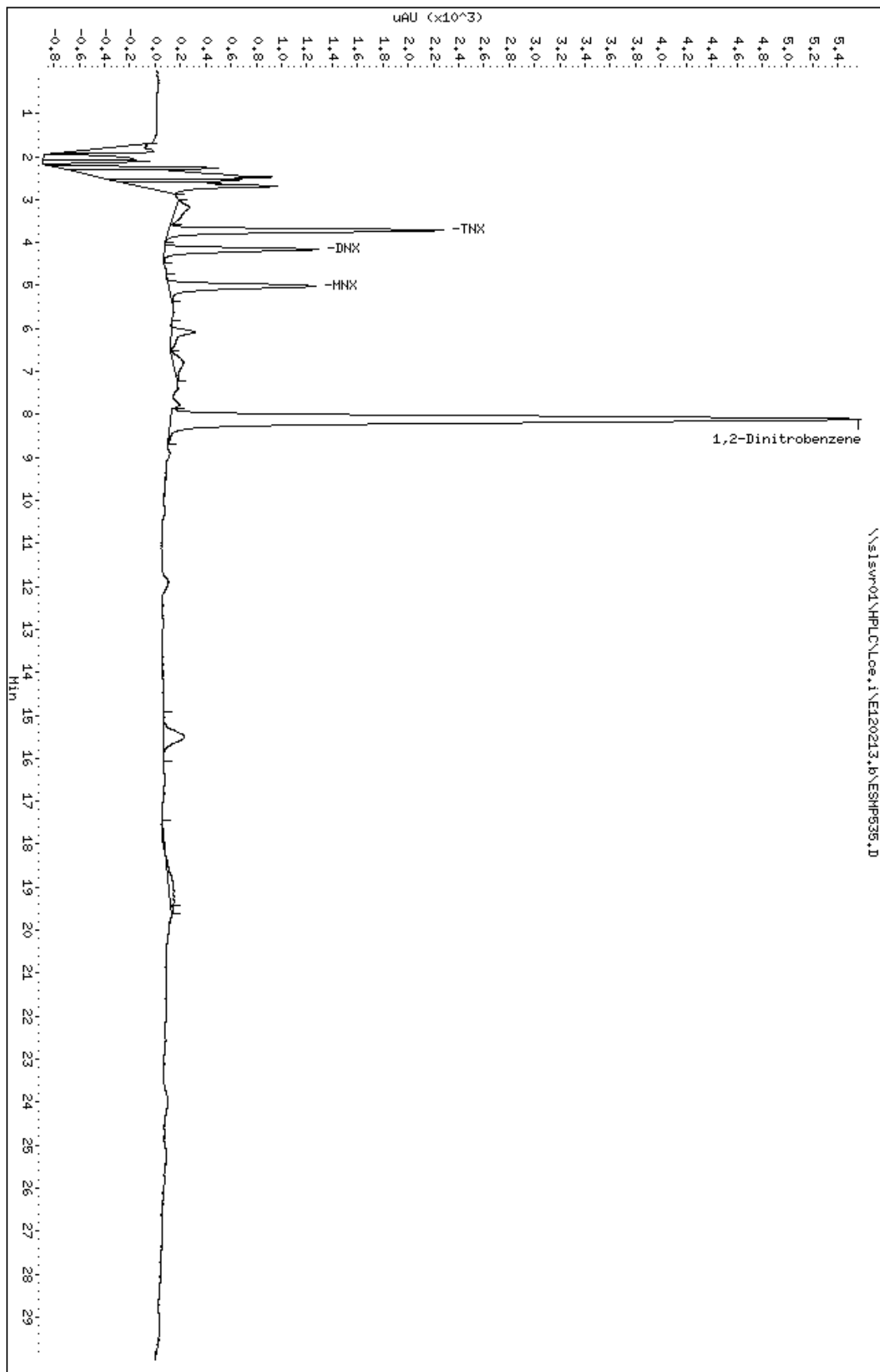
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.500	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL	
					( ug/L)	( ug/L)	
2 TNX	3.716	3.695	0.021	33438	49.1946	0.4914	
3 DNX	4.162	4.138	0.024	20574	37.7382	0.3770	
4 MNX	5.014	4.988	0.026	23189	53.3448	0.5329	
\$ 7 1,2-Dinitrobenzene	8.111	8.086	0.025	142164	299.720	2.994	

Data File: \\slswr01\HPLC\Loc.i\120213.b\ESHP535.D  
Date : 14-FEB-2012 01:21  
Client ID: C6AH-12-2035  
Sample Info: HQLCP1AC  
Purge Volume: 500.5  
Column phase: Allure C-18

Instrument: Loc.i  
Operator: AF  
Column diameter: 4.60



Data File: \\slsvr01\HPLC\Lce.i\E120213.b\ESMP536.D  
 Report Date: 20-Feb-2012 09:20

## TestAmerica St. Louis

Data file : \\slsvr01\HPLC\Lce.i\E120213.b\ESMP536.D  
 Lab Smp Id: MQLGP1AD Client Smp ID: CAAN-12-2035  
 Inj Date : 14-FEB-2012 01:56  
 Operator : AF Inst ID: Lce.i  
 Smp Info : MQLGP1AD  
 Misc Info : F2B030441-002D;2037080  
 Comment :  
 Method : \\slsvr01\HPLC\Lce.i\E120213.b\C18-8330.m  
 Meth Date : 14-Feb-2012 12:59 flakera Quant Type: ESTD  
 Cal Date : 13-FEB-2012 15:25 Cal File: EICL518B.D  
 Als bottle: 1 QC Sample: MSD  
 Dil Factor: 1.00000  
 Integrator: HP Genie Compound Sublist: XNX.sub  
 Target Version: 4.14  
 Processing Host: SLGC09

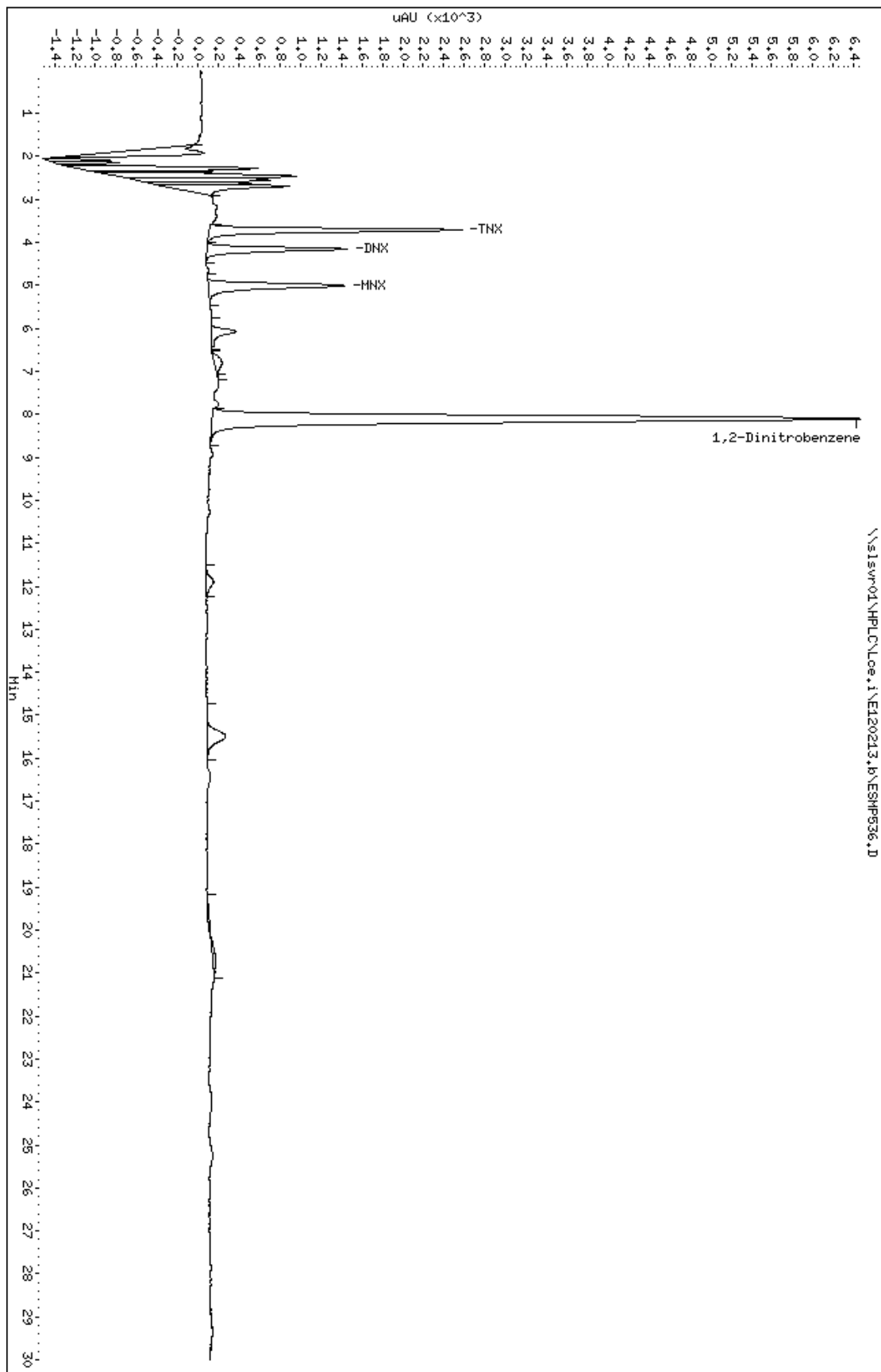
Concentration Formula:  $\text{Amt} * \text{DF} * (2 * \text{Vt} / \text{UF}) / \text{Vo} * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	2500.000	Final Volume of Extract
UF	1000.000	Unit Factor for uL to mL
Vo	500.500	Volume extracted
Cpnd Variable		Local Compound Variable

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL	
					( ug/L)	( ug/L)	
2 TNX	3.710	3.695	0.015	40483	59.5593	0.5950	
3 DNX	4.155	4.138	0.017	24615	45.1505	0.4510	
4 MNX	5.006	4.988	0.018	28604	65.8017	0.6574	
\$ 7 1,2-Dinitrobenzene	8.102	8.086	0.016	170162	358.747	3.584	

Data File: \\slswr01\HPLC\Loc.i\120213.b\ESHP536.D  
Date : 14-FEB-2012 01:56  
Client ID: CAAH-12-2035  
Sample Info: HQLCP1AD  
Purge Volume: 500.5  
Column phase: Allure C-18

Instrument: Loc.i  
Operator: AF  
Column diameter: 4.60



# **HPLC MISCELLANEOUS DATA**

**Prep Method:** SW-846 3535

**Prep Description:** EXTRACTION, SOLID PHASE

E 120213

**SOP Number:** ST-OP-0008

**Matrix:** WATER

**Extraction Date:** 2/6/2012

Lot Number	WorkOrder No	AnalDueDate	Initials: AF			Initials:		Initials:	
			Wt/Vol	pH 1	pH 2	Extr Unit	Concentration 1	Cleanup 1	Cleanup 2
F2B030441 - 001	MLFR1AA	02/24/2012	501.000 mL	6			2.500 mL	2/6/2012	
F2B030441 - 002	MLGP1AA	02/24/2012	500.500 mL	6			2.500 mL	2/6/2012	
F2B030441 - 002D	MLGP1AD	02/24/2012	500.500 mL	6			2.500 mL	2/6/2012	
F2B030441 - 002S	MLGP1AC	02/24/2012	500.500 mL	6			2.500 mL	2/6/2012	
F2B030443 - 001	MLGV1AA	02/24/2012	501.000 mL	6			2.500 mL	2/6/2012	
F2B030443 - 002	MLGX1AA	02/24/2012	501.900 mL	6			2.500 mL	2/6/2012	
F2B040401 - 001	ML1P1AA	02/24/2012	500.900 mL	6			2.500 mL	2/6/2012	
F2B040402 - 001	ML1Q1AA	02/24/2012	500.900 mL	6			2.500 mL	2/6/2012	
F2B060000 - 080B	MQMAV1AA		500.000 mL				2.500 mL	2/6/2012	
F2B060000 - 080C	MQMAV1AC		500.000 mL				2.500 mL	2/6/2012	

**Chemical Lot Information**

**Chemical** Acetonitrile  
**Lot Number** H39809  
RDX Columns P3241

**Miscellaneous Information**

**Start:** 02/06/2012 10:00  
**Stop:** 02/06/2012 12:45

**Extr 1:** 02/06/2012 10:00

**Extr 2:**

**Balance ID Soil:** 1129114854 AF  
**Balance ID Water:** 1126423545

**Conc Method:**  
**Conc Temp C:**

**Spike Information**

**Name** XNX Prep Spike  
**Standard ID** GC0018-12  
**Exp Date** 2/29/2012  
**Vol Added** 250 uL  
8330 Prep Surrogat GC0034-12 3/6/2012  
50 uL

Spiking verified by: C-1

**Comments:**

**Custody Information**

**Relinquished By:** AF

**Review/Received By:** AF

**Date of Transfer:** 2/6/12

Logbook No. 3760

Instrument ID# LCE

## TestAmerica HPLC Runlog

Date: 2/13/12

AF 2/14/12

Data File	Clock	Lab ID	Method	Lot Number	Matrix	STD #	Dil. Fact.	Oper	Batch	Comments
ECND 511	E12D213	CONDITIONING	8330			AF 2/13/12		AF		AF 2/13/12
ECUV 512		8330 CUV				GC0017-12	4X			GC0017-12
ECND 513		CONDITIONING				AF 2/13/12				DNX > 1.051
EICL 514		8330 ICAL-1				GC0017-12	200X			GC0017-12
515		-2					100X			8330 ICAL GOOD
516		-3					40X			
517		-4					10X			"B" FILPS - NG & PETN
518		-5					4X			
519		-6					20X			GC0017-12
520		-7					8X			
521		-8					4X			
522		-9					2X			
EICV 523		8330 ICV								ICV GOOD
EBIK 524		MQQTPIAA		F2B100000-029B	W	GC0017-12			2041029	
ELCS 525		PIAC C		-029C						
ESMP 526		MQMWFIAA		F2B070403-001						
527		WIAA		F2B090405-001						
528		WIACS		-001S						
529		WIADD		-001D						
ECUV 530		8330 CUV				GC0027-001712	4X			
EBIK 531		MQMAVIAA B		F2B060000-080B	W				2037080	TBD
ELCS 532		PIAC C		-080C						
ESMP 533		MQLFRIA A		F2B030441-001						
534		MLGPIAA		-002						
535		PIAC		-002S						

Reviewed By:

2/13/12

2/14/12

Form: SL-ORG-0009, Rev. 8/12/10

33

QC Types: BLK or B = Blank; LCS or C = Laboratory Control Sample; LCSD or L = Laboratory Control Sample Duplicate; S = Matrix Spike;

D = Matrix Spike Duplicate; SMP = Sample, Matrix Spike or Matrix Spike Duplicate; CAL = Calibration Standard or Continuing Calibration Standard.

Reporting Flags: Y = Yes data reported; N = No data not reported; TBD = to be determined pending re-analysis; TBD Y = data reported; TBD N = data not reported

SOP References: ST-GC-0017, current revisions.





TestAmerica St. Louis  
Data Review Check List  
HPLC

Clock: E120213

Method: 8330 Lot/Sample ID(s):

F2B630441-001, 002, 002MS, 002MSD, F2B060000-080B, 080C

F2B030443-001, 002

F2B040401-001

F2B040402-001

Due Date: 2/24/12

Batch #: 2037080

AK  
BS  
2/21/11

Review Item	Yes	No	N/A	2 <sup>nd</sup> Review
<b>A. Initial Calibration</b>				
1. Initial Calibration data in this package? If not, please specify Instrument / folder name: E120213		✓		✓
2. Initial Calibration meets method acceptance criteria? If not, please reference NCM # _____			✓	
<b>B. Calibration Check (ICV)</b>				
1. ICV performed and Form (IV) generated?			✓	
2. ICV meets method acceptance criteria? If not, please reference NCM # _____			✓	
<b>C. Continuing Calibration</b>				
1. Number included in this package: ②	✓			✓
2. CCV Forms generated?	✓			✓
3. All CCVs meet method acceptance criteria? If not, please reference NCM # _____	✓			✓
<b>D. HPLC Confirmation</b>				
1. Did samples require second column confirmation?		✓		✓
2. Did samples require Spectral Identification?		✓		✓
<b>E. Batch QC – Method Blanks</b>				
1. Is the method blank “ND” for target analytes? If not, please reference NCM # _____	✓			✓
<b>F. Batch QC – LCS (LCSD)</b>				
1. LCS (LCSD) spike recoveries meet proper QC/client limits? If not, please reference NCM # _____	✓			✓
2. LCS surrogate recoveries acceptable? If not, please reference NCM # 0195265		✓		✓
<b>G. Batch QC – MS/MSD</b>				
1. MS/MSD performed? If not, please reference NCM # _____	✓			✓
2. Spike amounts correct?				
2. MS/MSD spike recoveries meet proper QC/client limits? If not, please reference NCM # _____	✓			✓

**TestAmerica St. Louis**  
**Data Review Check List**  
**HPLC**

Review Item	Yes	No	N/A	2 <sup>nd</sup> Review
3. Surrogate recoveries acceptable for MS/MSD? If not, please reference NCM # _____	✓			✓
<b>H. Batch QC – RPD</b> 1. MS/MSD (LCS/LCSD) RPD within acceptance criteria? If not, please reference NCM # <u>0195266</u>		✓		✓
<b>I. Sample Results - Reports</b> 1. Are primary/secondary Form 10s included?			✓	
<b>J. Sample Results – Surrogate Recoveries</b> 1. All sample surrogate recoveries meet QC criteria? If not, please reference NCM # _____	✓			✓
<b>K. Sample Results – Dilutions</b> 1. Did samples require dilution due to matrix interference? If so, please reference NCM # _____		✓		✓
2. Did samples require dilution due to high target analyte concentrations? If so, please reference NCM # _____		✓		✓
<b>L. Sample Results – Qualifiers</b> 1. Did samples require any PG qualifiers for dual column comparison anomalies? If so, please reference NCM # _____			✓	
2. Did samples require any S qualifiers for Spectral Identification anomalies? If so, please reference NCM # _____			✓	
<b>M. Miscellaneous Information</b> 1. Have Batch/Prep sheets been included?	✓			✓
2. Have copies of all Run Logs been included?	✓			✓
3. Client requirement sheets included?	✓			✓
4. Were calculations checked?	✓			✓
5. Were manual integrations noted and signed?	✓			✓

Additional Comments:

Analyst: <u>Michelle Flahn</u>	Date: <u>2/21/12</u>
Second-Level Review: <u>Ben S.</u>	Date: <u>2/21/12</u>