

Friday, September 25, 1998

REQUEST NUMBER: 4661R

ANALYSIS TYPE: HE

Los Alamos
NATIONAL LABORATORY

ATTN: Steve Fry
Paragon/ATI
225 COMMERCE
FT. COLLINS, CO 80524

Please analyze the enclosed samples
according to the schedule indicated:

These samples are on:

SHIP DATE: 9/25/98
REPORT DUE: 10/25/98
TURN AROUND REQ'D: 30 days

LANL Request Number: 4661R
Per Agreement Number: 7794L0014-9S
Project Cost Code: MR3R12082642

RAD SCREENING: Not Required

COMMENTS: 15 - 1086 , GG;

LANL ER SMO CONTACT: Jaylene Valdez MS H865 5056659968

Signature: 

ANALYSIS ORDER CODE	ANALYTE(S)	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
HEXP		RE15-98-0029	03	S	9/23/98	
HEXP		RE15-98-0030	03	S	9/23/98	
HEXP		RE15-98-0031	03	S	9/23/98	
HEXP		RE15-98-0032	03	S	9/23/98	
HEXP		RE15-98-0033	03	S	9/23/98	
HEXP		RE15-98-0034	03	S	9/23/98	
HEXP		RE15-98-0035	03	S	9/23/98	
HEXP		RE15-98-0036	03	S	9/23/98	
HEXP		RE15-98-0037	03	S	9/23/98	

Final Page of REQUEST NUMBER 4661R

Page 1

Friday, September 25, 1998

Los Alamos
NATIONAL LABORATORY

CHAIN OF CUSTODY DOCUMENT NUMBER: 4661RC

REQUEST NUMBER: 4661R

ANALYSIS TYPE: HE

ATTN: Steve Fry
Paragon/ATI
225 COMMERCE
FT. COLLINS, CO 80524

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ANALYSIS ORDER CODE	PRESERVATIVE	MATRIX
RE15-98-0029	03	125 ml Glass	HEXP	ice	S
RE15-98-0030	03	125 ml Glass	HEXP	ice	S
RE15-98-0031	03	125 ml Glass	HEXP	ice	S
RE15-98-0032	03	125 ml Glass	HEXP	ice	S
RE15-98-0033	03	125 ml Glass	HEXP	ice	S
RE15-98-0034	03	125 ml Glass	HEXP	ice	S
RE15-98-0035	03	125 ml Glass	HEXP	ice	S
RE15-98-0036	03	125 ml Glass	HEXP	ice	S
RE15-98-0037	03	125 ml Glass	HEXP	ice	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 4661R

Page 1

Relinquished By:

Date Time

SI Haggelberg *[Signature]* 9/25/98 1326

PRINTED NAME

SIGNATURE

PRINTED NAME

SIGNATURE

PRINTED NAME

SIGNATURE

Received for DISPOSAL By:

Date Time

PRINTED NAME

SIGNATURE

Received By:

Date Time

PRINTED NAME

SIGNATURE

PRINTED NAME

SIGNATURE

PRINTED NAME

SIGNATURE

Remarks:

Los Alamos National Laboratory Environmental Restoration (Los Alamos, NM 87545)
CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

Technical Area 15	Send Lab Report to Nancy Ness	Field Unit Leader Roy Michelotti
Operable Unit 1086	M892	(505)665-7444
Date 09/23/98	LANL Destination SMO	Turnaround 30 days
OU Contact John McCann	LANL Contact John Miglio	Lab Report Required 10/23/98
Contact Phone No (505) 665-1091	LANL Mail Stop	Charge Code MR3R12082642

Relinquished by: <u>L. Karl Messers</u> (Signature): <u>[Signature]</u> Affiliation: ICF Kaiser Engineers, Inc	Date: <u>9-25-98</u> Time: <u>13:55</u>	Relinquished by: <u>[Signature]</u> (Signature): <u>[Signature]</u> Affiliation: <u>[Signature]</u>	Date: <u>[Signature]</u> (Signature): <u>[Signature]</u> Affiliation: <u>[Signature]</u>	Date: <u>[Signature]</u> (Signature): <u>[Signature]</u> Affiliation: <u>[Signature]</u>
Received by: <u>[Signature]</u> (Signature): <u>[Signature]</u> Affiliation: <u>[Signature]</u>	Time: <u>13:55</u>	Received by: <u>[Signature]</u> (Signature): <u>[Signature]</u> Affiliation: <u>[Signature]</u>	Time: <u>[Signature]</u>	Time: <u>[Signature]</u>
POSSIBLE HAZARD IDENTIFICATION: (please indicate if sample(s) are hazardous materials and/or suspected to contain high levels of hazardous substances): Radiological <u>Highly Toxic</u> Flammable <u>Non-Hazard</u> Skin Irritant <u>Other</u>				
Comments:			SCREENING METHOD: NA SAMPLE DISPOSAL: Disposal by Lab	

Field Unique Sample #/ID	Cont ID	Date & Time Collected	Sample Container Volume/Material	Matrix	Preserv	ANALYSIS REQUESTED: (SMO Order Codes)	REMARKS (Conditions of receipt, etc.)
RE15-98-0029	01	09/23/98 1345	500 ml Polyethylene	Soil	None	GSPEC	
RE15-98-0029	02	09/23/98 1345	500 ml Polyethylene	Soil	None	H3	
RE15-98-0029	03	09/23/98 1345	125 ml Glass	Soil	Ice	HEXP	
RE15-98-0029	04	09/23/98 1345	125 ml Polyethylene	Soil	None	ISOU	
RE15-98-0029	05	09/23/98 1345	125 ml Polyethylene	Soil	Ice	METAL	
RE15-98-0029	06	09/23/98 1345	125 ml Glass	Soil	Ice	PESTPCB	
RE15-98-0029	07	09/23/98 1345	125 ml Glass	Soil	Ice	SEMIN	
RE15-98-0029	08	09/23/98 1345	125 ml Septum Amber G	Soil	Ice	VOAGCMSN	
RE15-98-0030	01	09/23/98 1400	500 ml Polyethylene	Soil	None	GSPEC	
RE15-98-0030	02	09/23/98 1400	500 ml Polyethylene	Soil	None	H3	
RE15-98-0030	03	09/23/98 1400	125 ml Glass	Soil	Ice	HEXP	
RE15-98-0030	04	09/23/98 1400	125 ml Polyethylene	Soil	None	ISOU	

Original - LANL Destination

Yellow - RPF

Pink - FTL Copy

Los Alamos National Laboratory Environmental Restoration (Los Alamos, NM 87545)
CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

Technical Area 15	Send Lab Report to Nancy Ness	Field Unit Leader Roy Michelotti
Operable Unit 1086	M892	(505)665-7444
Date 09/23/98	LANL Destination SMO	Turnaround 30 days
OU Contact John McCann	LANL Contact John Miglio	Lab Report Required 10/23/98
Contact Phone No (505) 665-1091	LANL Mail Stop	Charge Code MR3R12082642

Field Unique Sample #/ID	Cont ID	Date & Time Collected	Sample Container Volume/Material	Matrix	Preserv	ANALYSIS REQUESTED: (SMO Order Codes)	REMARKS (Conditions of receipt, etc.)
~RE15-98-0030	05	09/23/98 1400	125 ml Polyethylene	Soil	Ice	METAL	
~RE15-98-0030	06	09/23/98 1400	125 ml Glass	Soil	Ice	PESTPCB	
~RE15-98-0030	07	09/23/98 1400	125 ml Glass	Soil	Ice	SEMIN	
~RE15-98-0030	08	09/23/98 1400	125 ml Septum Amber G	Soil	Ice	VOAGCMSN	
~RE15-98-0031	01	09/23/98 1410	500 ml Polyethylene	Soil	None	GSPEC	
~RE15-98-0031	02	09/23/98 1410	500 ml Polyethylene	Soil	None	H3	
~RE15-98-0031	03	09/23/98 1410	125 ml Glass	Soil	Ice	HEXP	
~RE15-98-0031	04	09/23/98 1410	125 ml Polyethylene	Soil	None	ISOU	
~RE15-98-0031	05	09/23/98 1410	125 ml Polyethylene	Soil	Ice	METAL	
~RE15-98-0031	06	09/23/98 1410	125 ml Glass	Soil	Ice	PESTPCB	
~RE15-98-0031	07	09/23/98 1410	125 ml Glass	Soil	Ice	SEMIN	
~RE15-98-0031	08	09/23/98 1410	125 ml Septum Amber G	Soil	Ice	VOAGCMSN	
~RE15-98-0032	01	09/23/98 1435	500 ml Polyethylene	Soil	None	GSPEC	
~RE15-98-0032	02	09/23/98 1435	500 ml Polyethylene	Soil	None	H3	
~RE15-98-0032	03	09/23/98 1435	125 ml Glass	Soil	Ice	HEXP	
~RE15-98-0032	04	09/23/98 1435	125 ml Polyethylene	Soil	None	ISOU	
~RE15-98-0032	05	09/23/98 1435	125 ml Polyethylene	Soil	Ice	METAL	
~RE15-98-0032	06	09/23/98 1435	125 ml Glass	Soil	Ice	PESTPCB	
~RE15-98-0032	07	09/23/98 1435	125 ml Glass	Soil	Ice	SEMIN	
~RE15-98-0032	08	09/23/98 1435	125 ml Septum Amber G	Soil	Ice	VOAGCMSN	
~RE15-98-0033	01	09/23/98 1451	500 ml Polyethylene	Soil	None	GSPEC	
~RE15-98-0033	02	09/23/98 1451	500 ml Polyethylene	Soil	None	H3	
~RE15-98-0033	03	09/23/98 1451	125 ml Glass	Soil	Ice	HEXP	
~RE15-98-0033	04	09/23/98 1451	125 ml Polyethylene	Soil	None	ISOU	
~RE15-98-0033	05	09/23/98 1451	125 ml Polyethylene	Soil	Ice	METAL	

Original - LANL Destination

Yellow - RPF

Pink - FTL Copy

Los Alamos National Laboratory Environmental Restoration (Los Alamos, NM 87545)
CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

Technical Area 15	Send Lab Report to Nancy Ness	Field Unit Leader Roy Michelotti
Operable Unit 1086	M892	(505)665-7444
Date 09/23/98	LANL Destination SMO	Turnaround 30 days
OU Contact John McCann	LANL Contact John Miglio	Lab Report Required 10/23/98
Contact Phone No (505) 665-1091	LANL Mail Stop	Charge Code MF3R12082642

Field Unique Sample #/ID	Cont ID	Date & Time Collected	Sample Container Volume/Material	Matrix	Preserv	ANALYSIS REQUESTED: (SMO Order Codes)	REMARKS (Conditions of receipt, etc.)
RE15-98-0033	06	09/23/98 1451	125 ml Glass	Soil	Ice	PESTPCB	
RE15-98-0033	08	09/23/98 1451	125 ml Glass	Soil	Ice	SEMIN	
RE15-98-0033	09	09/23/98 1451	125 ml Septum Amber G	Soil	Ice	VOAGCMSN	
RE15-98-0034	01	09/23/98 1505	500 ml Polyethylene	Soil	None	GSPEC	
RE15-98-0034	02	09/23/98 1505	500 ml Polyethylene	Soil	None	H3	
RE15-98-0034	03	09/23/98 1505	125 ml Glass	Soil	Ice	HEXP	
RE15-98-0034	04	09/23/98 1505	125 ml Polyethylene	Soil	None	ISOU	
RE15-98-0034	05	09/23/98 1505	125 ml Polyethylene	Soil	Ice	METTAL	
RE15-98-0034	06	09/23/98 1505	125 ml Glass	Soil	Ice	PESTPCB	
RE15-98-0034	08	09/23/98 1505	125 ml Glass	Soil	Ice	SEMIN	
RE15-98-0034	09	09/23/98 1505	125 ml Septum Amber G	Soil	Ice	VOAGCMSN	
RE15-98-0035	01	09/23/98 1525	500 ml Polyethylene	Soil	None	GSPEC	
RE15-98-0035	02	09/23/98 1525	500 ml Polyethylene	Soil	None	H3	
RE15-98-0035	03	09/23/98 1525	125 ml Glass	Soil	Ice	HEXP	
RE15-98-0035	04	09/23/98 1525	125 ml Polyethylene	Soil	None	ISOU	
RE15-98-0035	05	09/23/98 1525	125 ml Polyethylene	Soil	Ice	METTAL	
RE15-98-0035	06	09/23/98 1525	125 ml Glass	Soil	Ice	PESTPCB	
RE15-98-0035	07	09/23/98 1525	125 ml Glass	Soil	Ice	SEMIN	
RE15-98-0035	08	09/23/98 1525	125 ml Septum Amber G	Soil	Ice	VOAGCMSN	
RE15-98-0036	01	09/23/98 1540	500 ml Polyethylene	Soil	None	GSPEC	
RE15-98-0036	02	09/23/98 1540	500 ml Polyethylene	Soil	None	H3	
RE15-98-0036	03	09/23/98 1540	125 ml Glass	Soil	Ice	HEXP	
RE15-98-0036	04	09/23/98 1540	125 ml Polyethylene	Soil	None	ISOU	
RE15-98-0036	05	09/23/98 1540	125 ml Polyethylene	Soil	Ice	METTAL	
RE15-98-0036	06	09/23/98 1540	125 ml Glass	Soil	Ice	PESTPCB	

Original - LANL Destination

Yellow - RPF

Pink - FTL Copy

Los Alamos National Laboratory Environmental Restoration (Los Alamos, NM 87545)
CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

Technical Area	15	Send Lab Report to Nancy Ness	Field Unit Leader Roy Michelotti
Operable Unit	1086	M892	(505)665-7444
Date	09/23/98	LANL Destination SMO	Turnaround 30 days
OU Contact	John McCann	LANL Contact John Miglio	Lab Report Required 10/23/98
Contact Phone No (505)	665-1091	LANL Mail Stop	Charge Code MR3R12082642

Field Unique Sample #/ID	Cont ID	Date & Time Collected	Sample Container Volume/Material	Matrix	Preserv	ANALYSIS REQUESTED: (SMO Order Codes)	REMARKS (Conditions of receipt, etc.)
RE15-98-0036	08	09/23/98 1540	125 ml Glass	Soil	Ice	SEMIN	
RE15-98-0036	09	09/23/98 1540	125 ml Septum Amber G	Soil	Ice	VOAGCMSN	
RE15-98-0037	01	09/23/98 1554	500 ml Polyethylene	Soil	None	GSPEC	
RE15-98-0037	02	09/23/98 1554	500 ml Polyethylene	Soil	None	H3	
RE15-98-0037	03	09/23/98 1554	125 ml Glass	Soil	Ice	HEXP	
RE15-98-0037	04	09/23/98 1554	125 ml Polyethylene	Soil	None	ISOU	
RE15-98-0037	05	09/23/98 1554	125 ml Polyethylene	Soil	Ice	METTAL	
RE15-98-0037	06	09/23/98 1554	125 ml Glass	Soil	Ice	PESTPCB	
RE15-98-0037	07	09/23/98 1554	125 ml Glass	Soil	Ice	SEMIN	
RE15-98-0037	08	09/23/98 1554	125 ml Septum Amber G	Soil	Ice	VOAGCMSN	

SCREENING DATA RELEASE FORM

To: Field Support Facility

From: KARL MANESS, JCF KE

TA/OU: ~~1086/15~~ TA-15/1086

The following samples were received at the Field Support Facility (FSF) without screening data.

SAMPLE #

I understand that these samples will not be shipped until radiological screening data and corresponding C-O-C documentation arrive at the FSF. I further understand that it is my responsibility to ensure this information arrives in a timely manner to the FSF. If holding times are missed because screening data does arrive, I will pick up the samples and return them to the site from which they were collected.

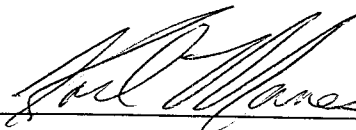
The following samples do not require screening data for the reasons stated below:

SAMPLES # RE 15-98-0029 thru RE 15-98-0037

Reason:

Field Screening Data Attached

Signature



Date

9/24/88

Los Alamos National Laboratory
Los Alamos, NM 87545

Date: 09/24/98

NOTIFICATION OF RADIOACTIVE MATERIAL SHIPMENT

To: SND

Phone/Fax No. _____

From: ICF Kaiser

Phone/Fax No. SOS 661-5200 661-5222

Please expect the following samples to arrive at your laboratory.

Sample ID #	Isotope (if known)	Activity per Unit Mass or Volume (pCi/g, μ Ci/L, etc.)	Contamination Level (d/m/100cm ²)		Comments
			Gross α	Gross β	
<u>REL5-98-0029</u>	<u>Du</u>	<u>< 2</u>	<u>NDA</u>	<u>NDA</u>	<u>Dry Soil</u>
<u>30</u>					
<u>31</u>					
<u>32</u>					
<u>33</u>					
<u>34</u>					
<u>35</u>					
<u>36</u>					
<u>37</u>	<u>Du</u>	<u>< 2</u>	<u>NDA</u>	<u>NDA</u>	<u>Dry Soil</u>

Screening Instrument: Ludlum 2221 w 2x2 Ludlum Mod 12 Plc Probe

Analyst: Ph Bahr

New

DATA PACKAGE (S) COC

TO:
EDIT/VALIDATION
ICF KAISER
505-661-5736

FROM: LOS ALAMOS NATL. LAB
SAMPLE MANAGEMENT
TA-3 BLDG. 271 MS: H865
LOS ALAMOS, NM
505-665-9968 OR 665-9967

This Chain of Custody is for the following data packages by REQUEST NUMBERS:

4688

4633

4636

4661

4802

4809

4484

4550

Relinquished:

Jaylan Vaz
signature

10-27-98
date

Data Packages receives:

William G. K...
signature

10/27/98
date

signature

date

(data relinquished)

signature

date

(data receives)



PARAGON ANALYTICS, INC.

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

October 23, 1998

Ms. Joylene Valdez
Los Alamos National Laboratory SMO
SMO TA-3, Bldg. 271
Los Alamos, NM 87545

RE: Paragon Workorder: 98-09-190
Client Project Name: None Submitted
Client Project Number: 4661R

Dear Ms. Valdez:

Nine soil samples were received from Los Alamos National Laboratory SMO on September 26, 1998. The samples were scheduled for Explosives by HPLC analysis. The result for this analysis are contained in the enclosed report pages 1-64.

Please note that an EDD was sent out on October 22, 1998.

I thank you for your confidence in Paragon Analytics, Inc. Should you have any questions, please call.

Sincerely,

Paragon Analytics, Inc.
Lance Steere
Senior Project Manager

Report Sent To: W. G. Brown

Approved By: _____

Date Sent: 10/27/98

LRS/ar

Enclosure: Report

ELD COPY

An Employee Owned Small Business

New

163
173

DATA PACKAGE (S) COC

TO:
EDIT/VALIDATION
ICF KAISER
505-661-5736

FROM: LOS ALAMOS NATL. LAB
SAMPLE MANAGEMENT
TA-3 BLDG. 271 MS: H865
LOS ALAMOS, NM
505-665-9968 OR 665-9967

This Chain of Custody is for the following data packages by REQUEST NUMBERS:

<u>4688</u>	<u>4633</u>	<u>4636</u>	<u>4661</u>
<u>4802</u>	<u>4809</u>	<u>4484</u>	<u>4550</u>

Relinquished:

Jaylinda , 10-27-98
signature date

Data Packages receives:

William G. [Signature] , 10/27/98
signature date

[Signature] , 1/15/99 (data relinquished)
signature date

Jaylinda , 1-15-99 (data receives)
signature date

CHAIN OF CUSTODY FORM (Example)

SECTION I. DATA PACKAGE INFORMATION (Relinquisher completes)

New Issue ☐ Yes ☒ No

Request Number(s):

4094 4204 1867 4661

Data Package Requestor (check one): ☒ Editing/Validation ☐ User

Name (print)

Joseph Garcia

Phone

1-5716

Focus Area:

IT

Z Number:

167331

SECTION II. AUTHORIZING SIGNATURES (Relinquished/Received signatures)

Relinquished By:

Joseph Garcia

Date:

6-28-99

I accept custody of the above listed data package(s).

Received By:

Joseph Garcia

Date:

Relinquished By:

Date:

I accept custody of the above listed data package(s).

Received By:

Date:

Comments:

525

CHAIN OF CUSTODY FORM (Example)

SECTION I. DATA PACKAGE INFORMATION (Relinquisher completes)

New Issue ☐ Yes ☒ No

Request Number(s):

4094 4204 1867 4661

Data Package Requestor (check one): ☒ Editing/Validation ☐ User

Name (print)

Joseph Garcia

Focus Area:

IT

Phone

1-5716

Z Number:

167339

SECTION II. AUTHORIZING SIGNATURES (Relinquished/Received signatures)

Relinquished By:

Joseph Garcia

Date:

6-28-99

I accept custody of the above listed data package(s).

Received By:

Joseph Garcia

Date:

6-28-99

Relinquished By:

Joseph Garcia

Date:

7/20/99

I accept custody of the above listed data package(s).

Received By:

Joseph Garcia

Date:

7-20-99

Comments:

CCS/VALIDATION COVER SHEET

M Code _____ SDG/RN: 4661R LAB NAME: Paragon LAB CODE _____

NAME OF VALIDATOR: Antonia Tallarico COMPANY: ICF Kaiser

VALIDATION DATE: 13 January 99 EDS ENTRY DATE _____

ANALYTICAL SUITE: ☐ VOLATILES ☒ HIGH EXPLOSIVES
 ☐ SEMIVOLATILES ☐ INORGANICS
 ☐ PESTICIDES/AROCLORS ☐ RADIOCHEMISTRY

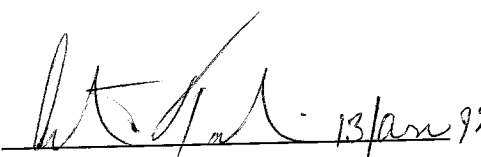
GENERAL CHECKLIST

	<u>PRESENT?</u> Ö if "yes" O if "no"
1. Case Narrative	_____
2. Airbills (no. Of shipments_____)	_____
3. Chain-of-custody records	_____
4. Sample tags	_____
5. Sample log-in sheets	_____
6. Internal lab sample transfer records and tracking sheets	_____
7. Other? Identify_____	_____

Are all samples assigned to the SDG present? " YES " NO
Identify any samples in the assigned SDG/RN that are missing

_____ _____ _____ _____ _____
_____ _____ _____ _____ _____

Comments/problems noted, including information about requests to the laboratory and agreed upon data of resolution and lab contact: (attach additional comment sheets as necessary)

Signature/1st validation:  13 Jan 99

Signature/2nd validation: _____

Qualifiers entered by: _____ Date: _____

Friday, September 25, 1998

Los Alamos
NATIONAL LABORATORY

ATTN: Steve Fry
Paragon/ATI
225 COMMERCE
FT. COLLINS, CO 80524

REQUEST NUMBER: 4661R

ANALYSIS TYPE: HE

9809190

Please analyze the enclosed samples
according to the schedule indicated:

These samples are on:

SHIP DATE: 9/25/98

REPORT DUE: 10/25/98

TURN AROUND REQ'D: 30 days

LANL Request Number: 4661R

Per Agreement Number: 7794L0014-9S

Project Cost Code: MR3R12082642

RAD SCREENING: Not Required

COMMENTS: 15 - 1086 , GG;

LANL ER SMO CONTACT: Jeylene Valdez MS H865 5056659968

Signature

Jeylene Valdez

ANALYSIS ORDER CODE	ANALYTE(S)	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
------------------------	------------	--------------	------------	------------------	-----------------	----------

01	HEXP	RE15-98-0029	03	S	9/23/98	
02	HEXP	RE15-98-0030	03	S	9/23/98	
03	HEXP	RE15-98-0031	03	S	9/23/98	
04	HEXP	RE15-98-0032	03	S	9/23/98	
05	HEXP	RE15-98-0033	03	S	9/23/98	
06	HEXP	RE15-98-0034	03	S	9/23/98	
07	HEXP	RE15-98-0035	03	S	9/23/98	
08	HEXP	RE15-98-0036	03	S	9/23/98	
09	HEXP	RE15-98-0037	03	S	9/23/98	

Final Page of REQUEST NUMBER 4661R

Page 1

000004



Paragon Analytics, Inc.

Explosives by HPLC Case Narrative

Los Alamos National Laboratory SMO

4661R

Order Number - 9809190

1. This report consists of 9 soil samples received by Paragon on 9/26/98.
2. These samples were extracted and analyzed according to SW-846, 3rd Edition procedures. Specifically, the samples were extracted and analyzed using procedures based on the protocols given in Method 8330.
3. The extracts were analyzed using HPLC with a UV detector and a C-18 column according to protocols based on Method 8330. All positive results were then confirmed on a CN column. Quantitations were taken from the primary column.
4. All initial and continuing calibration criteria were within acceptance criteria.
5. The method blank associated with this project was below the reporting limits for all analytes.
6. All laboratory control spike and laboratory control spike duplicate recoveries and RPDs were within the acceptance criteria.
7. All matrix spike and matrix spike duplicate recoveries and RPDs were within acceptance criteria.
8. All samples were extracted and analyzed within the established holding times.
9. All surrogate recoveries were within acceptance criteria.

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

Eddy Hammerquist
Eddy Hammerquist
Senior Organics Chemist

10-16-98
Date

PM
Reviewer's Initials

10/17/98
Date

000002

Nitroaromatics And Nitramines

Blank Spike and Blank Spike Duplicate

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

Client/Project ID: 4661R

Reported on: Friday, October 16, 1998

BS ID: EX980930-1LCS

BSD ID: EX980930-1LCSD

Sample Matrix: Solid
% Moisture: N/A
Cleanup Method: NONE
Report Basis: N/A

Date Collected: 30-Sep-98
Date Extracted: 30-Sep-98
Date Analyzed: 15-Oct-98
Prep Batch: EX980930-1

Sample Aliquot: 2
Final Volume: 20
Dilution: 1

CASNO	Target Analyte	Spike Added	BS Result	Units	Reporting Limit	BS % Rec.	Control Limits
2691-41-0	HMX	5	5.11	mg/kg	2.2	102	61 - 137
121-82-4	RDX	5	4.99	mg/kg	1	100	74 - 127
99-35-4	1,3,5-TRINITROBENZENE	5	5.22	mg/kg	0.25	104	79 - 117
99-65-0	1,3-DINITROBENZENE	5	5.04	mg/kg	0.25	101	80 - 132
98-95-3	NITROBENZENE	5	5.2	mg/kg	0.26	104	78 - 129
118-96-7	2,4,6-TRINITROTOLUENE	5	5.05	mg/kg	0.25	101	82 - 126
35572-78-2	2-AMINO-4,6-DNT	5	5.1	mg/kg	0.25	102	81 - 125
121-14-2	2,4-DINITROTOLUENE	5	5.07	mg/kg	0.25	101	75 - 130

CASNO	Target Analyte	Spike Added	BSD Result	Units	Reporting Limit	BSD % Rec.	RPD	RPD Limits
2691-41-0	HMX	5	5.16	mg/kg	2.2	103	1	30
121-82-4	RDX	5	5.02	mg/kg	1	100	0	30
99-35-4	1,3,5-TRINITROBENZENE	5	5.26	mg/kg	0.25	105	1	30
99-65-0	1,3-DINITROBENZENE	5	5.14	mg/kg	0.25	103	2	30
98-95-3	NITROBENZENE	5	5.65	mg/kg	0.26	113	8	30
118-96-7	2,4,6-TRINITROTOLUENE	5	5.35	mg/kg	0.25	107	6	30
35572-78-2	2-AMINO-4,6-DNT	5	5.34	mg/kg	0.25	107	5	30
121-14-2	2,4-DINITROTOLUENE	5	5.2	mg/kg	0.25	104	3	30

Surrogate Recovery BS/BS

CASNO	Target Analyte	Spike Added	BS % Rec.	BSD % Rec.	RPD	Control Limits
100-25-4	1,4-DINITROBENZENE	2.5	109	109	0	50 - 150

000020

Surrogate Summary for Nitroaromatics And Nitramines

Friday, October 16, 1998

Page 1 of 1

Control Limits	Lower	Upper
1,4-DINITROBENZENE	50	150

Lab ID	Client Sample ID	Collected	Received	% Recovery
Prep Batch ID: EX980930-1 Project Number: 9809190				
9809190-1	RE15-98-0029	9/23/98	9/26/98	106
9809190-2	RE15-98-0030	9/23/98	9/26/98	104
9809190-3	RE15-98-0031	9/23/98	9/26/98	104
9809190-4	RE15-98-0032	9/23/98	9/26/98	103
9809190-5	RE15-98-0033	9/23/98	9/26/98	104
9809190-6	RE15-98-0034	9/23/98	9/26/98	104
9809190-7	RE15-98-0035	9/23/98	9/26/98	102
9809190-8	RE15-98-0036	9/23/98	9/26/98	102
9809190-9	RE15-98-0037	9/23/98	9/26/98	104
9809190-9MS	RE15-98-0037	9/23/98	9/26/98	104
9809190-9MSD	RE15-98-0037	9/23/98	9/26/98	102
EX980930-1LCS	LABQC	9/30/98	9/30/98	109
EX980930-1LCSD	LABQC	9/30/98	9/30/98	109
EX980930-1MB	LABQC	9/30/98	9/30/98	105

000019

Prep Batch Summary for Nitroaromatics And Nitramines

Method SW8330

Prep Batch ID: EX980930-1

Date prepped: 30-Sep-98

Project Number: 9809190

COC Number: 4661RC

Lab ID	Client Sample ID	Date Collected	Date Received
9809190-1	RE15-98-0029	9/23/98	9/26/98
9809190-2	RE15-98-0030	9/23/98	9/26/98
9809190-3	RE15-98-0031	9/23/98	9/26/98
9809190-4	RE15-98-0032	9/23/98	9/26/98
9809190-5	RE15-98-0033	9/23/98	9/26/98
9809190-6	RE15-98-0034	9/23/98	9/26/98
9809190-7	RE15-98-0035	9/23/98	9/26/98
9809190-8	RE15-98-0036	9/23/98	9/26/98
9809190-9	RE15-98-0037	9/23/98	9/26/98
9809190-9MS	RE15-98-0037	9/23/98	9/26/98
9809190-9MSD	RE15-98-0037	9/23/98	9/26/98
EX980930-1LCS	LABQC	9/30/98	9/30/98
EX980930-1LCSD	LABQC	9/30/98	9/30/98
EX980930-1MB	LABQC	9/30/98	9/30/98

000022

Nitroaromatics And Nitramines

Method SW8330

Method Blank

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID:	LABQC
Lab ID:	EX980930-1MB

Sample Matrix: Solid
% Moisture: N/A
Cleanup Method: NONE
Report Basis: NA

Date Collected: 30-Sep-98
Date Extracted: 30-Sep-98
Date Analyzed: 15-Oct-98
Prep Batch: EX980930-1

Sample Aliquot: 2
Final Volume: 20
Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.63	mg/kg	2.5	105	50 - 150

U = Less than the Reporting Limit

000008

Nitroaromatics And Nitramines

Matrix Spike and Matrix Spike Duplicate

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

Reported on: Friday, October 16, 1998

ClientProject ID: 4661R

Field ID: RE15-98-0037

Lab ID: 9809190-9

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Spike Added	Sample Result	Units	Reporting Limit	Result Qualifier	MS Result	MS % Rec.	Control Limits
2691-41-0	HMX	5	2.2	mg/kg	2.2	U	5.07	101	61 - 137
121-82-4	RDX	5	1	mg/kg	1	U	4.98	100	74 - 127
99-35-4	1,3,5-TRINITROBENZENE	5	0.25	mg/kg	.25	U	5.2	104	79 - 117
99-65-0	1,3-DINITROBENZENE	5	0.25	mg/kg	.25	U	5.07	101	80 - 132
98-95-3	NITROBENZENE	5	0.26	mg/kg	.26	U	5.36	107	78 - 129
118-96-7	2,4,6-TRINITROTOLUENE	5	0.25	mg/kg	.25	U	5.17	103	82 - 126
35572-78-2	2-AMINO-4,6-DNT	5	0.25	mg/kg	.25	U	5.14	103	81 - 125
121-14-2	2,4-DINITROTOLUENE	5	0.25	mg/kg	.25	U	5.11	102	75 - 130

CASNO	Target Analyte	Spike Added	MSD Result	Units	Reporting Limit	MSD % Rec.	RPD	RPD Limits
2691-41-0	HMX	5	4.91	mg/kg	2.2	98	3	30
121-82-4	RDX	5	4.91	mg/kg	1	98	1	30
99-35-4	1,3,5-TRINITROBENZENE	5	5.09	mg/kg	.25	102	2	30
99-65-0	1,3-DINITROBENZENE	5	4.98	mg/kg	.25	100	2	30
98-95-3	NITROBENZENE	5	5.13	mg/kg	.26	103	4	30
118-96-7	2,4,6-TRINITROTOLUENE	5	5.01	mg/kg	.25	100	3	30
35572-78-2	2-AMINO-4,6-DNT	5	5.12	mg/kg	.25	102	0	30
121-14-2	2,4-DINITROTOLUENE	5	5.06	mg/kg	.25	101	1	30

Surrogate Recovery MS/MSD

CASNO	Target Analyte	Spike Added	MS % Rec.	MSD % Rec.	RPD	Control Limits
100-25-4	1,4-DINITROBENZENE	2.5	104	102	2	50 - 150

000021

CCS AND VALIDATION

Explanation of qualifiers (Q):

- U The analyte was analyzed for but not detected above the reported EQL
- J The analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample
 - J+ Likely has a high bias
 - J- Likely has a low bias
- UJ The analyte was analyzed for but not detected. The associated value is an estimate
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. Presence or absence cannot be verified.

Note: Any results qualified as "R" should be looked at for relevance for data use. Thus, "R" implies "PM" also, and must not be used alone
- P Use professional judgement based on data use . It usually has an "M" with it, indicating that a manual check should be made if the data that is qualified with the "P" is important to the data user.

In addition, PM also means that a decision must be made by the project manager/delegee regarding the need for further review of the data. This review should include some consideration of potential impact that could result from using the P qualified data. (For example, in the case of holding time exceedance, the project manager/delegee can decide to use the data with no qualification when analytes of interest are known to not be adversely affected by holding time exceedances. Another example is the case where soil sample duplicate analyses for metals exceed the precision criteria. Since this is likely because of sample non-homogeneity rather than lab error, the manager/delegee must decide how to use the data.)

- PM Manual review of raw data is recommended to determine if the defect impacts data use, as in "R" above.

REASON CODES FOR VALIDATION QUALIFIERS

HIGH EXPLOSIVES (H)

- 4 Sample result > EQL and < 5X the concentration of the related analyte in the blank, which indicates the reported detection is considered to be indistinguishable from blank contamination.
- 5 Sample result < EQL and < 5X (10X as above) the concentration of the analyte in the blank, which indicates the detected result was indistinguishable from blank contamination and the detected result was changed to non-detected at the EQL.
- 5a Sample result > EQL and > 5X (10X as above) the concentration of the analyte in the blank, which indicates the reported result is not likely to be related to the contamination in the associated blank.
- 6 Recovery of surrogates or analyte in the LCS > upper limit, which indicates a potential high bias in the results and a potential for false positive results.
- 6a Recovery of surrogates or analyte in the LCS < lower limit, which indicates a potential low bias in the results.
- 6d Result is a non-detect and the recovery of surrogates or the analyte in the LCS is < the lower limit, which indicates a potential for false negative results.
- 7 % RSD or %D exceeds specification - apply to a positive result, which indicates potential quantitation problems in the analyses and the potential for false positive results.
- 8 % RSD or %D exceeds the specification - apply to a non-detect, which indicates potential quantitation problems in the analyses and the potential false negative results.
9. Holding time is exceeded. An evaluation of the data of interest with respect to holding time exceedance impact (technically) is recommended. Factors to consider include

sample preservation, sample storage practices, use of the data, levels of contamination found in the sample, and the physical, chemical, and biological stability of the target analytes in the sample matrix.

10. Duplicate RPD > advisory 20% limit.

HIGH EXPLOSIVES

Initial calibration: Present? X yes no NA Daily calibration: Present? X yes no NA	NA NA	Obtain from lab. Q=A Obtain from lab. Q=A	
Lab Control Sample (LCS): Present? X yes no 60-120 % recovery of analytes (advisory) <i>Eight of the 14 target analytes were in the LCS.</i> <i>A LCS and a LCS duplicate were analyzed.</i>	OK See comment	Obtain from lab. Q=A If criterion not met, qualify each analyte associated with the LCS in the same batch as <u>J-</u> for <60% and <u>J+</u> for > 120%. For 0% recovery, qualify non-detects as <u>RPM</u> .	 <u>H6a</u> <u>H6</u> <u>H6d</u>
Surrogates: Present? yes no 3,4-Dinitrotoluene (required) 4-Nitroaniline (optional) <i>1,4-Dinitrobenzene was used as a surrogate in place of 3,4-dinitrotoluene.</i>	See comment	Obtain from lab. Q=A Enter % recovery in FIMAD table	

M13/Jan 99

<p><u>Method blank:</u></p> <p>Present: X yes no</p> <p>Target analytes \leq EQL</p>	OK	<p>Obtain from lab. Q=A</p> <p>If target compound found in blank but not in sample, no qualifier.</p> <p>Sample result > EQL and < 5 X multiple of blank, elevate EQL to sample result and qualify as <u>U</u>.</p> <p>Sample result < EQL and < 5X multiple of blank, elevate sample results to EQL and qualify as <u>U</u>.</p> <p>Sample result > 5X multiple, OK</p>	<p><u>H4</u></p> <p><u>H5</u></p>
<p><u>Holding time</u></p> <p>Extraction within 14 days of sample collection for soil and 7 days for water</p> <p>Analyses within 40 days of extraction</p>	OK	<p>Compare date of extraction with sampling date on Analytical Request and date of analysis with date of extraction.</p> <p>Q=<u>PM</u></p>	

M13/Jan 99

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0029

Lab ID: 9809190-1

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.65	mg/kg	2.5	106	50 - 150

U = Less than the Reporting Limit

M13/Jan 99

000009

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0030

Lab ID: 9809190-2

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.6	mg/kg	2.5	104	50 - 150

U = Less than the Reporting Limit

11/13/Jan 99

000010

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0031

Lab ID: 9809190-3

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.59	mg/kg	2.5	104	50 - 150

U = Less than the Reporting Limit

1713 Jan 99

000011

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0032

Lab ID: 9809190-4

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.58	mg/kg	2.5	103	50 - 150

U = Less than the Reporting Limit

11/13/99

000012

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0033

Lab ID: 9809190-5

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.59	mg/kg	2.5	104	50 - 150

U = Less than the Reporting Limit

MTB/Jan 99

000013

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0034

Lab ID: 9809190-6

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.61	mg/kg	2.5	104	50 - 150

U = Less than the Reporting Limit

MB/an 99

000014

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0035
Lab ID: 9809190-7

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.54	mg/kg	2.5	102	50 - 150

U = Less than the Reporting Limit

11/3/Jan 99

000015

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0036

Lab ID: 9809190-8

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.54	mg/kg	2.5	102	50 - 150

U = Less than the Reporting Limit

ATB/an 99

000016

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0037

Lab ID: 9809190-9

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.59	mg/kg	2.5	104	50 - 150

U = Less than the Reporting Limit

M13/Jan 99

000017

CCS/VALIDATION COVER SHEET

C CODE _____ SDG 4661 LAB NAME PARAGON LAB CODE _____
NAME OF CCS CHECKER _____ COMPANY _____
NAME OF VALIDATOR Antonia Gallarico COMPANY ICF Kaiser
CCS DATA _____ VALIDATION DATE 13/Jan 99 EDS ENTRY DATE _____

ANALYTICAL SUITE:

☐ VOLATILES
☐ SEMIVOLATILES
☐ PESTICIDES

☒ HIGH EXPLOSIVE
☐ INORGANICS
☐ RADIOCHEMISTRY

GENERAL CHECKLIST

1. CASE NARRATIVE
2. AIRBILLS (NO. OF SHIPMENTS _____)
3. CHAIN- OF-CUSTODY RECORDS
4. SAMPLE TAGS
5. SAMPLE LOG-IN SHEETS
6. INTERNAL LAB SAMPLE TRANSFER RECORDS
AND TRACKING SHEETS
7. OTHER ? IDENTIFY _____

PRESENT
X IF "YES"
O IF "NO"

ARE ALL SAMPLES ASSIGNED TO THE SDG PRESENT

YES

NO

IDENTIFY ANY SAMPLES IN THE ASSIGNED SDG?RN THAT ARE MISSING

COMMENTS/ PROBLEMS NOTED, INCLUDING INFORMATION ABOUT REQUEST TO THE
LABORATORY AND AGREED UPON DATA OF RESOLUTION AND LAB CONTACT:

SIGNATURE/ VALIDATION



PARAGON ANALYTICS, INC.

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

October 23, 1998

Ms. Joylene Valdez
Los Alamos National Laboratory SMO
SMO TA-3, Bldg. 271
Los Alamos, NM 87545

RE: Paragon Workorder: 98-09-190
Client Project Name: None Submitted
Client Project Number: 4661R

Dear Ms. Valdez:

Nine soil samples were received from Los Alamos National Laboratory SMO on September 26, 1998. The samples were scheduled for Explosives by HPLC analysis. The result for this analysis are contained in the enclosed report pages 1-64.

Please note that an EDD was sent out on October 22, 1998.

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

Sincerely,

Paragon Analytics, Inc.
Lance Steere
Senior Project Manager

LRS/ar
Enclosure: Report

Paragon Analytics, Incorporated

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 9809190

Client Name: Los Alamos National Laboratory SMO

Client Project Name:

Client Project Number: 4661R

Client PO Number: 7794L0014-9S

Client Sample	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
RE15-98-0029	9809190-1	4661RC	Soil	9/23/98	
RE15-98-0030	9809190-2	4661RC	Soil	9/23/98	
RE15-98-0031	9809190-3	4661RC	Soil	9/23/98	
RE15-98-0032	9809190-4	4661RC	Soil	9/23/98	
RE15-98-0033	9809190-5	4661RC	Soil	9/23/98	
RE15-98-0034	9809190-6	4661RC	Soil	9/23/98	
RE15-98-0035	9809190-7	4661RC	Soil	9/23/98	
RE15-98-0036	9809190-8	4661RC	Soil	9/23/98	
RE15-98-0037	9809190-9	4661RC	Soil	9/23/98	

Friday, September 25, 1998

CHAIN OF CUSTODY DOCUMENT NUMBER: 4661RC

Los Alamos
NATIONAL LABORATORY

REQUEST NUMBER: 4661R

ANALYSIS TYPE: HE

ATTN: Steve Fry
Paragon/ATI
225 COMMERCE
FT. COLLINS, CO 80524

9809190

	SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ANALYSIS ORDER CODE	PRESERVATIVE	MATRIX
01	RE15-98-0029	03	125 ml Glass	HEXP	Ice	S
02	RE15-98-0030	03	125 ml Glass	HEXP	Ice	S
03	RE15-98-0031	03	125 ml Glass	HEXP	Ice	S
04	RE15-98-0032	03	125 ml Glass	HEXP	Ice	S
05	RE15-98-0033	03	125 ml Glass	HEXP	Ice	S
06	RE15-98-0034	03	125 ml Glass	HEXP	Ice	S
07	RE15-98-0035	03	125 ml Glass	HEXP	Ice	S
08	RE15-98-0036	03	125 ml Glass	HEXP	Ice	S
09	RE15-98-0037	03	125 ml Glass	HEXP	Ice	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 4661R

Page 1

Relinquished By:

Date Time

SI Hagelberg *SI Hagelberg* 9/25/98 1326

PRINTED NAME SIGNATURE

Koley 9/26/98 1030
PRINTED NAME SIGNATURE

PRINTED NAME SIGNATURE

Received for DISPOSAL By:

Date Time

PRINTED NAME SIGNATURE

Received By:

Date Time

Koley
PRINTED NAME SIGNATURE

symantec 9/26/98 1030
PRINTED NAME SIGNATURE

PRINTED NAME SIGNATURE

Remarks:

CONDITION OF SAMPLE UPON RECEIPT

CLIENT: LANLSHIPPING CONTAINER #: LANL CenterWORKORDER NO. 9809190INITIALS: pmDATE: 9-26-95

1.	Does this project require special handling according to NEESA, Level 3, or CLP protocols? If yes, complete a. and b. a. Cooler Temperature _____ b. Lot No's. _____ c. Airbill Number _____	Yes	<u>No</u>
2.	Are custody seals on the cooler intact? If so, how many <u>41</u>	N/A	<u>Yes</u> No
3.	Are custody seals on sample containers intact?	N/A	<u>Yes</u> No
4.	Is there a Chain of Custody (COC) or other representative documents, letters or shipping memos?		<u>Yes</u> No
5.	Is the COC complete? Relinquished: Yes <u>X</u> No Requested Analysis: Yes <u>X</u> No	N/A	<u>Yes</u> No
6.	Is the COC in agreement with the samples received? No. of Samples: Yes <u>X</u> No Sample ID's: Yes <u>X</u> No Matrix: Yes <u>X</u> No No. of Containers: Yes <u>X</u> No		<u>Yes</u> No
7.	Are the samples requiring chemical preservation preserved correctly?	<u>N/A</u>	Yes No
8.	Is there enough sample? If so, are they in the proper containers?		<u>Yes</u> No
9.	Are all samples within holding times for the requested analyses?		<u>Yes</u> No
10.	Were the sample(s) shipped on ice?	N/A	<u>Yes</u> No
11.	Were all sample containers received intact? (not broken or leaking, etc.)		<u>Yes</u> No
12.	Are samples requiring no headspace, headspace free?	<u>N/A</u>	Yes No
13.	Do the samples require quarantine?		Yes <u>No</u>
14.	Do samples require Paragon disposal?		<u>Yes</u> No
15.	Did the client return any unused bottles?	Yes	<u>No</u>

Describe "NO" items (except No's 1, 13, & 14): _____

Was the client contacted? Yes _____ No _____
 If yes, Date: _____ Name of person contacted: _____

Describe actions taken or client instructions: _____

Group Leader's Signature: _____

Date: _____

Cooler Temperature: 3°C



Paragon Analytics, Inc.

Explosives by HPLC Case Narrative

Los Alamos National Laboratory SMO

4661R

Order Number - 9809190

1. This report consists of 9 soil samples received by Paragon on 9/26/98.
2. These samples were extracted and analyzed according to SW-846, 3rd Edition procedures. Specifically, the samples were extracted and analyzed using procedures based on the protocols given in Method 8330.
3. The extracts were analyzed using HPLC with a UV detector and a C-18 column according to protocols based on Method 8330. All positive results were then confirmed on a CN column. Quantitations were taken from the primary column.
4. All initial and continuing calibration criteria were within acceptance criteria.
5. The method blank associated with this project was below the reporting limits for all analytes.
6. All laboratory control spike and laboratory control spike duplicate recoveries and RPDs were within the acceptance criteria.
7. All matrix spike and matrix spike duplicate recoveries and RPDs were within acceptance criteria.
8. All samples were extracted and analyzed within the established holding times.
9. All surrogate recoveries were within acceptance criteria.

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

Eddy Hammerquist 10-16-98
Eddy Hammerquist Date
Senior Organics Chemist

PM 10/19/98
Reviewer's Initials Date

000002

Paragon Analytics, Incorporated

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 9809190

Client Name: Los Alamos National Laboratory SMO

Client Project Name:

Client Project Number: 4661R

Client PO Number: 7794L0014-9S

Client Sample	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
RE15-98-0029	9809190-1	4661RC	Soil	9/23/98	
RE15-98-0030	9809190-2	4661RC	Soil	9/23/98	
RE15-98-0031	9809190-3	4661RC	Soil	9/23/98	
RE15-98-0032	9809190-4	4661RC	Soil	9/23/98	
RE15-98-0033	9809190-5	4661RC	Soil	9/23/98	
RE15-98-0034	9809190-6	4661RC	Soil	9/23/98	
RE15-98-0035	9809190-7	4661RC	Soil	9/23/98	
RE15-98-0036	9809190-8	4661RC	Soil	9/23/98	
RE15-98-0037	9809190-9	4661RC	Soil	9/23/98	

Friday, September 25, 1998

Los Alamos
NATIONAL LABORATORY

ATTN: Steve Fry

Paragon/ATI

225 COMMERCE

FT. COLLINS, CO 80524

Please analyze the enclosed samples
according to the schedule indicated:

SHIP DATE: 9/25/98

REPORT DUE: 10/25/98

TURN AROUND REQ'D: 30 days

REQUEST NUMBER: 4661R

ANALYSIS TYPE: HE

9809190

These samples are on:

LANL Request Number: 4661R

Per Agreement Number: 7794L0014-9S

Project Cost Code: MR3R12082642

RAD SCREENING: Not Required

COMMENTS: 15 - 1086, GG;

LANL ER SMO CONTACT: Jaylene Valdez MS H865 5056659968

Signature

Jaylene Valdez

ANALYSIS ORDER CODE	ANALYTE(S)	SAMPLE ID	CONT ID	SAMPLE MATRIX	DATE SAMPLED	COMMENTS
------------------------	------------	--------------	------------	------------------	-----------------	----------

01	HEXP	RE15-98-0029	03	S	9/23/98	
02	HEXP	RE15-98-0030	03	S	9/23/98	
03	HEXP	RE15-98-0031	03	S	9/23/98	
04	HEXP	RE15-98-0032	03	S	9/23/98	
05	HEXP	RE15-98-0033	03	S	9/23/98	
06	HEXP	RE15-98-0034	03	S	9/23/98	
07	HEXP	RE15-98-0035	03	S	9/23/98	
08	HEXP	RE15-98-0036	03	S	9/23/98	
09	HEXP	RE15-98-0037	03	S	9/23/98	

000004

Friday, September 25, 1998

Los Alamos
NATIONAL LABORATORY

CHAIN OF CUSTODY DOCUMENT NUMBER: 4661RC

REQUEST NUMBER: 4661R

ANALYSIS TYPE: HE

ATTN: Steve Fry
Paragon/ATI
225 COMMERCE
FT. COLLINS, CO 80524

9809190

SAMPLE ID	CONT ID	CONTAINER DESCRIPTION	ANALYSIS ORDER CODE	PRESERVATIVE	MATRIX
01 RE15-98-0029	03	125 ml Glass	HEXP	Ice	S
02 RE15-98-0030	03	125 ml Glass	HEXP	Ice	S
03 RE15-98-0031	03	125 ml Glass	HEXP	Ice	S
04 RE15-98-0032	03	125 ml Glass	HEXP	Ice	S
05 RE15-98-0033	03	125 ml Glass	HEXP	Ice	S
06 RE15-98-0034	03	125 ml Glass	HEXP	Ice	S
07 RE15-98-0035	03	125 ml Glass	HEXP	Ice	S
08 RE15-98-0036	03	125 ml Glass	HEXP	Ice	S
09 RE15-98-0037	03	125 ml Glass	HEXP	Ice	S

Final Page of CHAIN OF CUSTODY DOCUMENT FOR REQUEST NUMBER 4661R

Page 1

Relinquished By:

Date Time

SI Hogelberg SD Hog 9/25/98 1326

PRINTED NAME

SIGNATURE

PRINTED NAME

SIGNATURE

PRINTED NAME

SIGNATURE

Received for DISPOSAL By:

Date Time

PRINTED NAME

SIGNATURE

Received By:

Date Time

Ledex

PRINTED NAME

SIGNATURE

PRINTED NAME

SIGNATURE

PRINTED NAME

SIGNATURE

Remarks:

000005

CONDITION OF SAMPLE UPON RECEIPT

CLIENT: LARISHIPPING CONTAINER #: 1anl coolerWORKORDER NO. 9809190INITIALS: pjmDATE: 9-26-98

1.	Does this project require special handling according to NEESA, Level 3, or CLP protocols? If yes, complete a. and b. a. Cooler Temperature _____ b. Lot No's. _____ c. Airbill Number _____		Yes	<u>No</u>
2.	Are custody seals on the cooler intact? If so, how many <u>4</u>	N/A	<u>Yes</u>	No
3.	Are custody seals on sample containers intact?	N/A	<u>Yes</u>	No
4.	Is there a Chain of Custody (COC) or other representative documents, letters or shipping memos?		<u>Yes</u>	No
5.	Is the COC complete? Relinquished: Yes <u>X</u> No Requested Analysis: Yes <u>X</u> No	N/A	<u>Yes</u>	No
6.	Is the COC in agreement with the samples received? No. of Samples: Yes <u>X</u> No Sample ID's: Yes <u>X</u> No Matrix: Yes <u>X</u> No No. of Containers: Yes <u>X</u> No		<u>Yes</u>	No
7.	Are the samples requiring chemical preservation preserved correctly?	<u>N/A</u>	Yes	No
8.	Is there enough sample? If so, are they in the proper containers?		<u>Yes</u>	No
9.	Are all samples within holding times for the requested analyses?		<u>Yes</u>	No
10.	Were the sample(s) shipped on ice?	N/A	<u>Yes</u>	No
11.	Were all sample containers received intact? (not broken or leaking, etc.)		<u>Yes</u>	No
12.	Are samples requiring no headspace, headspace free?	<u>N/A</u>	Yes	No
13.	Do the samples require quarantine?		Yes	<u>No</u>
14.	Do samples require Paragon disposal?		<u>Yes</u>	No
15.	Did the client return any unused bottles?		Yes	<u>No</u>

Describe "NO" items (except No's 1, 13, & 14): _____

Was the client contacted? Yes _____ No _____
 If yes, Date: _____ Name of person contacted: _____
 Describe actions taken or client instructions: _____

Group Leader's Signature: _____ Date: _____

Cooler Temperature: 3°C

Nitroaromatics And Nitramines

Method SW8330

Method Blank

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID:	LABQC
Lab ID:	EX980930-1MB

Sample Matrix: Solid
% Moisture: N/A
Cleanup Method: NONE
Report Basis: NA

Date Collected: 30-Sep-98
Date Extracted: 30-Sep-98
Date Analyzed: 15-Oct-98
Prep Batch: EX980930-1

Sample Aliquot: 2
Final Volume: 20
Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.63	mg/kg	2.5	105	50 - 150

U = Less than the Reporting Limit

000008

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0029
Lab ID: 9809190-1

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.65	mg/kg	2.5	106	50 - 150

U = Less than the Reporting Limit

000009

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0030

Lab ID: 9809190-2

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.6	mg/kg	2.5	104	50 - 150

U = Less than the Reporting Limit

000010

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

Client/Project ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0031

Lab ID: 9809190-3

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.59	mg/kg	2.5	104	50 - 150

U = Less than the Reporting Limit

000011

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0032

Lab ID: 9809190-4

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.58	mg/kg	2.5	103	50 - 150

U = Less than the Reporting Limit

000012

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0033

Lab ID: 9809190-5

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.59	mg/kg	2.5	104	50 - 150

U = Less than the Reporting Limit

000013

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0034

Lab ID: 9809190-6

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.61	mg/kg	2.5	104	50 - 150

U = Less than the Reporting Limit

000014

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0035

Lab ID: 9809190-7

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.54	mg/kg	2.5	102	50 - 150

U = Less than the Reporting Limit

000015

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0036

Lab ID: 9809190-8

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.54	mg/kg	2.5	102	50 - 150

U = Less than the Reporting Limit

000016

Nitroaromatics And Nitramines

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0037

Lab ID: 9809190-9

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Result	Units	Reporting Limit	Result Qualifier	Result Footnote
2691-41-0	HMX	2.2	mg/kg	2.2	U	
121-82-4	RDX	1	mg/kg	1	U	
99-35-4	1,3,5-TRINITROBENZENE	0.25	mg/kg	0.25	U	
99-65-0	1,3-DINITROBENZENE	0.25	mg/kg	0.25	U	
479-45-8	TETRYL	0.65	mg/kg	0.65	U	
98-95-3	NITROBENZENE	0.26	mg/kg	0.26	U	
118-96-7	2,4,6-TRINITROTOLUENE	0.25	mg/kg	0.25	U	
1946-51-0	4-AMINO-2,6-DNT	0.25	mg/kg	0.25	U	
35572-78-2	2-AMINO-4,6-DNT	0.25	mg/kg	0.25	U	
606-20-2	2,6-DINITROTOLUENE	0.26	mg/kg	0.26	U	
121-14-2	2,4-DINITROTOLUENE	0.25	mg/kg	0.25	U	
88-72-2	2-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-99-0	4-NITROTOLUENE	0.25	mg/kg	0.25	U	
99-08-1	3-NITROTOLUENE	0.25	mg/kg	0.25	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Units	Spike Amount	Percent Recovery	Control Limits
100-25-4	1,4-DINITROBENZENE	2.59	mg/kg	2.5	104	50 - 150

U = Less than the Reporting Limit

000017

Surrogate Summary for Nitroaromatics And Nitramines

Friday, October 16, 1998

Page 1 of 1

Control Limits	Lower	Upper
1,4-DINITROBENZENE	50	150

Lab ID	Client Sample ID	Collected	Received	% Recovery
--------	------------------	-----------	----------	------------

Prep Batch ID: EX980930-1

Project Number: 9809190

9809190-1	RE15-98-0029	9/23/98	9/26/98	106
9809190-2	RE15-98-0030	9/23/98	9/26/98	104
9809190-3	RE15-98-0031	9/23/98	9/26/98	104
9809190-4	RE15-98-0032	9/23/98	9/26/98	103
9809190-5	RE15-98-0033	9/23/98	9/26/98	104
9809190-6	RE15-98-0034	9/23/98	9/26/98	104
9809190-7	RE15-98-0035	9/23/98	9/26/98	102
9809190-8	RE15-98-0036	9/23/98	9/26/98	102
9809190-9	RE15-98-0037	9/23/98	9/26/98	104
9809190-9MS	RE15-98-0037	9/23/98	9/26/98	104
9809190-9MSD	RE15-98-0037	9/23/98	9/26/98	102
EX980930-1LCS	LABQC	9/30/98	9/30/98	109
EX980930-1LCSD	LABQC	9/30/98	9/30/98	109
EX980930-1MB	LABQC	9/30/98	9/30/98	105

000019

Nitroaromatics And Nitramines

Blank Spike and Blank Spike Duplicate

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

BS ID: EX980930-1LCS
BSD ID: EX980930-1LCSD

Sample Matrix: Solid
% Moisture: N/A
Cleanup Method: NONE
Report Basis: N/A

Date Collected: 30-Sep-98
Date Extracted: 30-Sep-98
Date Analyzed: 15-Oct-98
Prep Batch: EX980930-1

Sample Aliquot: 2
Final Volume: 20
Dilution: 1

CASNO	Target Analyte	Spike Added	BS Result	Units	Reporting Limit	BS % Rec.	Control Limits
2691-41-0	HMX	5	5.11	mg/kg	2.2	102	61 - 137
121-82-4	RDX	5	4.99	mg/kg	1	100	74 - 127
99-35-4	1,3,5-TRINITROBENZENE	5	5.22	mg/kg	0.25	104	79 - 117
99-65-0	1,3-DINITROBENZENE	5	5.04	mg/kg	0.25	101	80 - 132
98-95-3	NITROBENZENE	5	5.2	mg/kg	0.26	104	78 - 129
118-96-7	2,4,6-TRINITROTOLUENE	5	5.05	mg/kg	0.25	101	82 - 126
35572-78-2	2-AMINO-4,6-DNT	5	5.1	mg/kg	0.25	102	81 - 125
121-14-2	2,4-DINITROTOLUENE	5	5.07	mg/kg	0.25	101	75 - 130

CASNO	Target Analyte	Spike Added	BSD Result	Units	Reporting Limit	BSD % Rec.	RPD	RPD Limits
2691-41-0	HMX	5	5.16	mg/kg	2.2	103	1	30
121-82-4	RDX	5	5.02	mg/kg	1	100	0	30
99-35-4	1,3,5-TRINITROBENZENE	5	5.26	mg/kg	0.25	105	1	30
99-65-0	1,3-DINITROBENZENE	5	5.14	mg/kg	0.25	103	2	30
98-95-3	NITROBENZENE	5	5.65	mg/kg	0.26	113	8	30
118-96-7	2,4,6-TRINITROTOLUENE	5	5.35	mg/kg	0.25	107	6	30
35572-78-2	2-AMINO-4,6-DNT	5	5.34	mg/kg	0.25	107	5	30
121-14-2	2,4-DINITROTOLUENE	5	5.2	mg/kg	0.25	104	3	30

Surrogate Recovery BS/BS

CASNO	Target Analyte	Spike Added	BS % Rec.	BSD % Rec.	RPD	Control Limits
100-25-4	1,4-DINITROBENZENE	2.5	109	109	0	50 - 150

000020

Nitroaromatics And Nitramines

Matrix Spike and Matrix Spike Duplicate

Method SW8330

Lab Name: Paragon Analytics, Inc.

Work Order Number: 9809190

Client Name: Los Alamos National Laboratory

ClientProject ID: 4661R

Reported on: Friday, October 16, 1998

Field ID: RE15-98-0037
Lab ID: 9809190-9

Sample Matrix: Solid

% Moisture: 0

Cleanup Method: NONE

Report Basis: DRY WEIGHT

Date Collected: 23-Sep-98

Date Extracted: 30-Sep-98

Date Analyzed: 15-Oct-98

Prep Batch: EX980930-1

Sample Aliquot: 2

Final Volume: 20

Dilution: 1

CASNO	Target Analyte	Spike Added	Sample Result	Units	Reporting Limit	Result Qualifier	MS Result	MS % Rec.	Control Limits
2691-41-0	HMX	5	2.2	mg/kg	2.2	U	5.07	101	61 - 137
121-82-4	RDX	5	1	mg/kg	1	U	4.98	100	74 - 127
99-35-4	1,3,5-TRINITROBENZENE	5	0.25	mg/kg	.25	U	5.2	104	79 - 117
99-65-0	1,3-DINITROBENZENE	5	0.25	mg/kg	.25	U	5.07	101	80 - 132
98-95-3	NITROBENZENE	5	0.26	mg/kg	.26	U	5.36	107	78 - 129
118-96-7	2,4,6-TRINITROTOLUENE	5	0.25	mg/kg	.25	U	5.17	103	82 - 126
35572-78-2	2-AMINO-4,6-DNT	5	0.25	mg/kg	.25	U	5.14	103	81 - 125
121-14-2	2,4-DINITROTOLUENE	5	0.25	mg/kg	.25	U	5.11	102	75 - 130

CASNO	Target Analyte	Spike Added	MSD Result	Units	Reporting Limit	MSD % Rec.	RPD	RPD Limits
2691-41-0	HMX	5	4.91	mg/kg	2.2	98	3	30
121-82-4	RDX	5	4.91	mg/kg	1	98	1	30
99-35-4	1,3,5-TRINITROBENZENE	5	5.09	mg/kg	.25	102	2	30
99-65-0	1,3-DINITROBENZENE	5	4.98	mg/kg	.25	100	2	30
98-95-3	NITROBENZENE	5	5.13	mg/kg	.26	103	4	30
118-96-7	2,4,6-TRINITROTOLUENE	5	5.01	mg/kg	.25	100	3	30
35572-78-2	2-AMINO-4,6-DNT	5	5.12	mg/kg	.25	102	0	30
121-14-2	2,4-DINITROTOLUENE	5	5.06	mg/kg	.25	101	1	30

Surrogate Recovery MS/MSD

CASNO	Target Analyte	Spike Added	MS % Rec.	MSD % Rec.	RPD	Control Limits
100-25-4	1,4-DINITROBENZENE	2.5	104	102	2	50 - 150

000021

Prep Batch Summary for Nitroaromatics And Nitramines

Method SW8330

Prep Batch ID: EX980930-1

Date prepped: 30-Sep-98

Project Number: 9809190

COC Number: 4661RC

Lab ID	Client Sample ID	Date Collected	Date Received
9809190-1	RE15-98-0029	9/23/98	9/26/98
9809190-2	RE15-98-0030	9/23/98	9/26/98
9809190-3	RE15-98-0031	9/23/98	9/26/98
9809190-4	RE15-98-0032	9/23/98	9/26/98
9809190-5	RE15-98-0033	9/23/98	9/26/98
9809190-6	RE15-98-0034	9/23/98	9/26/98
9809190-7	RE15-98-0035	9/23/98	9/26/98
9809190-8	RE15-98-0036	9/23/98	9/26/98
9809190-9	RE15-98-0037	9/23/98	9/26/98
9809190-9MS	RE15-98-0037	9/23/98	9/26/98
9809190-9MSD	RE15-98-0037	9/23/98	9/26/98
EX980930-1LCS	LABQC	9/30/98	9/30/98
EX980930-1LCSD	LABQC	9/30/98	9/30/98
EX980930-1MB	LABQC	9/30/98	9/30/98

000022

=====

Calibration Table

=====

Calib. Data Modified : Tuesday, October 13, 1998 8:58:32 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 5.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 5.000 %
Abs. Non-ref. Window : 0.000 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Included
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75

Calibration Report Options :

Printout of recalibrations within a sequence:

Calibration Table after Recalibration

Normal Report after Recalibration

If the sequence is done with bracketing:

Results of first cycle (ending previous bracket)

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Lvl Sig	Amount [ug/ml]	Area	Amt/Area	Ref Grp Name
4.411	1	1 2.50000e-2	3.03048	8.24952e-3	HMX
		2 1.00000e-1	12.73274	7.85377e-3	
		3 5.00000e-1	62.84180	7.95649e-3	
		4 1.00000	124.73011	8.01731e-3	
		5 2.50000	303.39957	8.23996e-3	
6.411	1	1 2.50000e-2	3.51366	7.11509e-3	RDX
		2 1.00000e-1	15.48072	6.45965e-3	
		3 5.00000e-1	74.47765	6.71342e-3	
		4 1.00000	151.06975	6.61946e-3	
		5 2.50000	376.24951	6.64453e-3	
8.510	1	1 2.50000e-2	8.31328	3.00724e-3	1,3,5-TNB
		2 1.00000e-1	34.18022	2.92567e-3	
		3 5.00000e-1	163.57988	3.05661e-3	
		4 1.00000	326.06308	3.06689e-3	
		5 2.50000	808.75562	3.09117e-3	
9.379	1	1 2.50000e-2	10.58579	2.36166e-3	1,4-DNB
		2 1.00000e-1	41.79448	2.39266e-3	
		3 5.00000e-1	210.43306	2.37605e-3	
		4 1.00000	416.25385	2.40238e-3	
		5 2.50000	1032.84290	2.42050e-3	

RetTime [min]	Lvl Sig	Amount [ug/ml]	Area	Amt/Area	Ref Grp Name
-----	---	-----	-----	-----	-----
10.238	1	1 2.50000e-2	12.00868	2.08183e-3	1,3-DNB
		2 1.00000e-1	47.02092	2.12671e-3	
		3 5.00000e-1	231.60524	2.15885e-3	
		4 1.00000	449.86737	2.22288e-3	
		5 2.50000	1114.31580	2.24353e-3	
10.530	1	1 2.50000e-2	5.66958	4.40950e-3	Tetryl
		2 1.00000e-1	25.97213	3.85028e-3	
		3 5.00000e-1	131.56216	3.80048e-3	
		4 1.00000	260.56766	3.83777e-3	
		5 2.50000	646.16083	3.86901e-3	
11.470	1	1 2.50000e-2	7.11714	3.51265e-3	Nitrobenzene
		2 1.00000e-1	32.01076	3.12395e-3	
		3 5.00000e-1	158.34424	3.15768e-3	
		4 1.00000	312.56763	3.19931e-3	
		5 2.50000	776.59631	3.21918e-3	
12.786	1	1 2.50000e-2	8.69824	2.87414e-3	2,4,6-TNT
		2 1.00000e-1	34.07187	2.93497e-3	
		3 5.00000e-1	155.42012	3.21709e-3	
		4 1.00000	311.66092	3.20862e-3	
		5 2.50000	774.60974	3.22743e-3	
13.078	1	1 2.50000e-2	4.59085	5.44561e-3	4-Am-2,6-DNT
		2 1.00000e-1	19.80117	5.05021e-3	
		3 5.00000e-1	114.20254	4.37819e-3	
		4 1.00000	232.70612	4.29727e-3	
		5 2.50000	572.65222	4.36565e-3	
13.879	1	1 2.50000e-2	7.53784	3.31660e-3	2-Am-4,6-DNT
		2 1.00000e-1	27.94447	3.57853e-3	
		3 5.00000e-1	159.89488	3.12705e-3	
		4 1.00000	325.30066	3.07408e-3	
		5 2.50000	804.90088	3.10597e-3	
14.658	1	1 2.50000e-2	4.67782	5.34437e-3	2,6-DNT
		2 1.00000e-1	19.21981	5.20296e-3	
		3 5.00000e-1	108.50058	4.60827e-3	
		4 1.00000	216.99878	4.60832e-3	
		5 2.50000	536.63263	4.65868e-3	
15.224	1	1 2.50000e-2	9.18981	2.72041e-3	2,4-DNT
		2 1.00000e-1	38.78340	2.57842e-3	
		3 5.00000e-1	215.29704	2.32237e-3	
		4 1.00000	435.03323	2.29867e-3	
		5 2.50000	1080.62244	2.31348e-3	
17.617	1	1 2.50000e-2	4.73401	5.28094e-3	o-NT
		2 1.00000e-1	18.85766	5.30288e-3	
		3 5.00000e-1	97.75724	5.11471e-3	
		4 1.00000	198.60600	5.03509e-3	
		5 2.50000	486.97961	5.13369e-3	
18.768	1	1 2.50000e-2	3.28176	7.61787e-3	p-NT
		2 1.00000e-1	16.21964	6.16536e-3	
		3 5.00000e-1	86.41595	5.78597e-3	
		4 1.00000	175.35635	5.70267e-3	
		5 2.50000	427.37817	5.84962e-3	
20.157	1	1 2.50000e-2	4.44494	5.62437e-3	m-NT
		2 1.00000e-1	20.92701	4.77851e-3	
		3 5.00000e-1	109.58647	4.56261e-3	
		4 1.00000	221.57678	4.51311e-3	
		5 2.50000	536.41870	4.66054e-3	

More compound-specific settings:

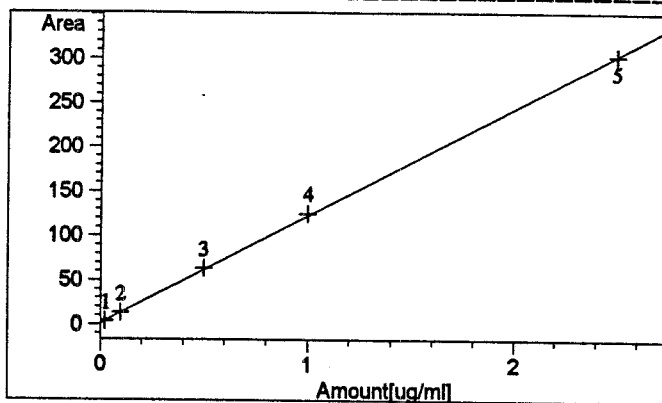
Compound: HMX	
Time Window	: From 4.111 min To 4.711 min
Compound: RDX	
Time Window	: From 6.111 min To 6.711 min
Compound: 1,3,5-TNB	
Time Window	: From 8.210 min To 8.810 min
Compound: 1,4-DNB	
Time Window	: From 9.079 min To 9.679 min
Compound: 1,3-DNB	
Time Window	: From 9.938 min To 10.538 min
Compound: Tetryl	
Time Window	: From 10.230 min To 10.830 min
Compound: Nitrobenzene	
Time Window	: From 11.170 min To 11.770 min
Compound: 2,4,6-TNT	
Time Window	: From 12.486 min To 13.086 min
Compound: 4-Am-2,6-DNT	
Time Window	: From 12.778 min To 13.378 min
Compound: 2-Am-4,6-DNT	
Time Window	: From 13.579 min To 14.179 min
Compound: 2,6-DNT	
Time Window	: From 14.358 min To 14.958 min
Compound: 2,4-DNT	
Time Window	: From 14.924 min To 15.524 min
Compound: o-NT	
Time Window	: From 17.317 min To 17.917 min
Compound: p-NT	
Time Window	: From 18.468 min To 19.068 min
Compound: m-NT	
Time Window	: From 19.857 min To 20.457 min

1 Warnings or Errors :

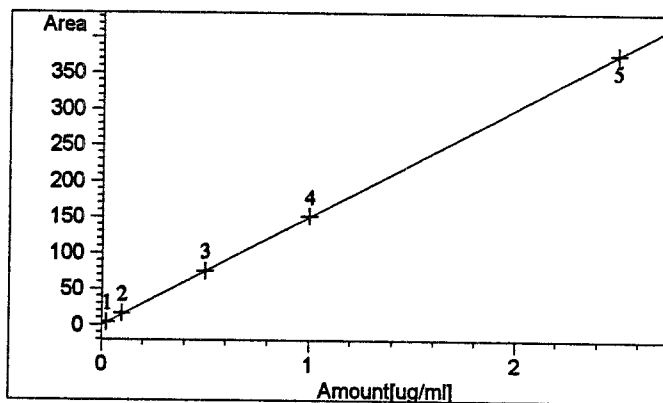
Warning : Cal. table open and changed while report was generated.

=====

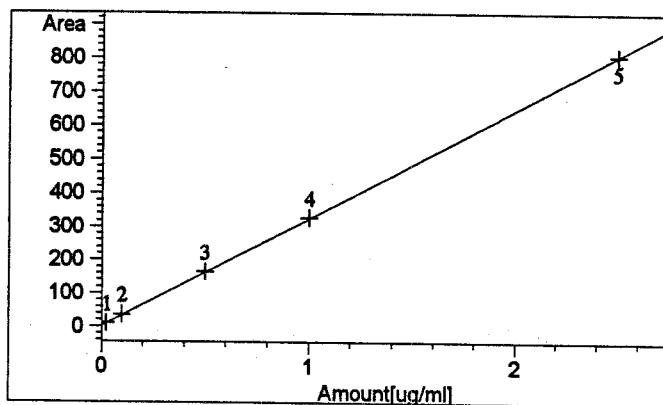
Calibration Curves



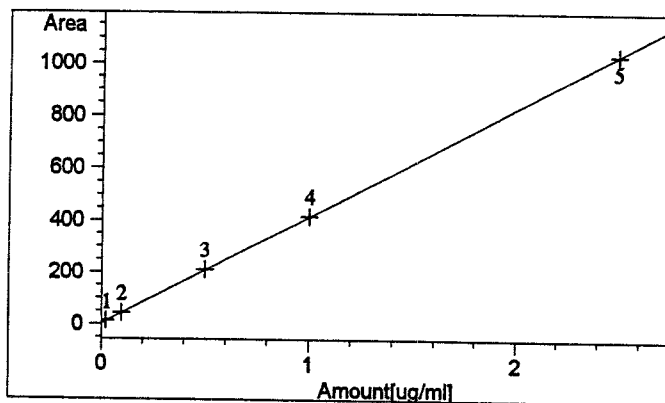
HMX at exp. RT: 4.411
VWD1 A, Wavelength=254 nm
Correlation: 0.99993
Residual Std. Dev.: 1.59029
Formula: $y = mx + b$
m: 121.42392
b: 9.76840e-1
x: Amount[ug/ml]
y: Area



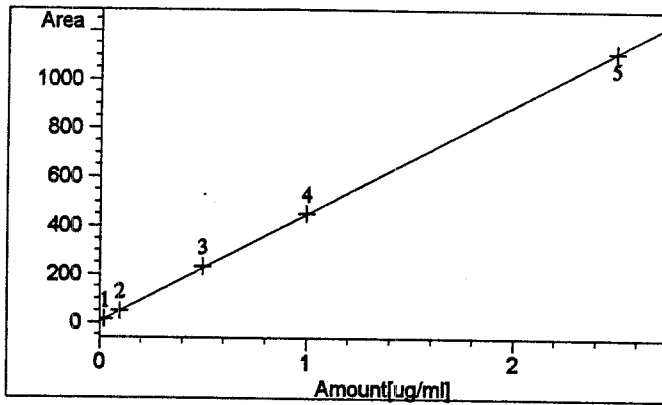
RDX at exp. RT: 6.411
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 0.53744
Formula: $y = mx + b$
m: 150.55001
b: -3.79193e-2
x: Amount[ug/ml]
y: Area



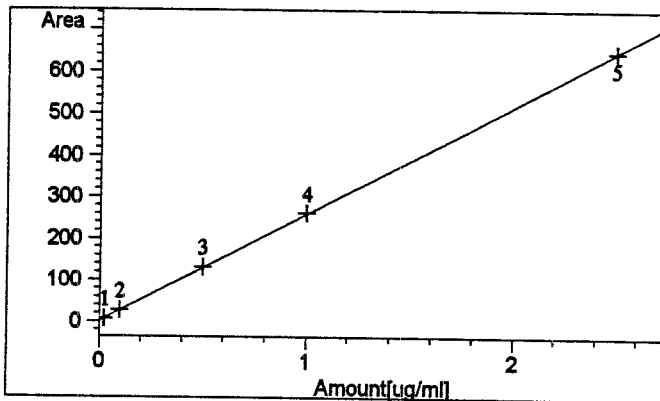
1,3,5-TNB at exp. RT: 8.510
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 1.25024
Formula: $y = mx + b$
m: 323.33811
b: 1.18706
x: Amount[ug/ml]
y: Area



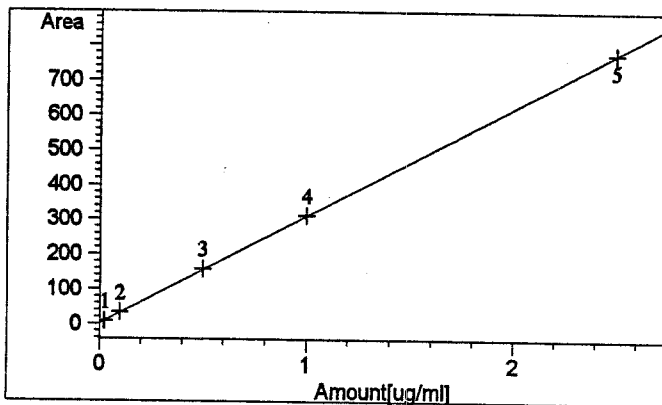
1,4-DNB at exp. RT: 9.379
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 1.93683
Formula: $y = mx + b$
m: 413.09361
b: 1.31649
x: Amount[ug/ml]
y: Area



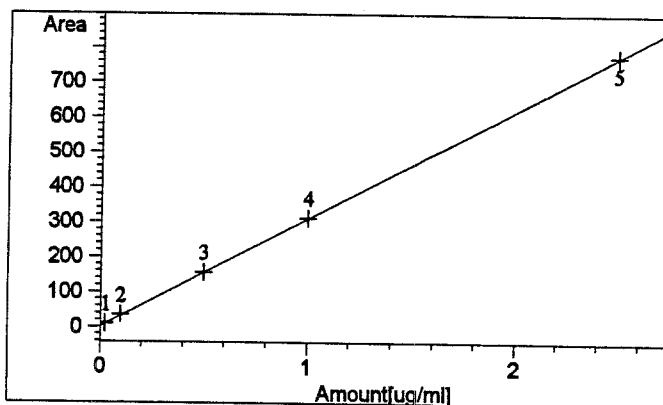
1,3-DNB at exp. RT: 10.238
VWD1 A, Wavelength=254 nm
Correlation: 0.99997
Residual Std. Dev.: 3.72169
Formula: $y = mx + b$
m: 445.22215
b: 3.04611
x: Amount[ug/ml]
y: Area



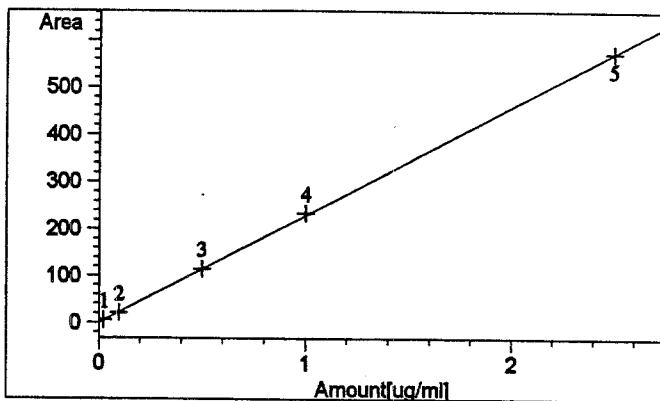
Tetryl at exp. RT: 10.530
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 1.41726
Formula: $y = mx + b$
m: 258.60793
b: 5.29108e-1
x: Amount[ug/ml]
y: Area



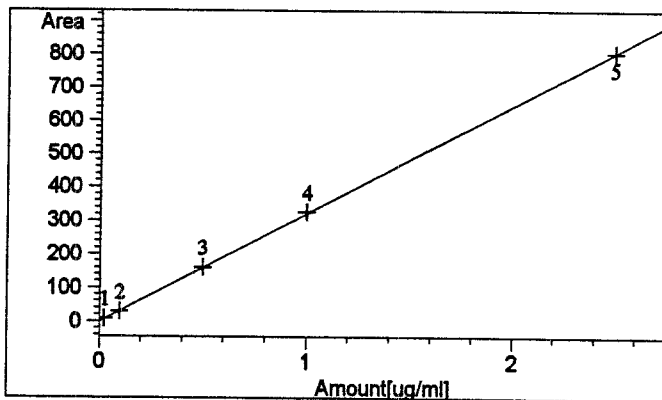
Nitrobenzene at exp. RT: 11.470
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 1.54840
Formula: $y = mx + b$
m: 310.61910
b: 8.88715e-1
x: Amount[ug/ml]
y: Area



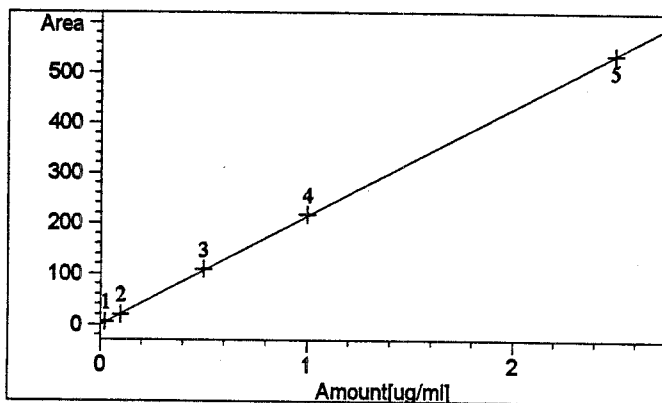
2,4,6-TNT at exp. RT: 12.786
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 1.26766
Formula: $y = mx + b$
m: 309.42242
b: 1.34890
x: Amount[ug/ml]
y: Area



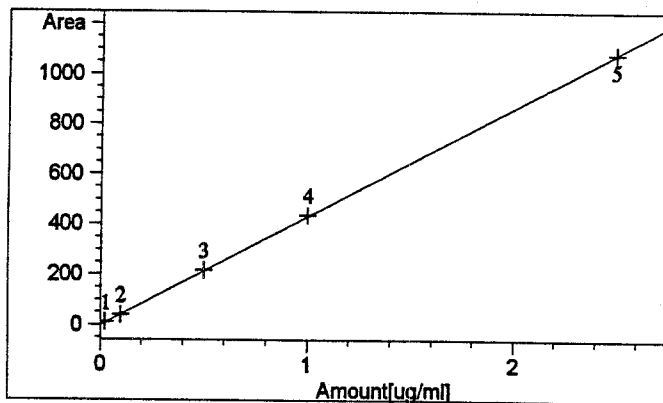
4-Am-2,6-DNT at exp. RT: 13.078
VWD1 A, Wavelength=254 nm
Correlation: 0.99996
Residual Std. Dev.: 2.27092
Formula: $y = mx + b$
m: 229.86889
b: -7.09377e-1
x: Amount[ug/ml]
y: Area



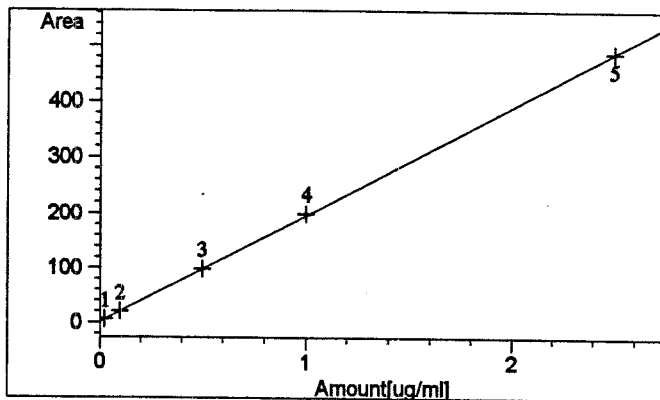
2-Am-4,6-DNT at exp. RT: 13.879
VWD1 A, Wavelength=254 nm
Correlation: 0.99997
Residual Std. Dev.: 2.50097
Formula: $y = mx + b$
m: 322.83395
b: -1.01855
x: Amount[ug/ml]
y: Area



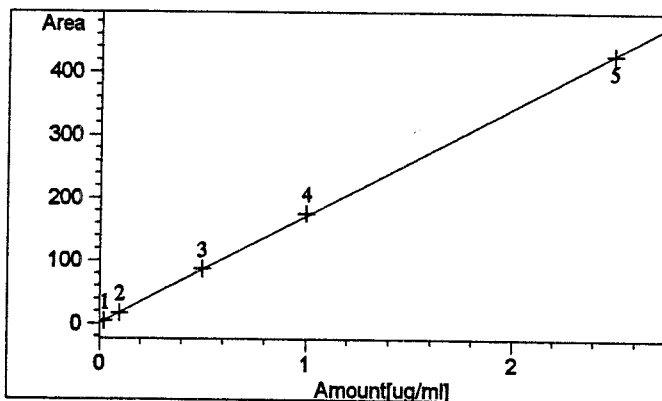
2,6-DNT at exp. RT: 14.658
VWD1 A, Wavelength=254 nm
Correlation: 0.99997
Residual Std. Dev.: 1.67053
Formula: $y = mx + b$
m: 215.14255
b: -2.38903e-1
x: Amount[ug/ml]
y: Area



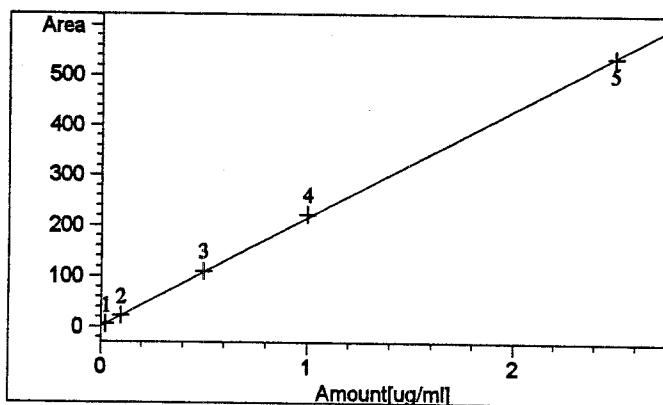
2,4-DNT at exp. RT: 15.224
VWD1 A, Wavelength=254 nm
Correlation: 0.99999
Residual Std. Dev.: 2.31002
Formula: $y = mx + b$
m: 433.25556
b: -1.37555
x: Amount[ug/ml]
y: Area



o-NT at exp. RT: 17.617
VWD1 A, Wavelength=254 nm
Correlation: 0.99996
Residual Std. Dev.: 1.77498
Formula: $y = mx + b$
m: 195.12968
b: $3.37430e-1$
x: Amount[ug/ml]
y: Area



p-NT at exp. RT: 18.768
VWD1 A, Wavelength=254 nm
Correlation: 0.99993
Residual Std. Dev.: 2.16911
Formula: $y = mx + b$
m: 171.45865
b: $2.30826e-1$
x: Amount[ug/ml]
y: Area



m-NT at exp. RT: 20.157
VWD1 A, Wavelength=254 nm
Correlation: 0.99990
Residual Std. Dev.: 3.30601
Formula: $y = mx + b$
m: 215.14054
b: $9.16531e-1$
x: Amount[ug/ml]
y: Area

**NITROAROMATICS AND NITRAMINES
REFERENCE CALIBRATION VERIFICATION REPORT**

Lab Name: Paragon Analytics, Inc.

Initial Date Analyzed: 10-12-98

Date/Time Analyzed: 10-12-98 20:38

Instrument/Column ID: HPLCIV/C-18

Analyte	Expected Conc.	Measured Conc.	% Dev.
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.500	0.480	4
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.500	0.488	2
1,3,5-Trinitrobenzene (1,3,5-TNB)	0.500	0.515	3
1,4-Dinitrobenzene (1,4-DNB)	0.500	0.507	1
1,3-Dinitrobenzene (1,3-DNB)	0.500	0.480	4
Methyl-2,4,6-trinitrophenylnitramine (Tetryl)	0.500	0.536	7
Nitrobenzene (NB)	0.500	0.499	0.2
2,4,6-Trinitrotoluene (2,4,6-TNT)	0.500	0.501	0.2
4-Amino-2,6-DNT	0.500	0.494	1
2-Amino-4,6-DNT	0.500	0.498	0.4
2,6-Dinitrotoluene (2,6-DNT)	0.500	0.490	2
2,4-Dinitrotoluene (2,4-DNT)	0.500	0.504	0.8
o-Nitrotoluene (2-NT)	0.500	0.501	0.2
p-Nitrotoluene (4-NT)	0.500	0.464	7
m-Nitrotoluene (3-NT)	0.500	0.512	2

000030

**NITROAROMATICS AND NITRAMINES
CONTINUING CALIBRATION VERIFICATION REPORT**

Lab Name: Paragon Analytics, Inc.

Initial Date Analyzed: 10-12-98

Date/Time Analyzed: 10-15-98 11:11

Instrument/Column ID: HPLCIV/C-18

Analyte	Expected Conc.	Measured Conc.	% Dev.
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.500	0.522	4
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.500	0.495	1
1,3,5-Trinitrobenzene (1,3,5-TNB)	0.500	0.495	1
1,4-Dinitrobenzene (1,4-DNB)	0.500	0.497	0.6
1,3-Dinitrobenzene (1,3-DNB)	0.500	0.493	1
Methyl-2,4,6-trinitrophenylnitramine (Tetryl)	0.500	0.502	0.4
Nitrobenzene (NB)	0.500	0.507	1
2,4,6-Trinitrotoluene (2,4,6-TNT)	0.500	0.498	0.4
4-Amino-2,6-DNT	0.500	0.529	6
2-Amino-4,6-DNT	0.500	0.517	3
2,6-Dinitrotoluene (2,6-DNT)	0.500	0.510	2
2,4-Dinitrotoluene (2,4-DNT)	0.500	0.513	3
o-Nitrotoluene (2-NT)	0.500	0.502	0
p-Nitrotoluene (4-NT)	0.500	0.491	2
m-Nitrotoluene (3-NT)	0.500	0.493	1

000031

**NITROAROMATICS AND NITRAMINES
CONTINUING CALIBRATION VERIFICATION REPORT**

Lab Name: Paragon Analytics, Inc.

Initial Date Analyzed: 10-12-98

Date/Time Analyzed: 10-15-98 15:37

Instrument/Column ID: HPLCIV/C-18

Analyte	Expected Conc.	Measured Conc.	% Dev.
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.500	0.517	3
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.500	0.500	0.0
1,3,5-Trinitrobenzene (1,3,5-TNB)	0.500	0.498	0.4
1,4-Dinitrobenzene (1,4-DNB)	0.500	0.498	0.4
1,3-Dinitrobenzene (1,3-DNB)	0.500	0.495	1
Methyl-2,4,6-trinitrophenylnitramine (Tetryl)	0.500	0.504	0.8
Nitrobenzene (NB)	0.500	0.504	0.8
2,4,6-Trinitrotoluene (2,4,6-TNT)	0.500	0.487	3
4-Amino-2,6-DNT	0.500	0.529	6
2-Amino-4,6-DNT	0.500	0.503	1
2,6-Dinitrotoluene (2,6-DNT)	0.500	0.500	0.0
2,4-Dinitrotoluene (2,4-DNT)	0.500	0.504	1
o-Nitrotoluene (2-NT)	0.500	0.494	1
p-Nitrotoluene (4-NT)	0.500	0.481	4
m-Nitrotoluene (3-NT)	0.500	0.493	1

000032

**NITROAROMATICS AND NITRAMINES
CONTINUING CALIBRATION VERIFICATION REPORT**

Lab Name: Paragon Analytics, Inc.

Initial Date Analyzed: 10-12-98

Date/Time Analyzed: 10-15-98 22:37

Instrument/Column ID: HPLCIV/C-18

Analyte	Expected Conc.	Measured Conc.	% Dev.
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	0.500	0.520	4
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	0.500	0.490	2
1,3,5-Trinitrobenzene (1,3,5-TNB)	0.500	0.495	1
1,4-Dinitrobenzene (1,4-DNB)	0.500	0.491	2
1,3-Dinitrobenzene (1,3-DNB)	0.500	0.492	2
Methyl-2,4,6-trinitrophenylnitramine (Tetryl)	0.500	0.493	1
Nitrobenzene (NB)	0.500	0.498	0.4
2,4,6-Trinitrotoluene (2,4,6-TNT)	0.500	0.486	3
4-Amino-2,6-DNT	0.500	0.526	5
2-Amino-4,6-DNT	0.500	0.504	1
2,6-Dinitrotoluene (2,6-DNT)	0.500	0.499	0.2
2,4-Dinitrotoluene (2,4-DNT)	0.500	0.499	0
o-Nitrotoluene (2-NT)	0.500	0.506	1
p-Nitrotoluene (4-NT)	0.500	0.507	1
m-Nitrotoluene (3-NT)	0.500	0.503	0.6

000033

Sel	Run	Vial	Method	Datafile	SeqTable	Calib:RT:RF	Sample Name
---	---	----	-----	-----	-----	-----	-----
No	1	101	83302	10120001	01:01		prime
No	2	102	83302	10120002	02:01		prime
No	3	103	83302	10120003	03:01		MXC3907 1:200
No	4	104	83302	10120004	04:01		MXC3907 1:50
No	5	105	83302	10120005	05:01		MXC3907 1:10
No	6	106	83302	10120006	06:01		MXC3907 1:5
No	7	107	83302	10120007	07:01		MXC3907 1:2
No	8	108	83302	10120008	08:01		MXC4205 1:10RC
No	9	123	83302	10120009	09:01		100898SMB1
No	10	124	83302	10120010	10:01		100898SLCS1
No	11	125	83302	10120011	11:01		100898SLCSD1
No	12	126	83302	10120012	12:01		9810070-1
No	13	127	83302	10120013	13:01		9810070-1MS
No	14	128	83302	10120014	14:01		9810070-1MSD
No	15	109	83302	10120015	15:01		100898WMB1
No	16	110	83302	10120016	16:01		100898WLCS1
No	17	111	83302	10120017	17:01		100898WLCSD1
No	18	112	83302	10120018	18:01		9810090-1
No	19	102	83302	10120019	19:01		MXC3907 1:10
No	20	113	83302	10120020	20:01		9810072-1
No	21	114	83302	10120021	21:01		9810072-2
No	22	115	83302	10120022	22:01		9810072-3
No	23	116	83302	10120023	23:01		9810072-4
No	24	117	83302	10120024	24:01		9810072-5
No	25	118	83302	10120025	25:01		9810073-1
No	26	119	83302	10120026	26:01		100798WMB1
No	27	120	83302	10120027	27:01		100798WLCS1
No	28	121	83302	10120028	28:01		100798WLCSD1
No	29	122	83302	10120029	29:01		9810042-1
No	30	102	83302	10120030	30:01		MXC3907 1:10

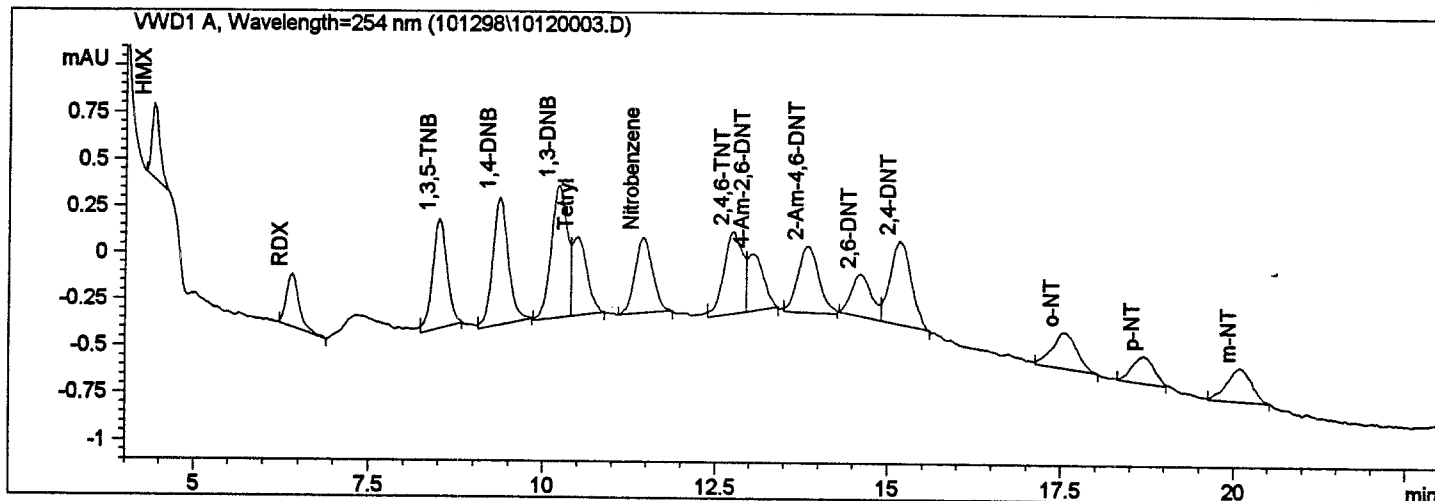
000035

Sel	Run	Vial	Method	Datafile	SeqTable	Calib:RT:RF	Sample Name
---	---	---	-----	-----	-----	-----	-----
No	1	101	8330	10150001	01:01		prime
No	2	102	8330	10150002	02:01		prime
No	3	103	8330	10150003	03:01		MXC3907 1:10
No	4	104	8330	10150004	04:01		093098SMB1
No	5	105	8330	10150005	05:01		093098SLCS1
No	6	106	8330	10150006	06:01		093098SLCSD1
No	7	107	8330	10150007	07:01		9809165-1
No	8	108	8330	10150008	08:01		9809165-2
No	9	109	8330	10150009	09:01		9809190-1
No	10	102	8330	10150010	10:01		MXC3907 1:10
No	11	110	8330	10150011	11:01		9809190-2
No	12	111	8330	10150012	12:01		9809190-3
No	13	112	8330	10150013	13:01		9809190-4
No	14	113	8330	10150014	14:01		9809190-5
No	15	114	8330	10150015	15:01		9809190-6
No	16	115	8330	10150016	16:01		9809190-7
No	17	116	83302	10150017	17:01		9809190-8
No	18	117	8330	10150018	18:01		9809190-9
No	19	118	8330	10150019	19:01		9809190-9MS
No	20	119	8330	10150020	20:01		9809190-9MSD
No	21	103	8330	10150021	21:01		MXC3907 1:10
No	22	120	8330	10150022	22:01		101098SMB1
No	23	121	8330	10150023	23:01		101098SLCS1
No	24	122	8330	10150024	24:01		101098SLCSD1
No	25	123	8330	10150025	25:01		9810113-1
No	26	124	8330	10150026	26:01		9810113-1MS
No	27	125	8330	10150027	27:01		9810113-1MSD
No	28	126	8330	10150028	28:01		101398SMB1
No	29	127	8330	10150029	29:01		101398SLCS1
No	30	128	8330	10150030	30:01		101398SLCSD1
No	31	129	8330	10150031	31:01		9810133-1
No	32	102	8330	10150032	32:01		MXC3907 1:10
No	33	130	8330	10150033	33:01		9810133-2
No	34	131	8330	10150034	34:01		9810133-2MS
No	35	132	8330	10150035	35:01		9810133-2MSD
No	36	133	8330	10150036	36:01		101398WMB1
No	37	134	8330	10150037	37:01		101398WLCS1
No	38	135	8330	10150038	38:01		101398WLCSD1
No	39	136	8330	10150039	39:01		9810135-1
No	40	137	8330	10150040	40:01		9810135-1MS
No	41	138	8330	10150041	41:01		9810135-1MSD
No	42	103	8330	10150042	42:01		MXC3907 1:10
No	43	200	RINSE	10150043	43:01		RINSE

000036

Injection Date : Mon, 12. Oct.->5:28:08 PM Seq Line : 3
Sample Name : MXC3907 1:200 Vial No. : 103
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 83302.M
Analysis Method : C:\HPCHEM\1\METHODS\101298P.M
Last Changed : Tue, 13. Oct. 1998, 09:10:03 am
(modified after loading)
hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Tue, 13. Oct. 1998,09:08:05 am
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

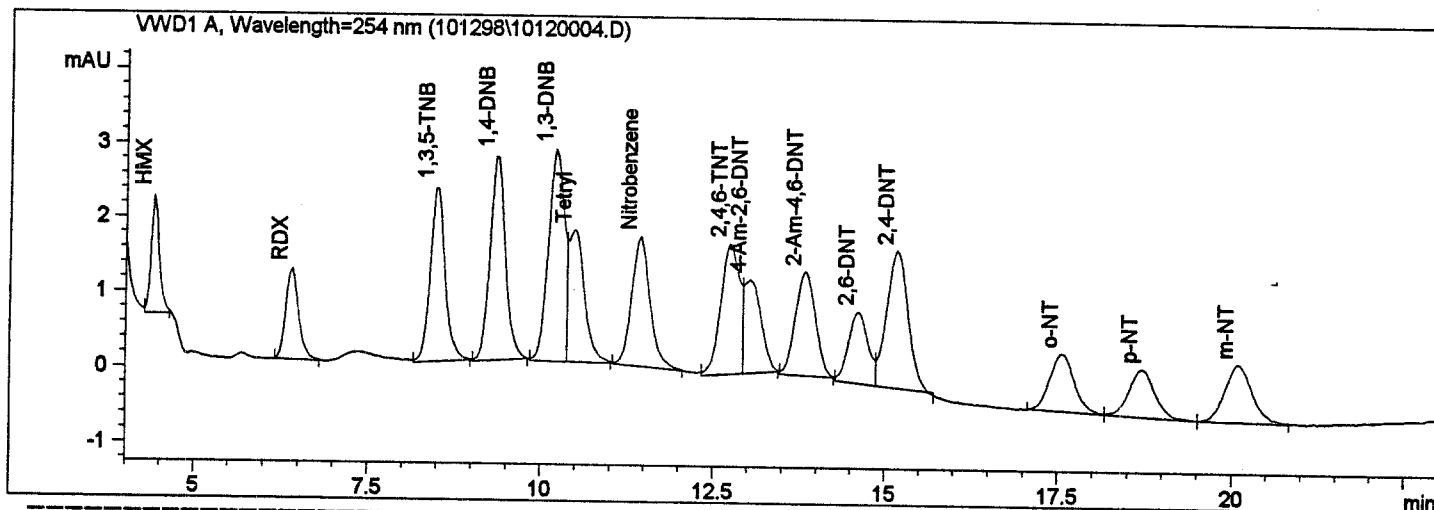
RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.411	4.411	3.030	0.017	HMX
6.400	6.411	3.514	0.024	RDX
8.502	8.510	8.313	0.022	1,3,5-TNB
9.366	9.379	10.586	0.022	1,4-DNB
10.221	10.238	12.009	0.020	1,3-DNB
10.492	10.530	5.670	0.020	Tetryl
11.445	11.470	7.117	0.020	Nitrobenzene
12.754	12.786	8.698	0.024	2,4,6-TNT
13.044	13.078	4.591	0.023	4-Am-2,6-DNT
13.836	13.879	7.538	0.027	2-Am-4,6-DNT
14.600	14.658	4.678	0.023	2,6-DNT
15.169	15.224	9.190	0.024	2,4-DNT
17.533	17.617	4.734	0.023	o-NT
18.700	18.768	3.282	0.018	p-NT
20.097	20.157	4.445	0.016	m-NT

Totals: 0.322

Injection Date : Mon, 12. Oct.-->6:06:15 PM Seq Line : 4
Sample Name : MXC3907 1:50 Vial No. : 104
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 83302.M
Analysis Method : C:\HPCHEM\1\METHODS\101298P.M
Last Changed : Tue, 13. Oct. 1998, 09:11:42 am
(modified after loading)

hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Tue, 13. Oct. 1998,09:08:05 am

Multiplier :1.000000

Dilution :1.000000

Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

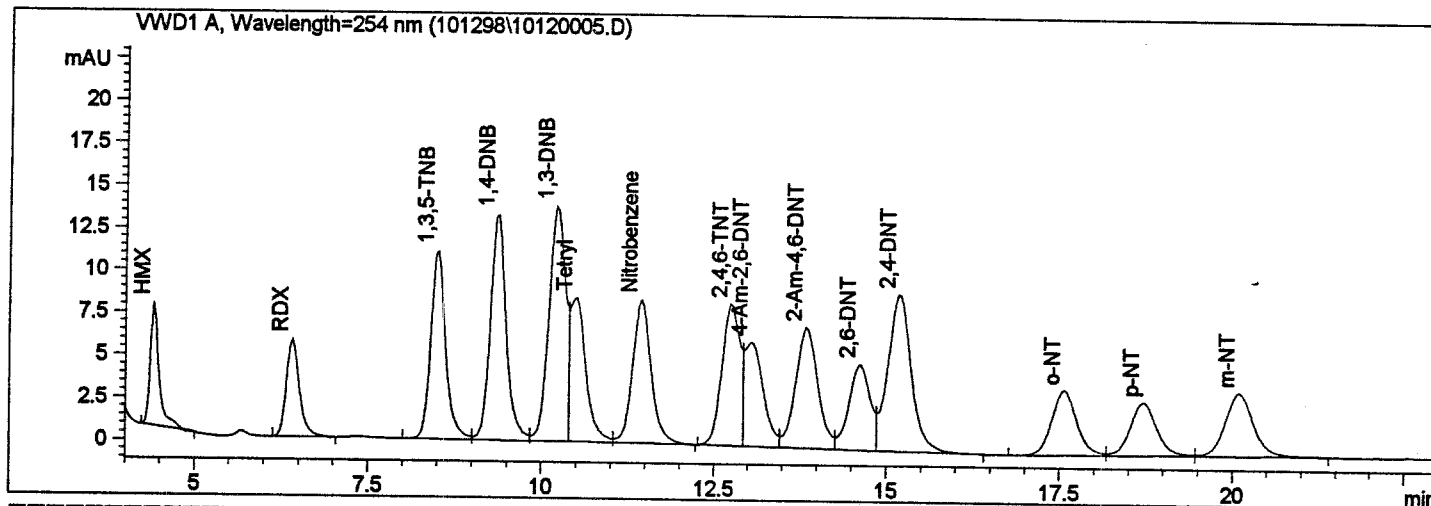
RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.405	4.411	12.733	0.097	HMX
6.394	6.411	15.481	0.103	RDX
8.483	8.510	34.180	0.102	1,3,5-TNB
9.349	9.379	41.794	0.098	1,4-DNB
10.203	10.238	47.021	0.099	1,3-DNB
10.478	10.530	25.972	0.098	Tetryl
11.429	11.470	32.011	0.100	Nitrobenzene
12.734	12.786	34.072	0.106	2,4,6-TNT
13.029	13.078	19.801	0.089	4-Am-2,6-DNT
13.827	13.879	27.944	0.090	2-Am-4,6-DNT
14.600	14.658	19.220	0.090	2,6-DNT
15.167	15.224	38.783	0.093	2,4-DNT
17.553	17.617	18.858	0.095	o-NT
18.700	18.768	16.220	0.093	p-NT
20.081	20.157	20.927	0.093	m-NT

Totals: 1.446

Injection Date : Mon, 12. Oct.->6:44:23 PM Seq Line : 5
Sample Name : MXC3907 1:10 Vial No. : 105
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 83302.M
Analysis Method : C:\HPCHEM\1\METHODS\101298P.M
Last Changed : Tue, 13. Oct. 1998, 09:08:23 am
(modified after loading)

hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Tue, 13. Oct. 1998,09:08:05 am
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

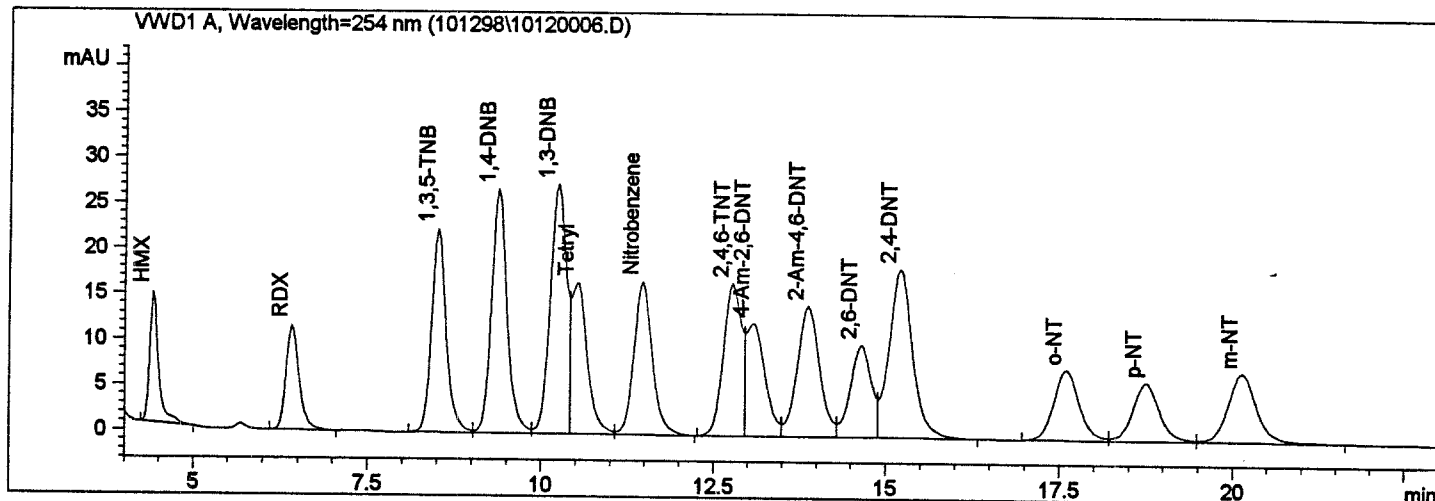
RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.406	4.411	62.842	0.509	HMX
6.398	6.411	74.478	0.495	RDX
8.488	8.510	163.580	0.502	1,3,5-TNB
9.353	9.379	210.433	0.506	1,4-DNB
10.209	10.238	231.605	0.513	1,3-DNB
10.487	10.530	131.562	0.507	Tetryl
11.436	11.470	158.344	0.507	Nitrobenzene
12.743	12.786	155.420	0.498	2,4,6-TNT
13.042	13.078	114.203	0.500	4-Am-2,6-DNT
13.839	13.879	159.895	0.498	2-Am-4,6-DNT
14.613	14.658	108.501	0.505	2,6-DNT
15.177	15.224	215.297	0.500	2,4-DNT
17.559	17.617	97.757	0.499	o-NT
18.708	18.768	86.416	0.503	p-NT
20.092	20.157	109.586	0.505	m-NT

Totals:

7.549

Injection Date : Mon, 12. Oct.->7:22:32 PM Seq Line : 6
Sample Name : MXC3907 1:5 Vial No. : 106
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 83302.M
Analysis Method : C:\HPCHEM\1\METHODS\101298P.M
Last Changed : Tue, 13. Oct. 1998, 09:12:15 am
(modified after loading)
hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Tue, 13. Oct. 1998,09:08:05 am
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

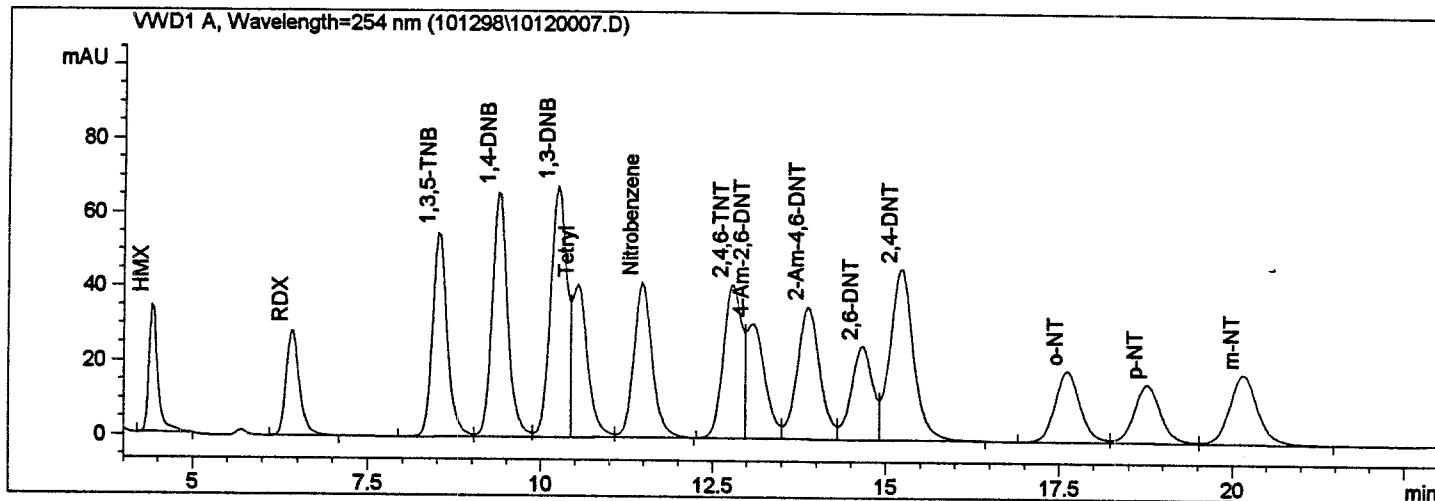
RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.409	4.411	124.730	1.019	HMX
6.409	6.411	151.070	1.004	RDX
8.504	8.510	326.063	1.005	1,3,5-TNB
9.372	9.379	416.254	1.004	1,4-DNB
10.230	10.238	449.867	1.004	1,3-DNB
10.517	10.530	260.568	1.006	Tetryl
11.459	11.470	312.568	1.003	Nitrobenzene
12.770	12.786	311.661	1.003	2,4,6-TNT
13.071	13.078	232.706	1.015	4-Am-2,6-DNT
13.868	13.879	325.301	1.011	2-Am-4,6-DNT
14.640	14.658	216.999	1.010	2,6-DNT
15.206	15.224	435.033	1.007	2,4-DNT
17.591	17.617	198.606	1.016	o-NT
18.739	18.768	175.356	1.021	p-NT
20.129	20.157	221.577	1.026	m-NT

Totals: 15.154

Injection Date : Mon, 12. Oct.->8:00:40 PM Seq Line : 7
Sample Name : MXC3907 1:2 Vial No. : 107
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 83302.M
Analysis Method : C:\HPCHEM\1\METHODS\101298P.M
Last Changed : Tue, 13. Oct. 1998, 09:13:06 am
(modified after loading)

hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Tue, 13. Oct. 1998,09:08:05 am
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.414	4.411	303.400	2.491	HMX
6.415	6.411	376.250	2.499	RDX
8.514	8.510	808.756	2.498	1,3,5-TNB
9.381	9.379	1032.843	2.497	1,4-DNB
10.239	10.238	1114.316	2.496	1,3-DNB
10.529	10.530	646.161	2.497	Tetryl
11.471	11.470	776.596	2.497	Nitrobenzene
12.785	12.786	774.610	2.499	2,4,6-TNT
13.079	13.078	572.652	2.494	4-Am-2,6-DNT
13.874	13.879	804.901	2.496	2-Am-4,6-DNT
14.654	14.658	536.633	2.495	2,6-DNT
15.216	15.224	1080.622	2.497	2,4-DNT
17.608	17.617	486.980	2.494	o-NT
18.757	18.768	427.378	2.491	p-NT
20.151	20.157	536.419	2.489	m-NT

Totals:

37.431

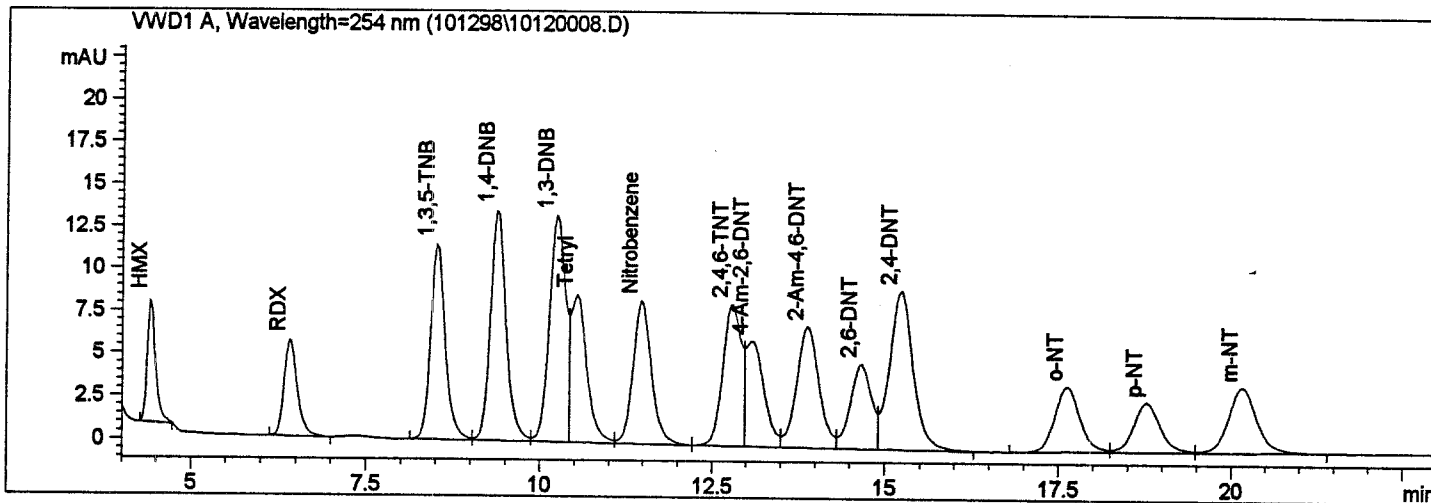
=====

Injection Date	: Mon, 12. Oct.->8:38:46 PM	Seq Line	:	8
Sample Name	: MXC4205 1:10RCV	Vial No.	:	108
Acq Operator	: EDDY	Inj. No.	:	1
		Inj. Vol.	:	100 µl

=====

Acq. Method : 83302.M
Analysis Method : C:\HPCHEM\1\METHODS\101298P.M
Last Changed : Tue, 13. Oct. 1998, 09:08:53 am
(modified after loading)

hplc iv (8330's on a C-18 column)



=====

Customized Report:8330m

=====

Sorted BySignal

Calib. Data Modified :Tue, 13. Oct. 1998,09:08:05 am
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

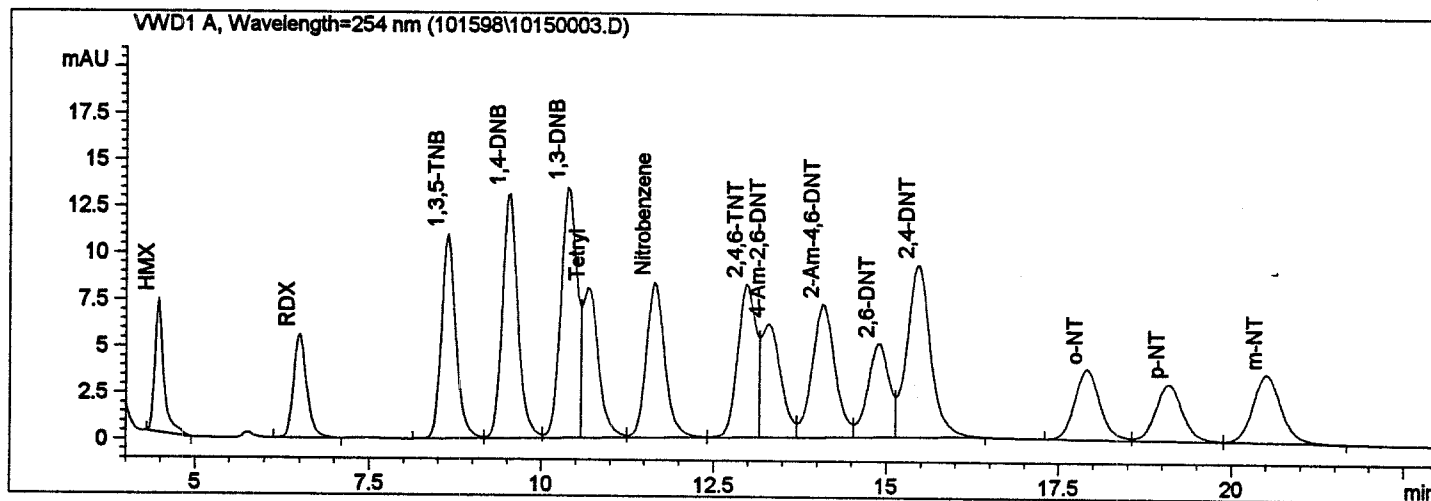
RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.411	4.411	59.209	0.480	HMX
6.411	6.411	73.447	0.488	RDX
8.510	8.510	167.652	0.515	1,3,5-TNB
9.379	9.379	210.731	0.507	1,4-DNB
10.238	10.238	216.673	0.480	1,3-DNB
10.530	10.530	139.156	0.536	Tetryl
11.470	11.470	155.854	0.499	Nitrobenzene
12.786	12.786	156.260	0.501	2,4,6-TNT
13.078	13.078	112.832	0.494	4-Am-2,6-DNT
13.879	13.879	159.805	0.498	2-Am-4,6-DNT
14.658	14.658	105.259	0.490	2,6-DNT
15.224	15.224	216.965	0.504	2,4-DNT
17.617	17.617	98.027	0.501	o-NT
18.768	18.768	79.871	0.464	p-NT
20.157	20.157	111.040	0.512	m-NT

Totals:

7.468

Injection Date : Thu, 15. Oct.-->11:11:03 AM Seq Line : 3
Sample Name : MXC3907 1:10 Vial No. : 103
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Thu, 15. Oct. 1998, 00:28:10 pm
(modified after loading)
hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.462	4.462	64.338	0.522	HMX
6.488	6.488	74.533	0.495	RDX
8.627	8.627	161.198	0.495	1,3,5-TNB
9.520	9.520	206.683	0.497	1,4-DNB
10.379	10.379	222.514	0.493	1,3-DNB
10.677	10.677	130.421	0.502	Tetryl
11.641	11.641	158.268	0.507	Nitrobenzene
12.971	12.971	155.485	0.498	2,4,6-TNT
13.292	13.292	120.815	0.529	4-Am-2,6-DNT
14.078	14.078	165.980	0.517	2-Am-4,6-DNT
14.883	14.883	109.591	0.510	2,6-DNT
15.448	15.448	220.801	0.513	2,4-DNT
17.900	17.900	98.239	0.502	o-NT
19.083	19.083	84.461	0.491	p-NT
20.501	20.501	106.950	0.493	m-NT

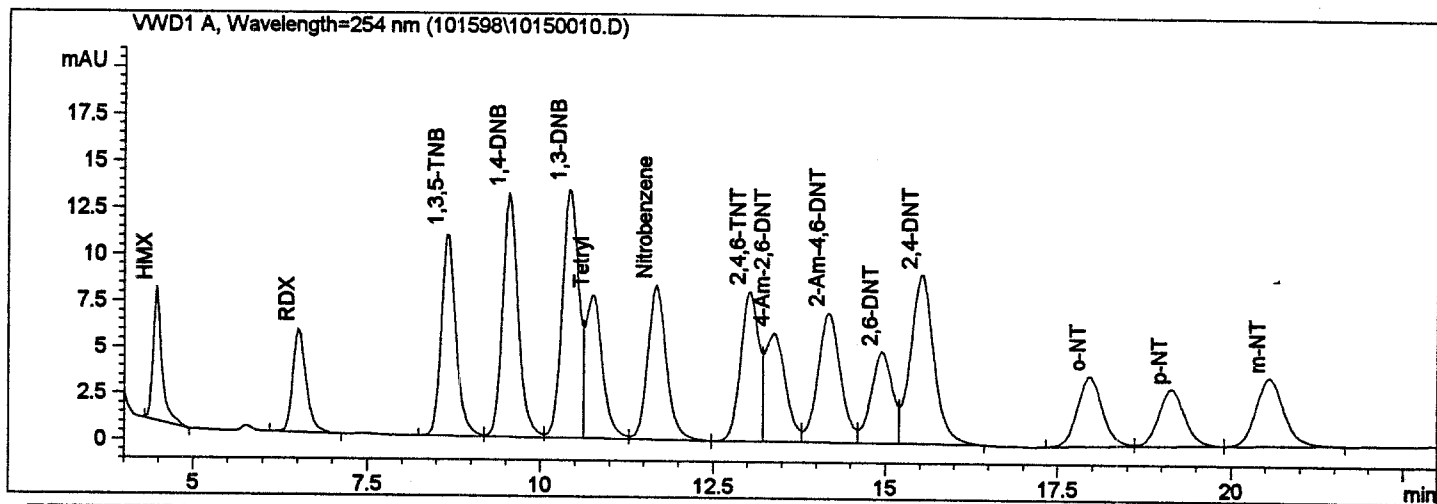
Totals:

7.564

Injection Date : Thu, 15. Oct.->3:37:58 PM Seq Line : 10
Sample Name : MXC3907 1:10 Vial No. : 102
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Thu, 15. Oct. 1998, 04:25:55 pm
(modified after loading)

hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.466	4.462	63.777	0.517	HMX
6.508	6.488	75.166	0.500	RDX
8.648	8.627	162.180	0.498	1,3,5-TNB
9.541	9.520	207.063	0.498	1,4-DNB
10.414	10.379	223.531	0.495	1,3-DNB
10.749	10.677	130.923	0.504	Tetryl
11.668	11.641	157.418	0.504	Nitrobenzene
13.017	12.971	152.000	0.487	2,4,6-TNT
13.372	13.292	120.868	0.529	4-Am-2,6-DNT
14.170	14.078	161.341	0.503	2-Am-4,6-DNT
14.941	14.883	107.346	0.500	2,6-DNT
15.514	15.448	216.974	0.504	2,4-DNT
17.950	17.900	96.777	0.494	o-NT
19.129	19.083	82.627	0.481	p-NT
20.544	20.501	106.887	0.493	m-NT

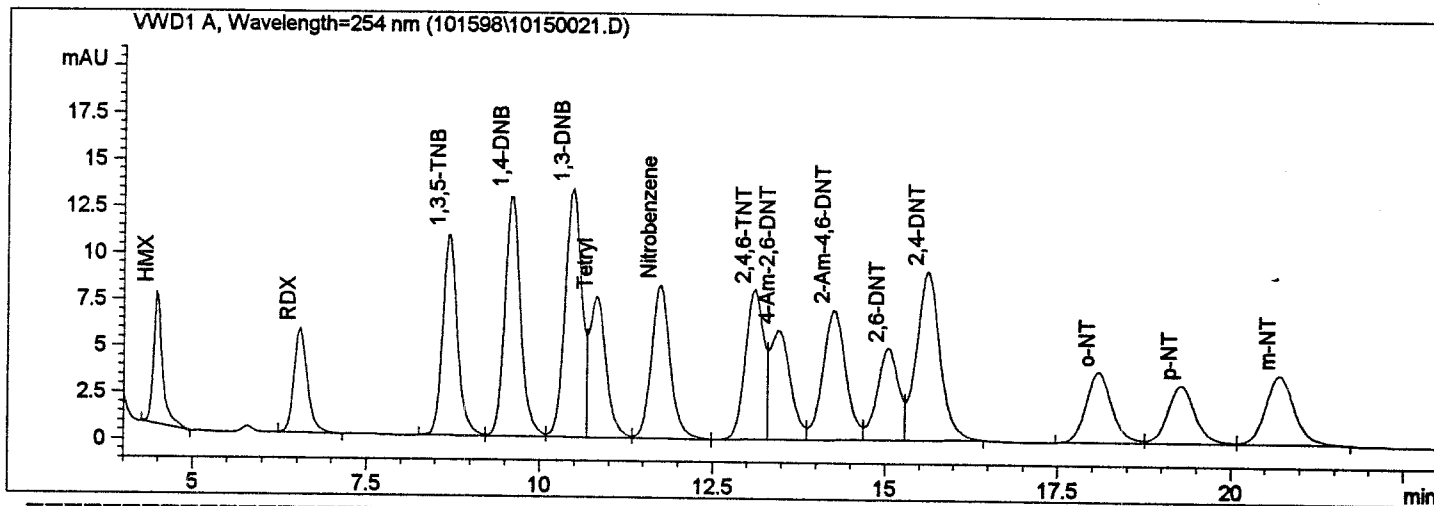
Totals:

7.506

Injection Date : Thu, 15. Oct.->10:37:40 PM Seq Line : 21
Sample Name : MXC3907 1:10 Vial No. : 103
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Fri, 16. Oct. 1998, 09:26:57 am
(modified after loading)

hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm

Multiplier :1.000000

Dilution :1.000000

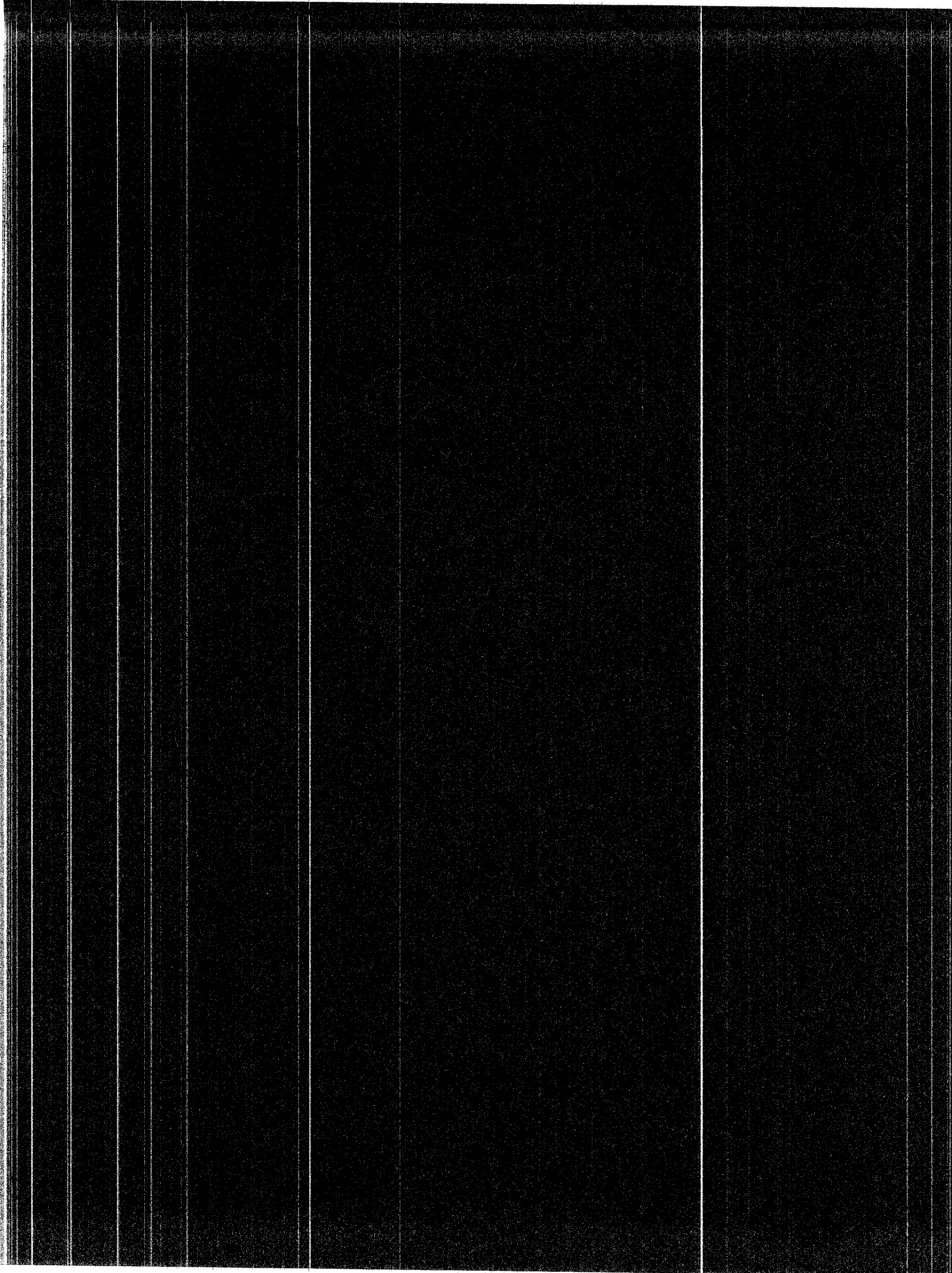
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.477	4.462	64.064	0.520	HMX
6.531	6.488	75.072	0.499	RDX
8.683	8.627	161.373	0.495	1,3,5-TNB
9.583	9.520	203.948	0.491	1,4-DNB
10.459	10.379	222.311	0.492	1,3-DNB
10.812	10.677	128.116	0.493	Tetryl
11.727	11.641	155.436	0.498	Nitrobenzene
13.095	12.971	151.812	0.486	2,4,6-TNT
13.448	13.292	120.140	0.526	4-Am-2,6-DNT
14.247	14.078	161.599	0.504	2-Am-4,6-DNT
15.036	14.883	107.082	0.499	2,6-DNT
15.609	15.448	214.963	0.499	2,4-DNT
18.080	17.900	99.119	0.506	o-NT
19.267	19.083	87.104	0.507	p-NT
20.698	20.501	109.099	0.503	m-NT

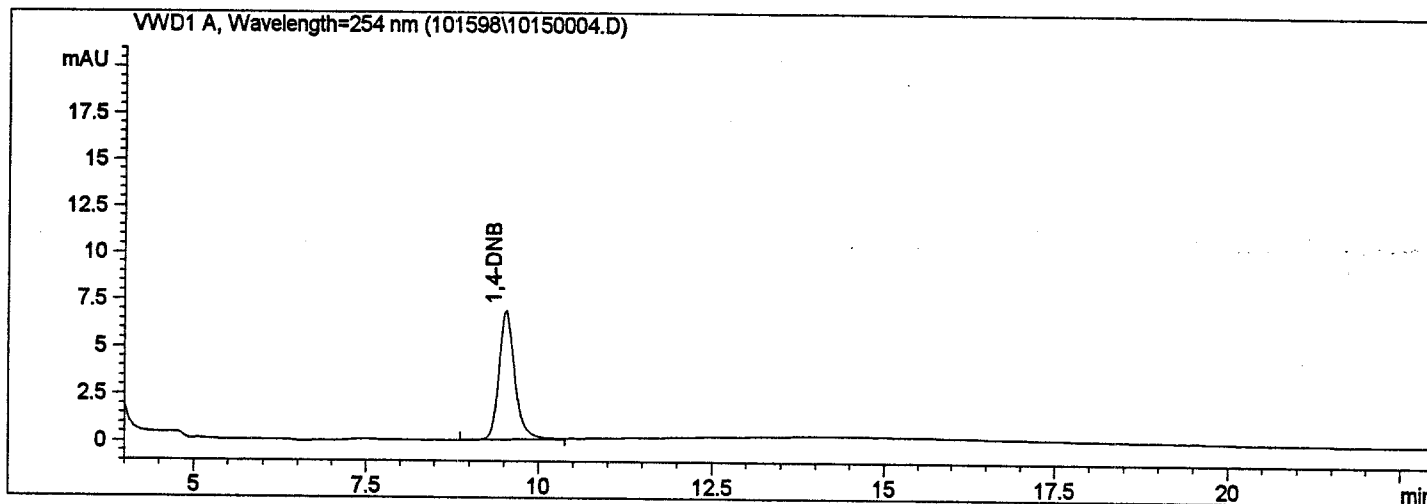
Totals:

7.517



Injection Date : Thu, 15. Oct.-->11:49:11 AM Seq Line : 4
Sample Name : 093098SMB1 Vial No. : 104
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Thu, 15. Oct. 1998, 03:17:27 pm
(modified after loading)
hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal
Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

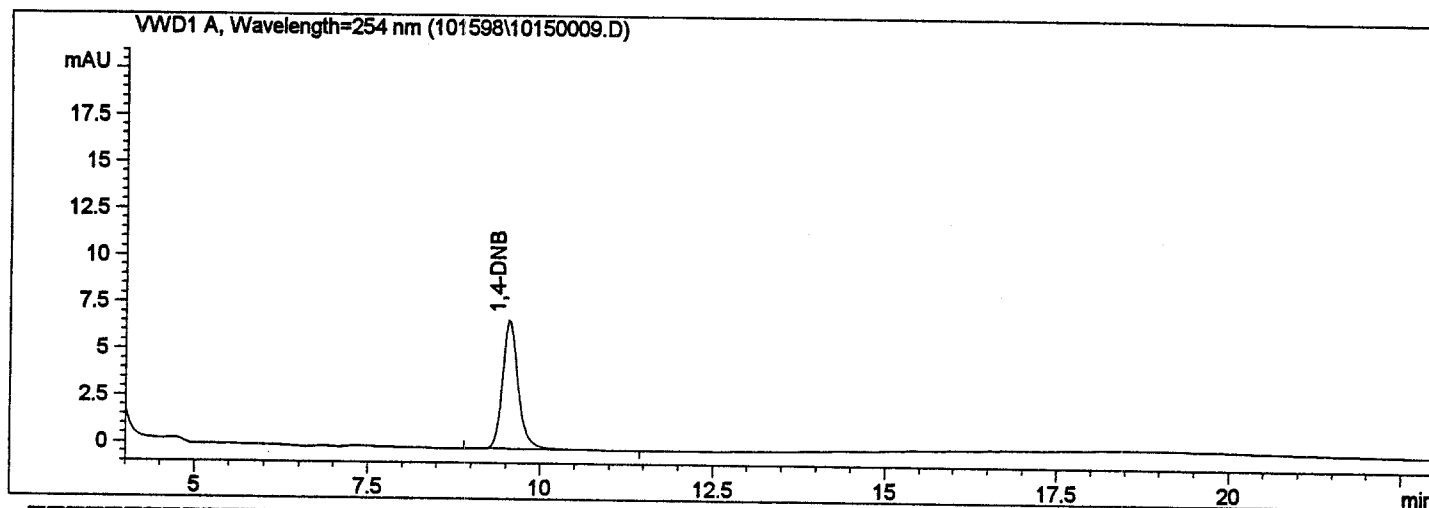
Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
0.000	4.462	0.000	0.000	HMX
0.000	6.488	0.000	0.000	RDX
0.000	8.627	0.000	0.000	1,3,5-TNB
9.523	9.520	109.995	0.263	1,4-DNB
0.000	10.379	0.000	0.000	1,3-DNB
0.000	10.677	0.000	0.000	Tetryl
0.000	11.641	0.000	0.000	Nitrobenzene
0.000	12.971	0.000	0.000	2,4,6-TNT
0.000	13.292	0.000	0.000	4-Am-2,6-DNT
0.000	14.078	0.000	0.000	2-Am-4,6-DNT
0.000	14.883	0.000	0.000	2,6-DNT
0.000	15.448	0.000	0.000	2,4-DNT
0.000	17.900	0.000	0.000	o-NT
0.000	19.083	0.000	0.000	p-NT
0.000	20.501	0.000	0.000	m-NT

Totals: 0.263

Injection Date : Thu, 15. Oct.->2:59:50 PM Seq Line : 9
Sample Name : 9809190-1 Vial No. : 109
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Thu, 15. Oct. 1998, 03:48:43 pm
(modified after loading)
hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

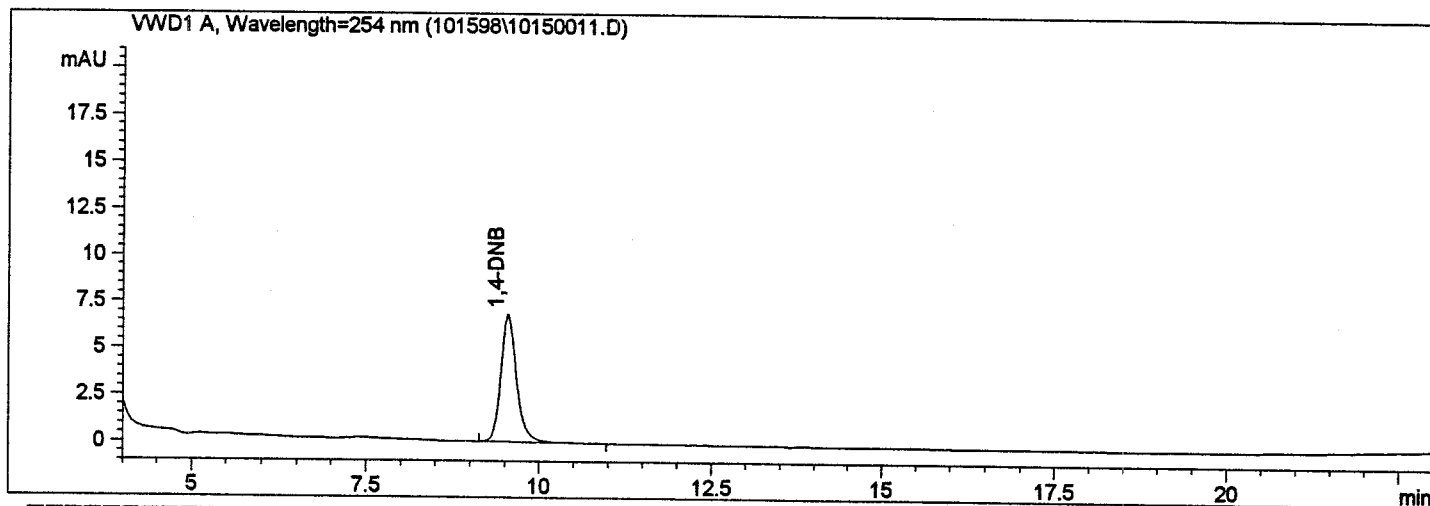
Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
0.000	4.462	0.000	0.000	HMX
0.000	6.488	0.000	0.000	RDX
0.000	8.627	0.000	0.000	1,3,5-TNB
9.546	9.520	110.959	0.265	1,4-DNB
0.000	10.379	0.000	0.000	1,3-DNB
0.000	10.677	0.000	0.000	Tetryl
0.000	11.641	0.000	0.000	Nitrobenzene
0.000	12.971	0.000	0.000	2,4,6-TNT
0.000	13.292	0.000	0.000	4-Am-2,6-DNT
0.000	14.078	0.000	0.000	2-Am-4,6-DNT
0.000	14.883	0.000	0.000	2,6-DNT
0.000	15.448	0.000	0.000	2,4-DNT
0.000	17.900	0.000	0.000	o-NT
0.000	19.083	0.000	0.000	p-NT
0.000	20.501	0.000	0.000	m-NT

Totals: 0.265

Injection Date : Thu, 15. Oct.->4:16:06 PM Seq Line : 11
Sample Name : 9809190-2 Vial No. : 110
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Fri, 16. Oct. 1998, 09:25:46 am
(modified after loading)
hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

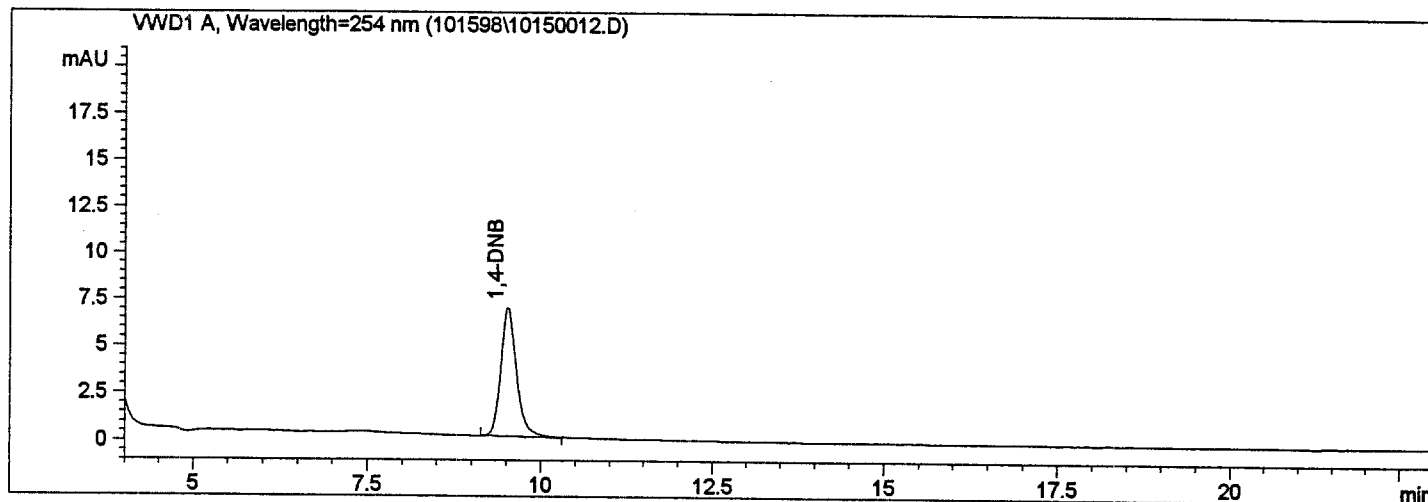
RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
0.000	4.462	0.000	0.000	HMX
0.000	6.488	0.000	0.000	RDX
0.000	8.627	0.000	0.000	1,3,5-TNB
9.538	9.520	108.772	0.260	1,4-DNB
0.000	10.379	0.000	0.000	1,3-DNB
0.000	10.677	0.000	0.000	Tetryl
0.000	11.641	0.000	0.000	Nitrobenzene
0.000	12.971	0.000	0.000	2,4,6-TNT
0.000	13.292	0.000	0.000	4-Am-2,6-DNT
0.000	14.078	0.000	0.000	2-Am-4,6-DNT
0.000	14.883	0.000	0.000	2,6-DNT
0.000	15.448	0.000	0.000	2,4-DNT
0.000	17.900	0.000	0.000	o-NT
0.000	19.083	0.000	0.000	p-NT
0.000	20.501	0.000	0.000	m-NT

Totals:

0.260

Injection Date : Thu, 15. Oct.->4:54:14 PM Seq Line : 12
Sample Name : 9809190-3 Vial No. : 111
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Fri, 16. Oct. 1998, 09:27:28 am
(modified after loading)
hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

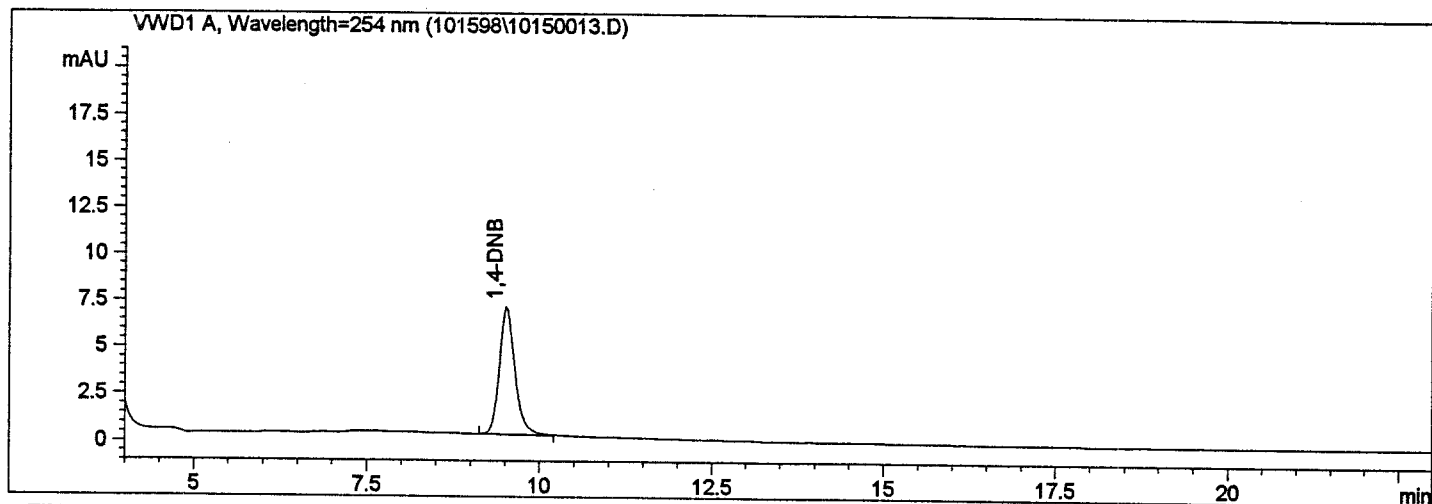
Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
0.000	4.462	0.000	0.000	HMX
0.000	6.488	0.000	0.000	RDX
0.000	8.627	0.000	0.000	1,3,5-TNB
9.515	9.520	108.314	0.259	1,4-DNB
0.000	10.379	0.000	0.000	1,3-DNB
0.000	10.677	0.000	0.000	Tetryl
0.000	11.641	0.000	0.000	Nitrobenzene
0.000	12.971	0.000	0.000	2,4,6-TNT
0.000	13.292	0.000	0.000	4-Am-2,6-DNT
0.000	14.078	0.000	0.000	2-Am-4,6-DNT
0.000	14.883	0.000	0.000	2,6-DNT
0.000	15.448	0.000	0.000	2,4-DNT
0.000	17.900	0.000	0.000	o-NT
0.000	19.083	0.000	0.000	p-NT
0.000	20.501	0.000	0.000	m-NT

Totals: 0.259

Injection Date : Thu, 15. Oct.->5:32:22 PM Seq Line : 13
Sample Name : 9809190-4 Vial No. : 112
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Fri, 16. Oct. 1998, 09:27:58 am
(modified after loading)
hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

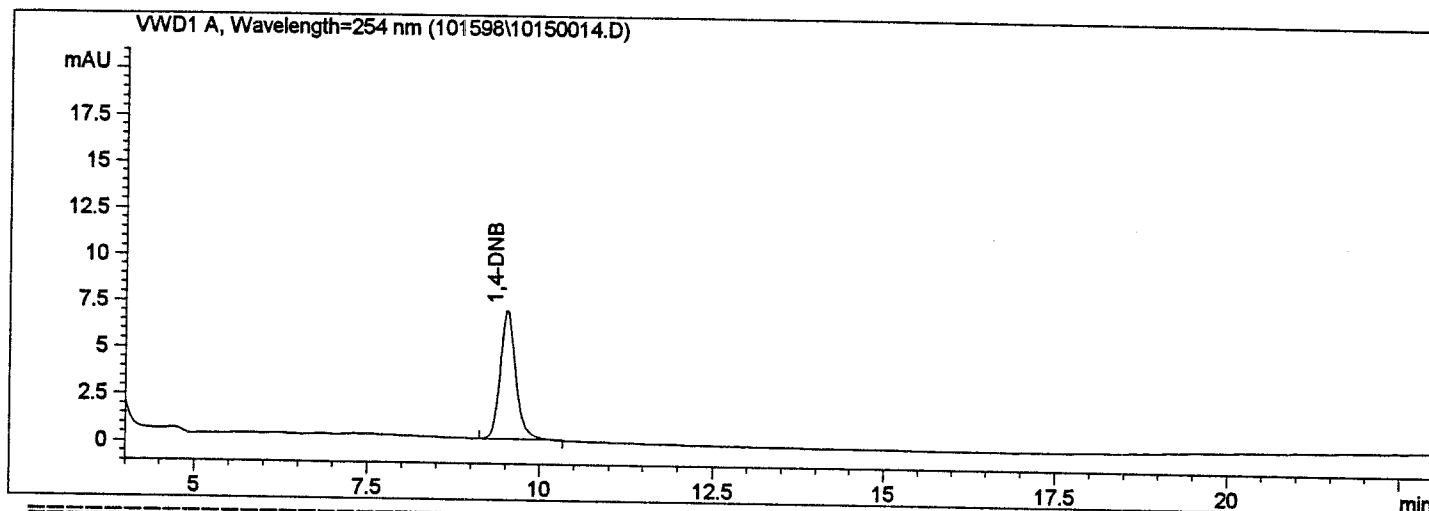
Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
0.000	4.462	0.000	0.000	HMX
0.000	6.488	0.000	0.000	RDX
0.000	8.627	0.000	0.000	1,3,5-TNB
9.509	9.520	107.859	0.258	1,4-DNB
0.000	10.379	0.000	0.000	1,3-DNB
0.000	10.677	0.000	0.000	Tetryl
0.000	11.641	0.000	0.000	Nitrobenzene
0.000	12.971	0.000	0.000	2,4,6-TNT
0.000	13.292	0.000	0.000	4-Am-2,6-DNT
0.000	14.078	0.000	0.000	2-Am-4,6-DNT
0.000	14.883	0.000	0.000	2,6-DNT
0.000	15.448	0.000	0.000	2,4-DNT
0.000	17.900	0.000	0.000	o-NT
0.000	19.083	0.000	0.000	p-NT
0.000	20.501	0.000	0.000	m-NT

Totals: 0.258

Injection Date : Thu, 15. Oct.->6:10:27 PM Seq Line : 14
Sample Name : 9809190-5 Vial No. : 113
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Fri, 16. Oct. 1998, 09:30:33 am
(modified after loading)
hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal
Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
0.000	4.462	0.000	0.000	HMX
0.000	6.488	0.000	0.000	RDX
0.000	8.627	0.000	0.000	1,3,5-TNB
9.514	9.520	108.424	0.259	1,4-DNB
0.000	10.379	0.000	0.000	1,3-DNB
0.000	10.677	0.000	0.000	Tetryl
0.000	11.641	0.000	0.000	Nitrobenzene
0.000	12.971	0.000	0.000	2,4,6-TNT
0.000	13.292	0.000	0.000	4-Am-2,6-DNT
0.000	14.078	0.000	0.000	2-Am-4,6-DNT
0.000	14.883	0.000	0.000	2,6-DNT
0.000	15.448	0.000	0.000	2,4-DNT
0.000	17.900	0.000	0.000	o-NT
0.000	19.083	0.000	0.000	p-NT
0.000	20.501	0.000	0.000	m-NT

Totals: 0.259

Sample Name: 9809190-6

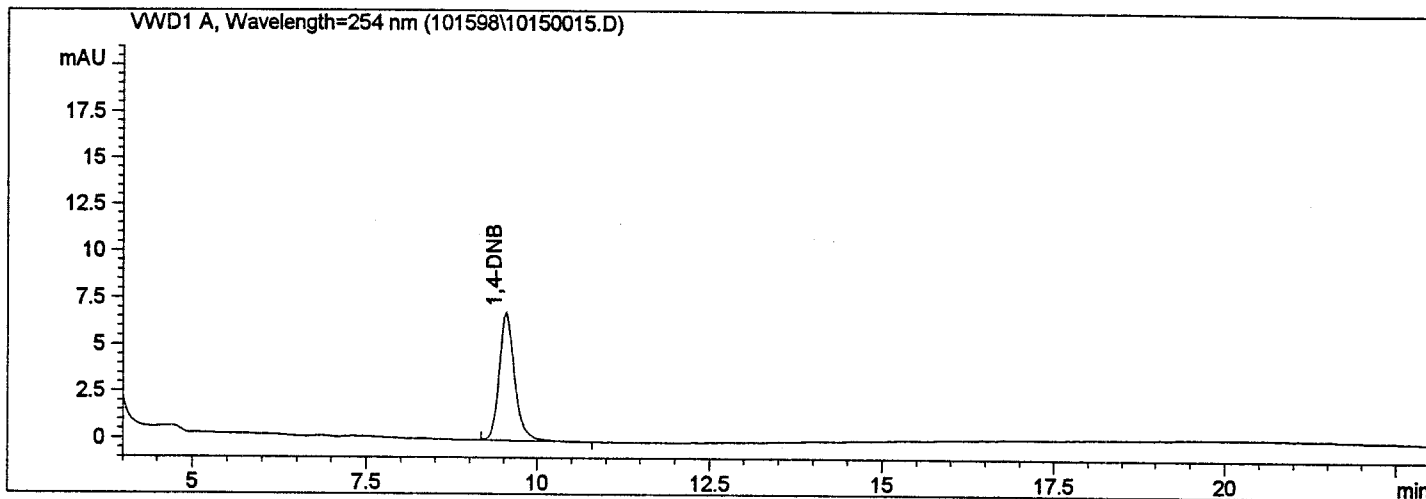
1

=====

Injection Date	: Thu, 15. Oct.->6:48:33 PM	Seq Line	:	15
Sample Name	: 9809190-6	Vial No.	:	114
Acq Operator	: EDDY	Inj. No.	:	1
		Inj. Vol.	:	100 µl

=====

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Fri, 16. Oct. 1998, 09:31:02 am
(modified after loading)
hplc iv (8330's on a C-18 column)



=====

Customized Report:8330m

=====

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm

Multiplier :1.000000

Dilution :1.000000

Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
0.000	4.462	0.000	0.000	HMX
0.000	6.488	0.000	0.000	RDX
0.000	8.627	0.000	0.000	1,3,5-TNB
9.532	9.520	109.082	0.261	1,4-DNB
0.000	10.379	0.000	0.000	1,3-DNB
0.000	10.677	0.000	0.000	Tetryl
0.000	11.641	0.000	0.000	Nitrobenzene
0.000	12.971	0.000	0.000	2,4,6-TNT
0.000	13.292	0.000	0.000	4-Am-2,6-DNT
0.000	14.078	0.000	0.000	2-Am-4,6-DNT
0.000	14.883	0.000	0.000	2,6-DNT
0.000	15.448	0.000	0.000	2,4-DNT
0.000	17.900	0.000	0.000	o-NT
0.000	19.083	0.000	0.000	p-NT
0.000	20.501	0.000	0.000	m-NT

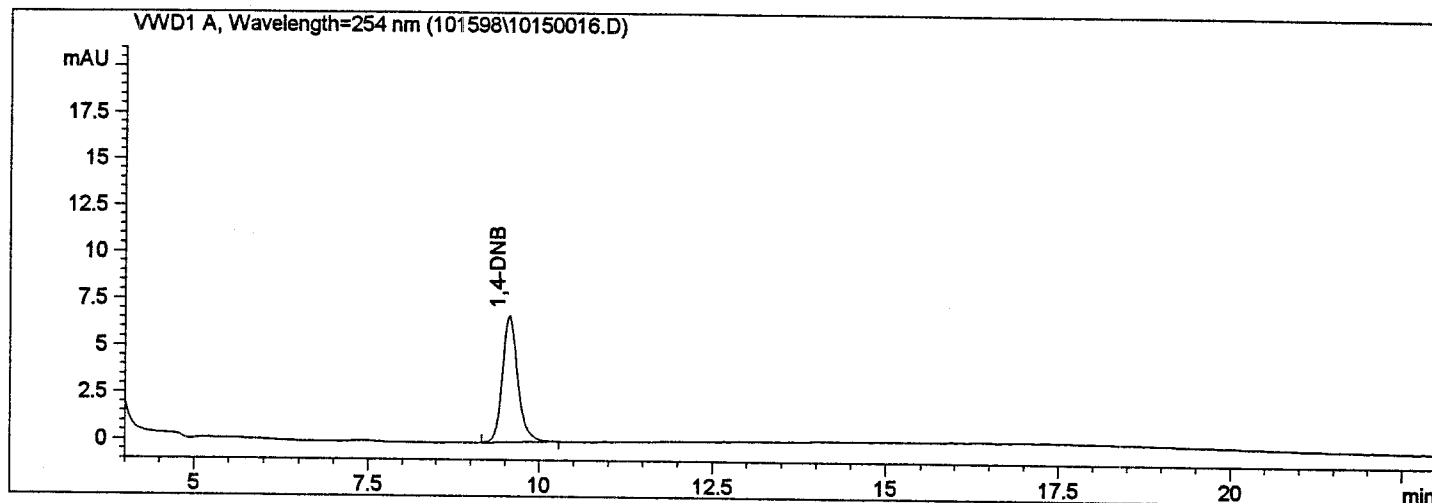
Totals:

0.261

Injection Date : Thu, 15. Oct.->7:26:40 PM Seq Line : 16
Sample Name : 9809190-7 Vial No. : 115
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Fri, 16. Oct. 1998, 09:31:23 am
(modified after loading)

hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

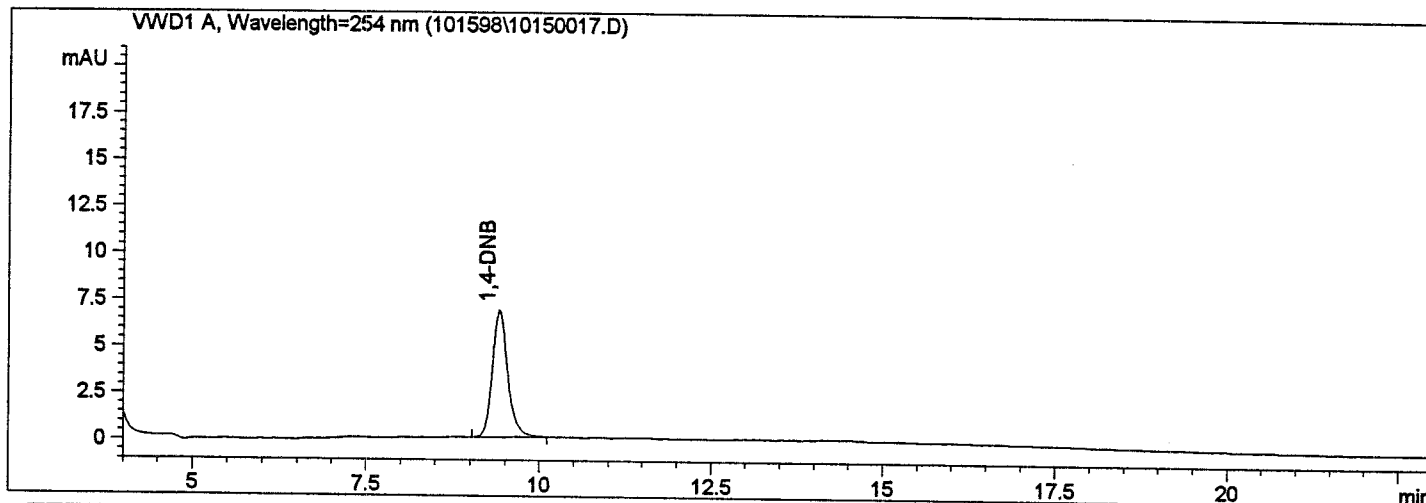
RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
0.000	4.462	0.000	0.000	HMX
0.000	6.488	0.000	0.000	RDX
0.000	8.627	0.000	0.000	1,3,5-TNB
9.555	9.520	106.262	0.254	1,4-DNB
0.000	10.379	0.000	0.000	1,3-DNB
0.000	10.677	0.000	0.000	Tetryl
0.000	11.641	0.000	0.000	Nitrobenzene
0.000	12.971	0.000	0.000	2,4,6-TNT
0.000	13.292	0.000	0.000	4-Am-2,6-DNT
0.000	14.078	0.000	0.000	2-Am-4,6-DNT
0.000	14.883	0.000	0.000	2,6-DNT
0.000	15.448	0.000	0.000	2,4-DNT
0.000	17.900	0.000	0.000	o-NT
0.000	19.083	0.000	0.000	p-NT
0.000	20.501	0.000	0.000	m-NT

Totals:

0.254

Injection Date : Thu, 15. Oct.->8:05:02 PM Seq Line : 17
Sample Name : 9809190-8 Vial No. : 116
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 83302.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Fri, 16. Oct. 1998, 09:31:54 am
(modified after loading)
hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

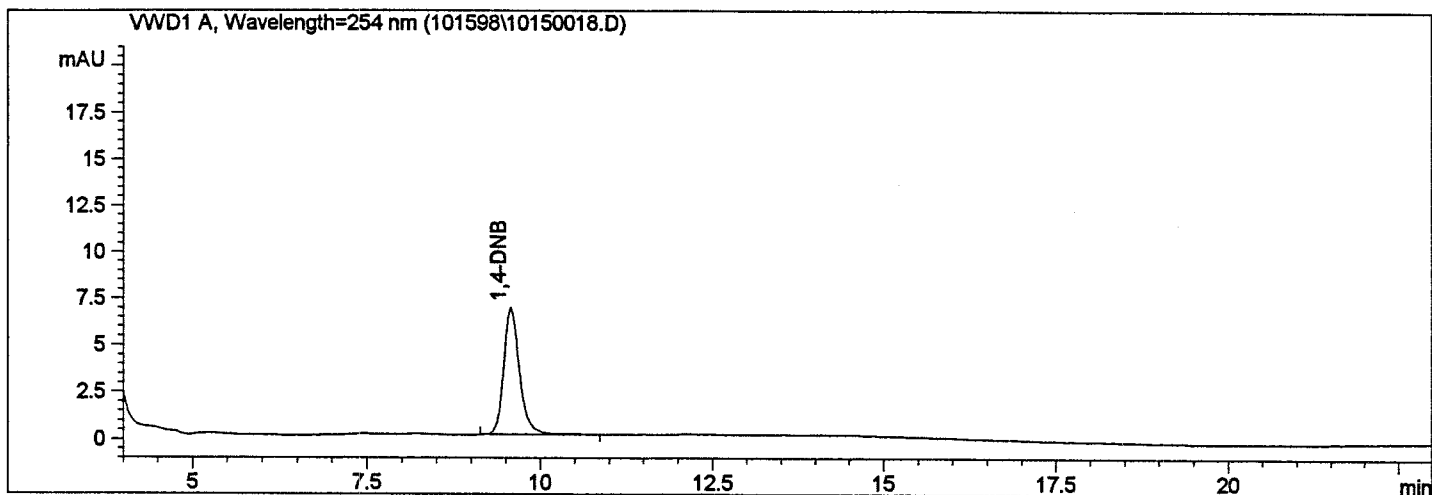
RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
0.000	4.462	0.000	0.000	HMX
0.000	6.488	0.000	0.000	RDX
0.000	8.627	0.000	0.000	1,3,5-TNB
9.410	9.520	106.291	0.254	1,4-DNB
0.000	10.379	0.000	0.000	1,3-DNB
0.000	10.677	0.000	0.000	Tetryl
0.000	11.641	0.000	0.000	Nitrobenzene
0.000	12.971	0.000	0.000	2,4,6-TNT
0.000	13.292	0.000	0.000	4-Am-2,6-DNT
0.000	14.078	0.000	0.000	2-Am-4,6-DNT
0.000	14.883	0.000	0.000	2,6-DNT
0.000	15.448	0.000	0.000	2,4-DNT
0.000	17.900	0.000	0.000	o-NT
0.000	19.083	0.000	0.000	p-NT
0.000	20.501	0.000	0.000	m-NT

Totals: 0.254

Injection Date : Thu, 15. Oct. ->8:43:23 PM Seq Line : 18
Sample Name : 9809190-9 Vial No. : 117
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Fri, 16. Oct. 1998, 09:26:08 am
(modified after loading)

hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm

Multiplier :1.000000

Dilution :1.000000

Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

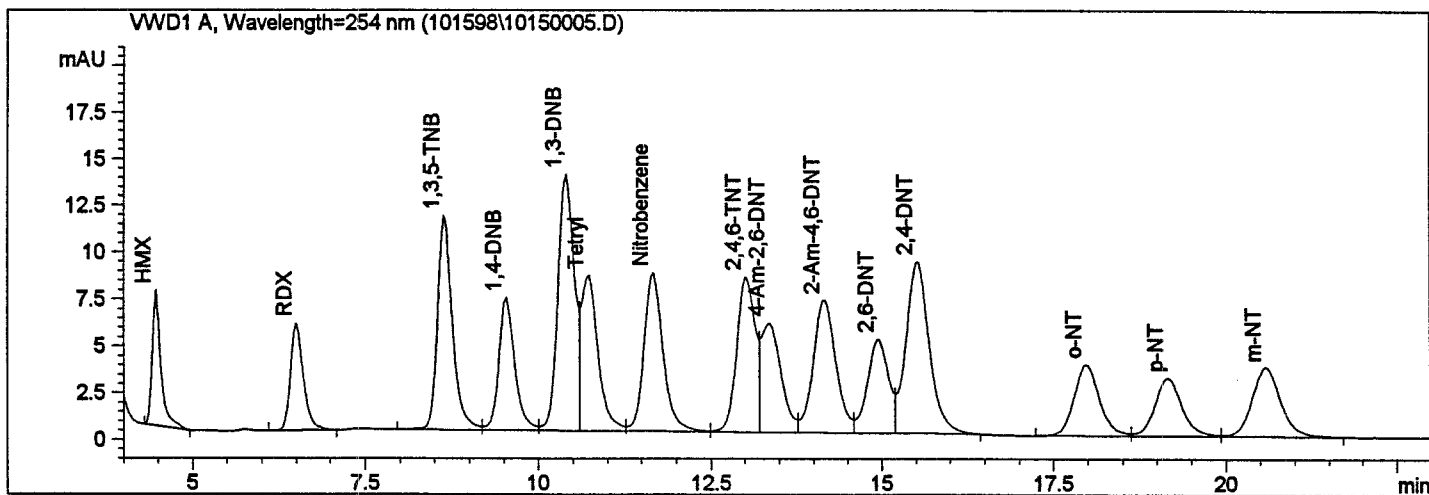
RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
0.000	4.462	0.000	0.000	HMX
0.000	6.488	0.000	0.000	RDX
0.000	8.627	0.000	0.000	1,3,5-TNB
9.566	9.520	108.504	0.259	1,4-DNB
0.000	10.379	0.000	0.000	1,3-DNB
0.000	10.677	0.000	0.000	Tetryl
0.000	11.641	0.000	0.000	Nitrobenzene
0.000	12.971	0.000	0.000	2,4,6-TNT
0.000	13.292	0.000	0.000	4-Am-2,6-DNT
0.000	14.078	0.000	0.000	2-Am-4,6-DNT
0.000	14.883	0.000	0.000	2,6-DNT
0.000	15.448	0.000	0.000	2,4-DNT
0.000	17.900	0.000	0.000	o-NT
0.000	19.083	0.000	0.000	p-NT
0.000	20.501	0.000	0.000	m-NT

Totals:

0.259

Injection Date : Thu, 15. Oct.->12:27:20 PM Seq Line : 5
Sample Name : 093098SLCS1 Vial No. : 105
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Thu, 15. Oct. 1998, 03:19:08 pm
(modified after loading)
hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.464	4.462	63.022	0.511	HMX
6.498	6.488	75.011	0.499	RDX
8.637	8.627	170.101	0.522	1,3,5-TNB
9.530	9.520	113.653	0.272	1,4-DNB
10.398	10.379	227.348	0.504	1,3-DNB
10.724	10.677	140.247	0.540	Tetryl
11.660	11.641	162.515	0.520	Nitrobenzene
13.010	12.971	157.696	0.505	2,4,6-TNT
13.349	13.292	115.946	0.507	4-Am-2,6-DNT
14.149	14.078	163.720	0.510	2-Am-4,6-DNT
14.943	14.883	109.230	0.509	2,6-DNT
15.515	15.448	218.160	0.507	2,4-DNT
17.970	17.900	99.201	0.507	o-NT
19.154	19.083	87.045	0.506	p-NT
20.572	20.501	109.583	0.505	m-NT

Totals:

7.425

```

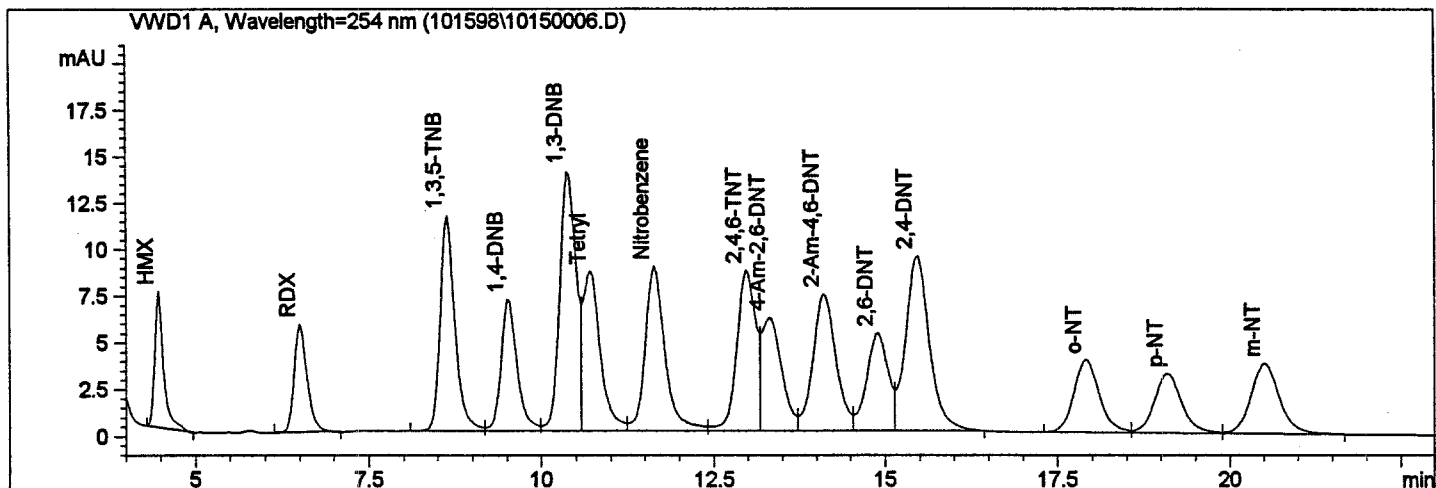
=====
Injection Date   : Thu, 15. Oct.-->1:05:28 PM      Seq Line       :           6
Sample Name     : 093098SLCSD1                    Vial No.        :          106
Acq Operator    : EDDY                             Inj. No.        :           1
                                           Inj. Vol.       :         100 µl
=====

```

```

Acq. Method     : 8330.M
Analysis Method  : C:\HPCHEM\1\METHODS\101598P.M
Last Changed    : Thu, 15. Oct. 1998, 03:41:18 pm
                  (modified after loading)
hplc iv (8330's on a C-18 column)

```



=====

Customized Report:8330m

=====

Sorted BySignal

```

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier           :1.000000
Dilution             :1.000000
Uncalibrated Peaks   :not reported

```

Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.463	4.462	63.635	0.516	HMX
6.497	6.488	75.597	0.502	RDX
8.626	8.627	171.417	0.526	1,3,5-TNB
9.513	9.520	114.204	0.273	1,4-DNB
10.378	10.379	231.836	0.514	1,3-DNB
10.701	10.677	146.670	0.565	Tetryl
11.630	11.641	176.271	0.565	Nitrobenzene
12.970	12.971	166.791	0.535	2,4,6-TNT
13.310	13.292	121.550	0.532	4-Am-2,6-DNT
14.108	14.078	171.525	0.534	2-Am-4,6-DNT
14.887	14.883	114.193	0.532	2,6-DNT
15.459	15.448	223.904	0.520	2,4-DNT
17.906	17.900	99.981	0.511	o-NT
19.087	19.083	87.499	0.509	p-NT
20.503	20.501	109.711	0.506	m-NT

Totals:

7.640

```

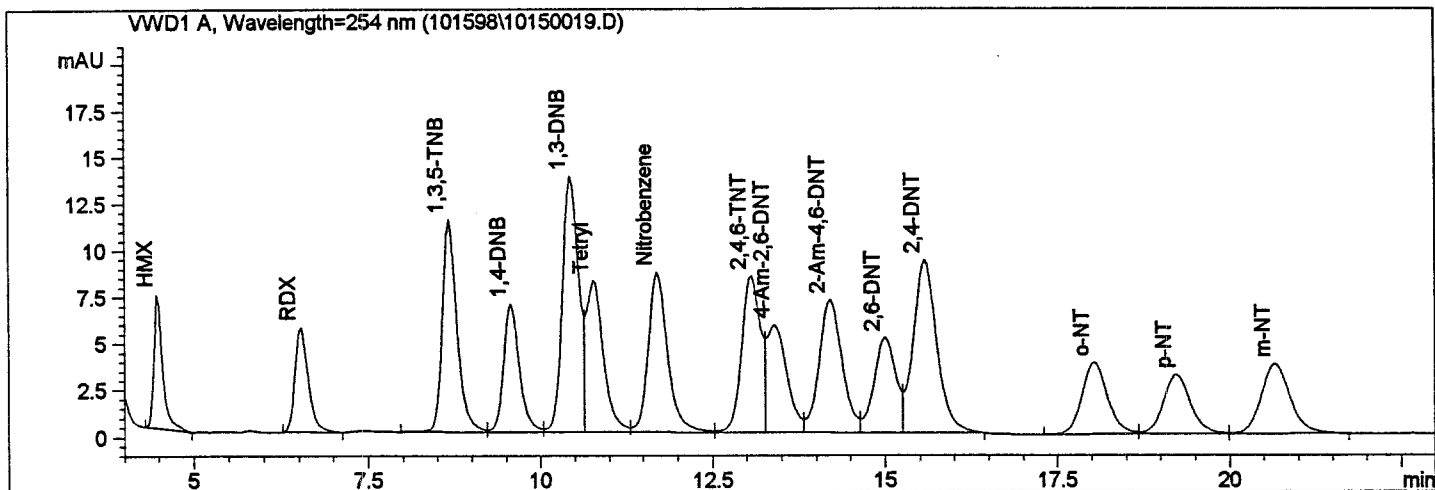
=====
Injection Date   : Thu, 15. Oct.-->9:21:29 PM      Seq Line   :      19
Sample Name     : 9809190-9MS                     Vial No.    :     118
Acq Operator    : EDDY                             Inj. No.    :      1
                                                    Inj. Vol.   :    100 µl
=====

```

```

Acq. Method     : 8330.M
Analysis Method  : C:\HPCHEM\1\METHODS\101598P.M
Last Changed    : Fri, 16. Oct. 1998, 09:26:23 am
                  (modified after loading)
hplc iv (8330's on a C-18 column)

```



=====

Customized Report:8330m

=====

Sorted BySignal

```

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier           :1.000000
Dilution             :1.000000
Uncalibrated Peaks   :not reported

```

Signal Description : VWD1 A, Wavelength=254 nm

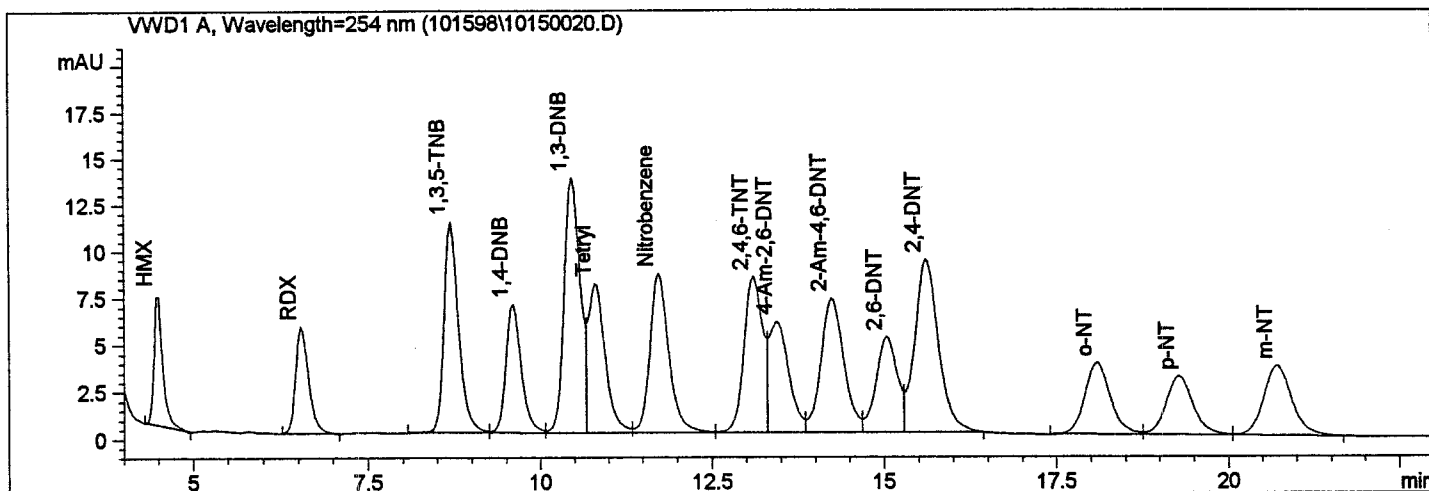
RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.476	4.462	62.486	0.507	HMX
6.524	6.488	74.914	0.498	RDX
8.668	8.627	169.274	0.520	1,3,5-TNB
9.564	9.520	109.211	0.261	1,4-DNB
10.436	10.379	228.917	0.507	1,3-DNB
10.774	10.677	139.322	0.537	Tetryl
11.701	11.641	167.283	0.536	Nitrobenzene
13.059	12.971	161.413	0.517	2,4,6-TNT
13.399	13.292	114.369	0.501	4-Am-2,6-DNT
14.202	14.078	165.062	0.514	2-Am-4,6-DNT
14.995	14.883	110.472	0.515	2,6-DNT
15.568	15.448	219.979	0.511	2,4-DNT
18.033	17.900	99.145	0.506	o-NT
19.223	19.083	86.224	0.502	p-NT
20.657	20.501	108.840	0.502	m-NT

Totals:

7.433

Injection Date : Thu, 15. Oct.-->9:59:34 PM Seq Line : 20
Sample Name : 9809190-9MSD Vial No. : 119
Acq Operator : EDDY Inj. No. : 1
Inj. Vol. : 100 µl

Acq. Method : 8330.M
Analysis Method : C:\HPCHEM\1\METHODS\101598P.M
Last Changed : Fri, 16. Oct. 1998, 09:26:40 am
(modified after loading)
hplc iv (8330's on a C-18 column)



Customized Report:8330m

Sorted BySignal

Calib. Data Modified :Thu, 15. Oct. 1998,00:27:23 pm
Multiplier :1.000000
Dilution :1.000000
Uncalibrated Peaks :not reported

Signal Description : VWD1 A, Wavelength=254 nm

RT [min]	Exp. Ret	Area	Amount [ug/ml]	Name
4.483	4.462	60.628	0.491	HMX
6.540	6.488	73.932	0.491	RDX
8.693	8.627	165.807	0.509	1,3,5-TNB
9.592	9.520	106.955	0.256	1,4-DNB
10.465	10.379	224.560	0.498	1,3-DNB
10.813	10.677	135.335	0.521	Tetryl
11.733	11.641	160.212	0.513	Nitrobenzene
13.098	12.971	156.396	0.501	2,4,6-TNT
13.440	13.292	117.060	0.512	4-Am-2,6-DNT
14.240	14.078	164.410	0.512	2-Am-4,6-DNT
15.038	14.883	109.531	0.510	2,6-DNT
15.610	15.448	218.047	0.506	2,4-DNT
18.086	17.900	98.716	0.504	o-NT
19.276	19.083	85.737	0.499	p-NT
20.708	20.501	108.089	0.498	m-NT

Totals:

7.323

00006 A

[illegible]