

EXTRACTION OF DIOXATHION FROM WATER

12/11/02 @ 0930 SCF, WTD

				V_i	V_f
121102 MB	Method Blank			1000 mL	1 mL
121102 LC	Lab Control*			1000 mL	1 mL
			multiplier		
BT80863	MW-9 ^{SCF}	MW-1	1.22	820	
BT80864	MW-4 ^{SCF}	MW-11	1.20	835	
BT80865	MW-5 ^{SCF}	MW-3	1.16	860	
BT80866	MW-6 ^{SCF}	MW-2	1.11	900	
BT80867	MW-8 ^{SCF}	MW-10	1.08	930	
BT80868	MW-8-MS ^{SCF}	MW-7	1.18	850	
BT80870	MW-8-MSD ^{SCF}	MW-9	1.14	880	
BT80871	MW-4		1.11	900	
BT80872	MW-5		1.10	910	
BT80873	MW-6		1.09	920	
BT80874	MW-8		1.15	870	
BT80875	MW-8-MS*		1.15	870	
BT80876	MW-8-MSD*		1.10	910	
BT80877	Rinsate Blank		1.14	880	
BT80879	Duplicate		1.14	880	

Reagents:

Extract: on Solv. - MeCl₂ Fisher lot# ~~0238~~^{SCF} 023287Exchange Solv. ~~Acetone~~ Acetonitrile Fisher lot# 007398

Preparation of Calibration Curve
 Dioxathion Study 12/11/02 @ 0900 SCF

BA-100802-1 WTD Diox Mix @ 100 PPM EACH.

cc-1 Naphthalene

- ① 0.0151g to 100 mL ACN = 515 PPM
- ② 194 μ L of ① @ 515 ppm to Final Volume of 10 mL @ 10 ppm

BA-121102-SCF

CC-1 Intermediate

(100 ppm dilute 1:100 \rightarrow 10 μ L in 1 mL) = 1 PPM

		Vol of
CC-1	0.4 PPM Diox / 1 PPM Naph	(400 μ L of Int. Diox + 100 μ L Naph (10)) 1 mL
CC-2	1-PPM Diox / 2 PPM Naph	(10 μ L Diox (100) + 200 μ L Naph (10)) 1 mL
CC-3	3-PPM Diox / 3-PPM Naph	(30 μ L Diox (100) + 300 μ L Naph (10)) 1 mL
CC-4	5-PPM Diox / 4-PPM Naph	(50 μ L Diox (100) + 400 μ L Naph (10)) 1 mL
CC-5	7-PPM Diox / 5-PPM Naph	(70 μ L Diox (100) + 500 μ L Naph (10)) 1 mL
CC-6	10-PPM Diox / 6-PPM Naph	(100 μ L Diox (100) + 600 μ L Naph (10)) 1 mL
CC-7	15 PPM Diox / 7-PPM Naph	(150 μ L Diox (100) + 700 μ L Naph (10)) 1 mL

Acetonitrile Fisher lot # 007398 1

Naphthalene Aldrich lot # 059022Z

Preparation of Doxathion Matrix Spike¹⁰⁹
Doxathion Study 12/11/02 @ 0900 SCF

BA-100802-1 WTD @ 100 PPM

$$100 \text{ PPM} \times X = 5 \text{ PPM} \cdot 10 \text{ mL}$$

$$X = 0.5 \text{ mL}$$

BA-121102-1 SCF 5 PPM (500 μL of BA-100802-1 WTD (100 PPM) to 10 mL)

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 Calibration Table
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Default Calibration

Calib. Data Modified : Wednesday, December 11, 2002 4:30:36 PM
 Calculate : External Standard
 Based on : Peak Area
 Rel. Reference Window : 2.000 %
 Abs. Reference Window : 0.150 min
 Rel. Non-ref. Window : 2.000 %
 Abs. Non-ref. Window : 0.150 min
 Multiplier : 1.0000
 Dilution : 1.0000
 Sample Amount : 0.00000
 Uncalibrated Peaks : not reported
 Partial Calibration : Yes, identified peaks are recalibrated
 Correct All Ret. Times: No, only for identified peaks
 Curve Type : Linear
 Origin : Ignored
 Weight : Equal

Recalibration Settings:

Average Response : No Update
 Average Retention Time: Average all calibrations

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: DAD1 A, Sig=270,40 Ref=450,80
 Signal 2: DAD1 B, Sig=210,40 Ref=off
 Signal 3: DAD1 C, Sig=230,40 Ref=off
 Signal 4: FLD1 A, Ex=zero, Em=zero
 Signal 5: FLD1 B, Ex=zero, Em=420
 Signal 6: FLD1 C, Ex=zero, Em=500
 Signal 7: FLD1 D, Ex=zero, Em=560

RetTime [min]	Lvl Sig	Amount [wt%]	Area	Amt/Area	Ref Grp Name
4.434	2 1	4.00000e-1	8.34011e-1	4.79610e-1	Dioxenethion
	2	1.00000	17.83270	5.60767e-2	
	3	3.00000	54.13765	5.54143e-2	
	4	5.00000	89.32704	5.59741e-2	
	5	7.00000	124.60097	5.61793e-2	
	6	10.00000	174.58035	5.72802e-2	
	7	15.00000	275.49948	5.44466e-2	

RetTime [min]	Lvl Sig	Amount [wt%]	Area	Amt/Area	Ref Grp Name	
5.105	2	1	1.00000	296.50916	3.37258e-3	Naphthalene
		2	2.00000	509.24689	3.92737e-3	
		3	3.00000	743.52032	4.03486e-3	
		4	4.00000	992.88086	4.02868e-3	
		5	5.00000	1250.87610	3.99720e-3	
		6	6.00000	1466.65039	4.09095e-3	
		7	7.00000	1692.61084	4.13562e-3	
8.375	2	1	4.00000e-1	3.78112	1.05789e-1	Dioxathion(cis-isomer)
		2	1.00000	9.15154	1.09271e-1	
		3	3.00000	29.09575	1.03108e-1	
		4	5.00000	51.79129	9.65413e-2	
		5	7.00000	73.55196	9.51708e-2	
		6	10.00000	103.40858	9.67038e-2	
		7	15.00000	155.29860	9.65881e-2	
9.033	2	1	4.00000e-1	2.88533	1.38632e-1	Dioxathion(trans-isomer)
		2	1.00000	10.49094	9.53203e-2	
		3	3.00000	35.36561	8.48282e-2	
		4	5.00000	69.16527	7.22906e-2	
		5	7.00000	95.40379	7.33723e-2	
		6	10.00000	139.63681	7.16144e-2	
		7	15.00000	216.22766	6.93713e-2	

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 Peak Sum Table
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 No Entries in table
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Calibration Curve

Dioxenethion, DAD1 B
Area = 18.3800459*Amt -3.4459561

Area

300 Rel. Res%(1): -78.648

250

200

150

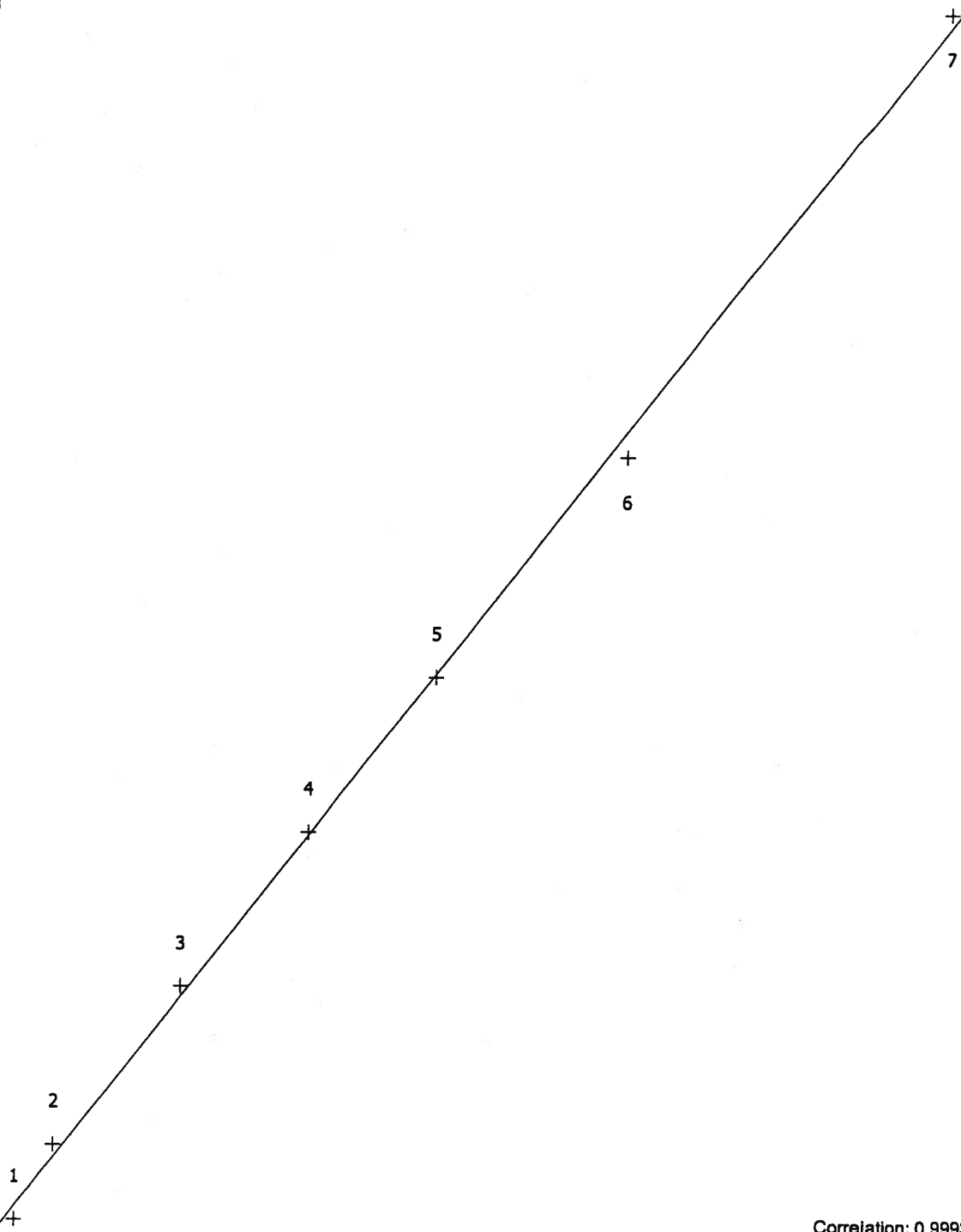
100

50

0

0 2 4 6 8 10 12 14 Amount[wt%]

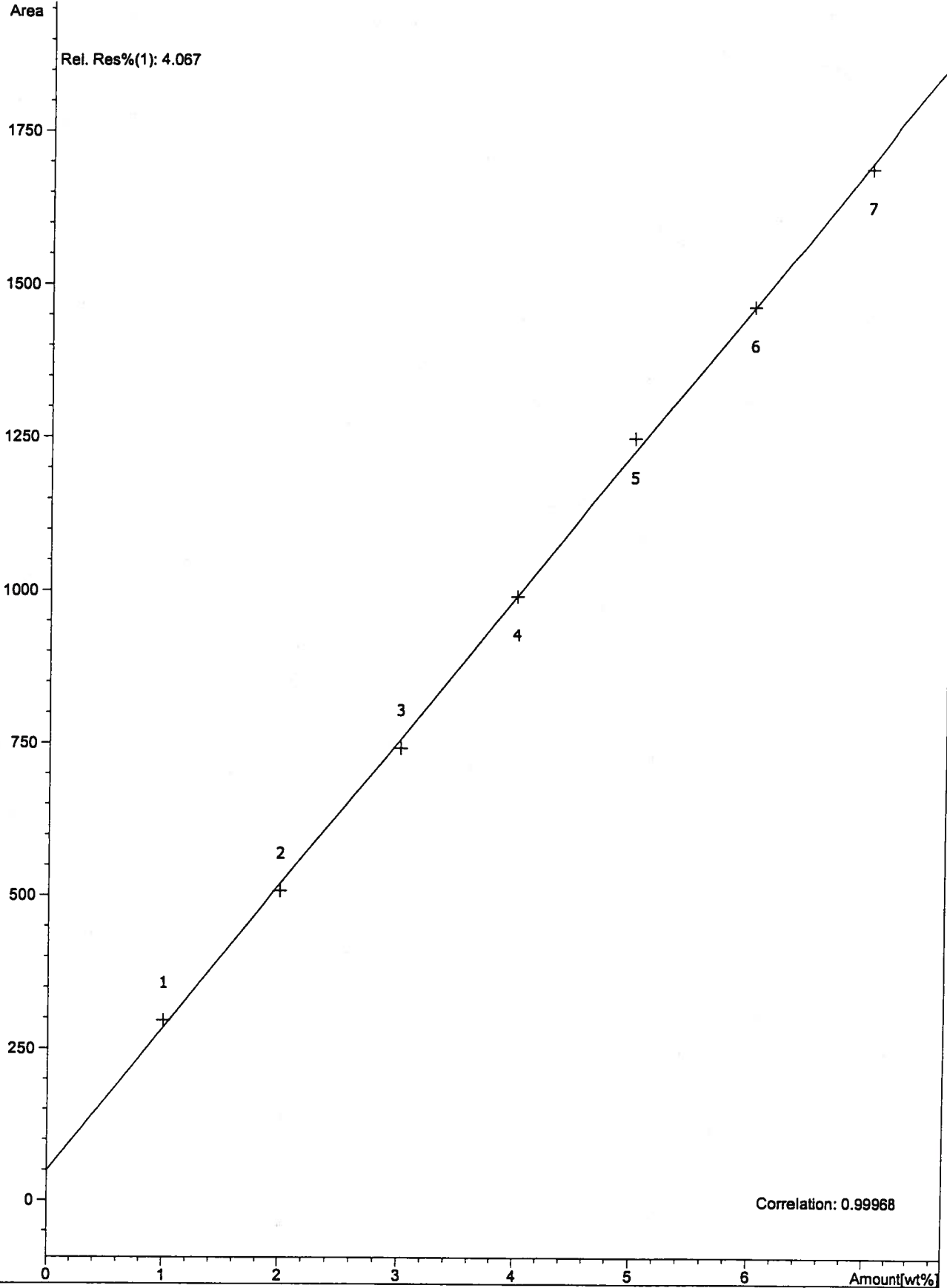
Correlation: 0.99938



Calibration Curve

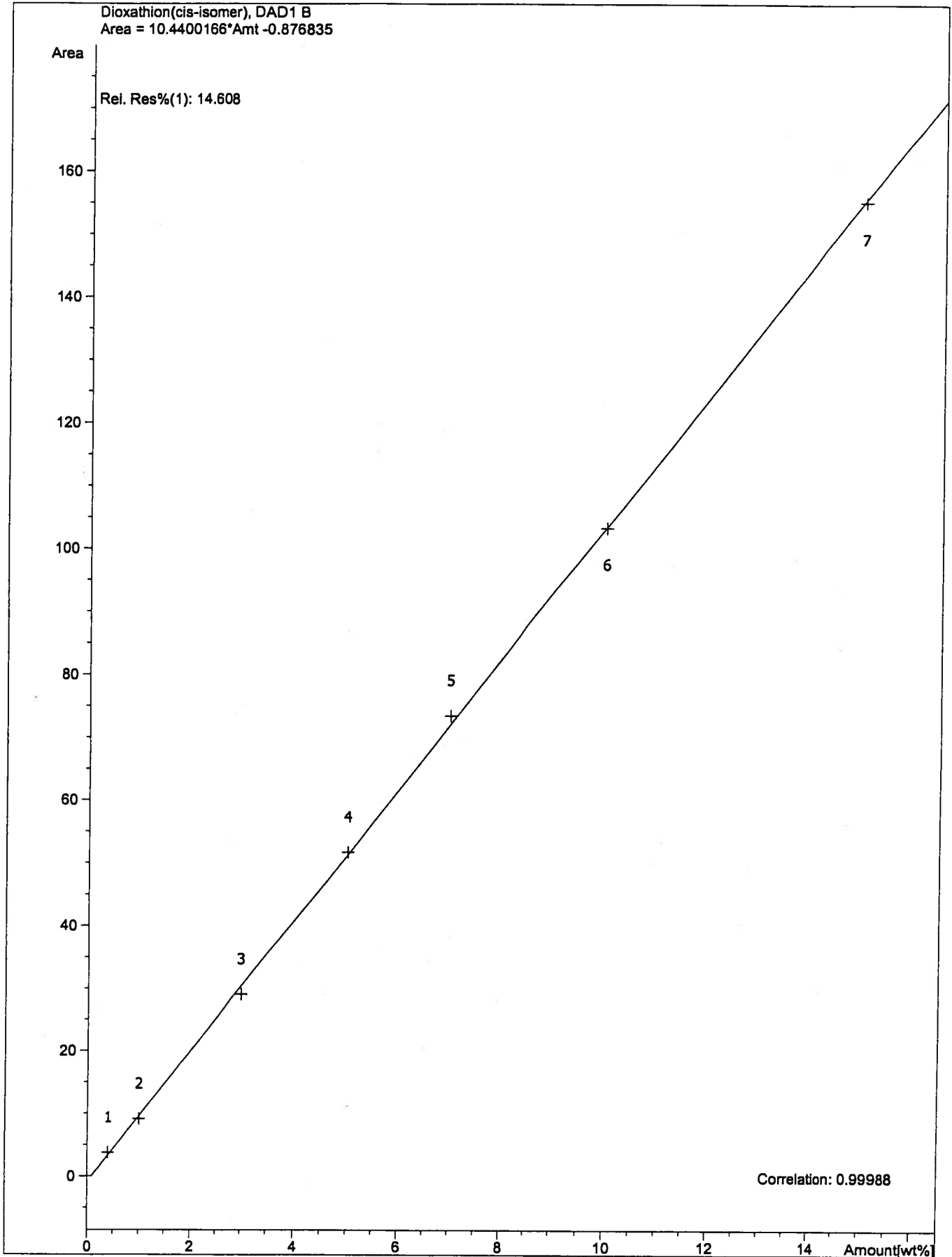
Naphthalene, DAD1 B
Area = 236.088137*Amt +48.832389

Rel. Res%(1): 4.067

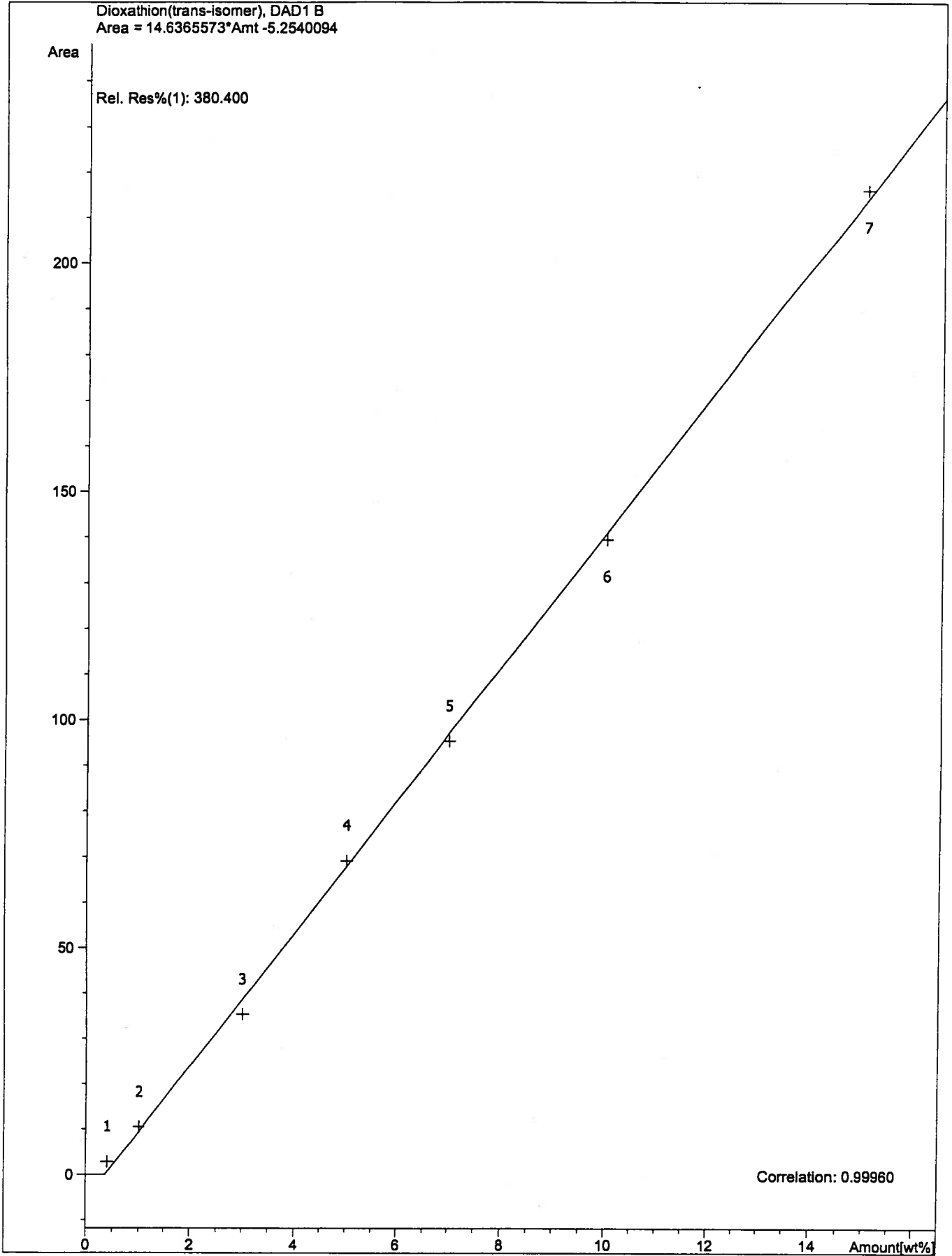


Correlation: 0.99968

Calibration Curve



Calibration Curve



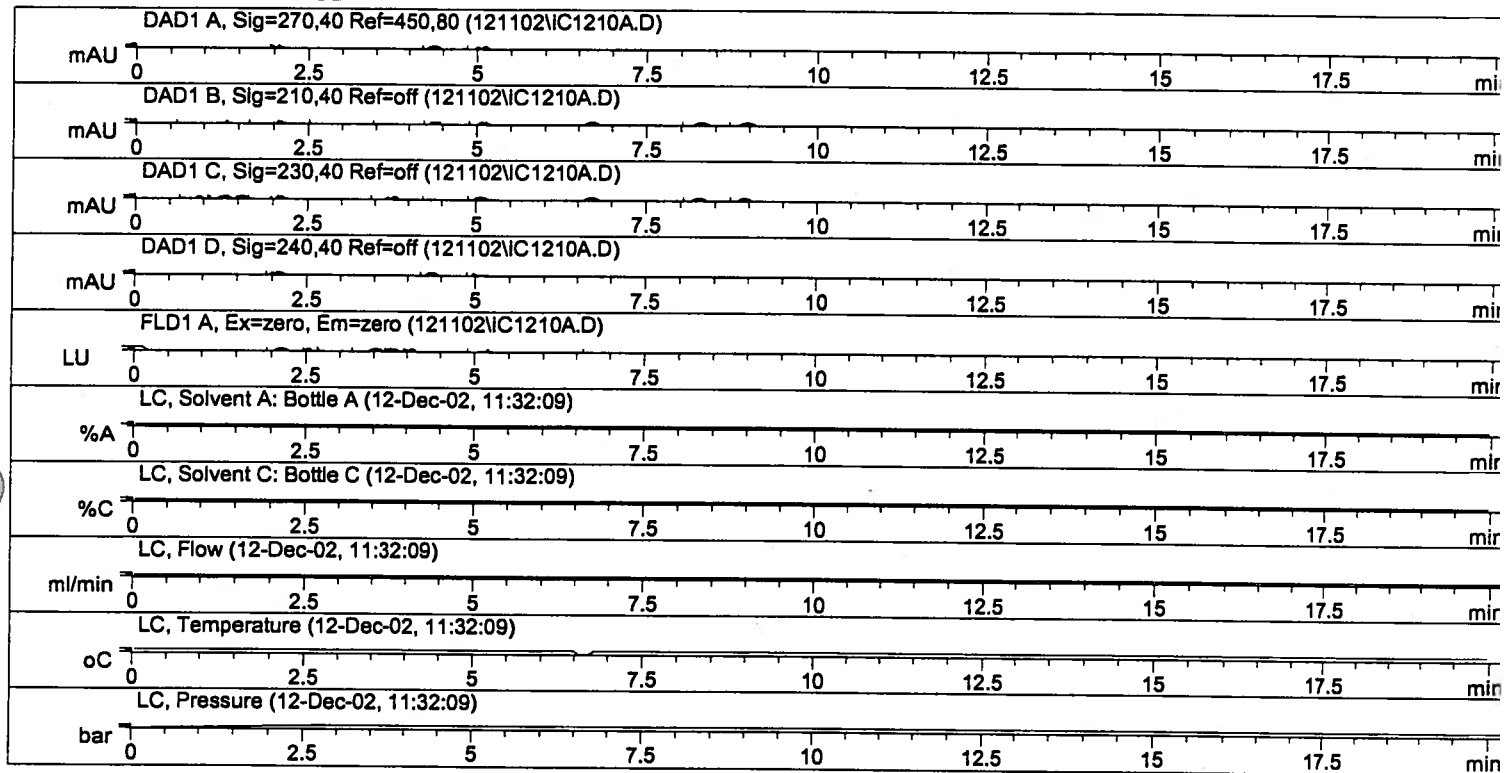
Initial Calibration Mid Point 5 ppm Diox mix, 4 ppm Nap
hthylene

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Injection Date   : 12/12/02 11:32:09 AM          Seq. Line   :    4
Sample Name     : CC4                          Vial        :   19
Acq. Operator   : Steve Flowers                 Inj         :    1
                                                    Inj Volume  : 25 µl

Acq. Method    : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed   : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed   : 12/13/02 9:17:51 AM by Steve Flowers
                (modified after loading)
  
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DIOXATHION METHOD



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External Standard Report
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Sorted By       : Signal
Calib. Data Modified : 12/13/02 9:17:48 AM
Multiplier     : 1.0000
Dilution       : 1.0000
  
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Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.359	VP	89.24964	5.65075e-2	5.04327		Dioxenethion
5.068	MM	1034.51550	4.03577e-3	4.17506		Naphthalene
8.268	MF	52.79961	9.73760e-2	5.14141		Dioxathion(cis-isomer)
8.939	FM	68.13815	7.35903e-2	5.01430		Dioxathion(trans-isomer)

Totals : 19.37406

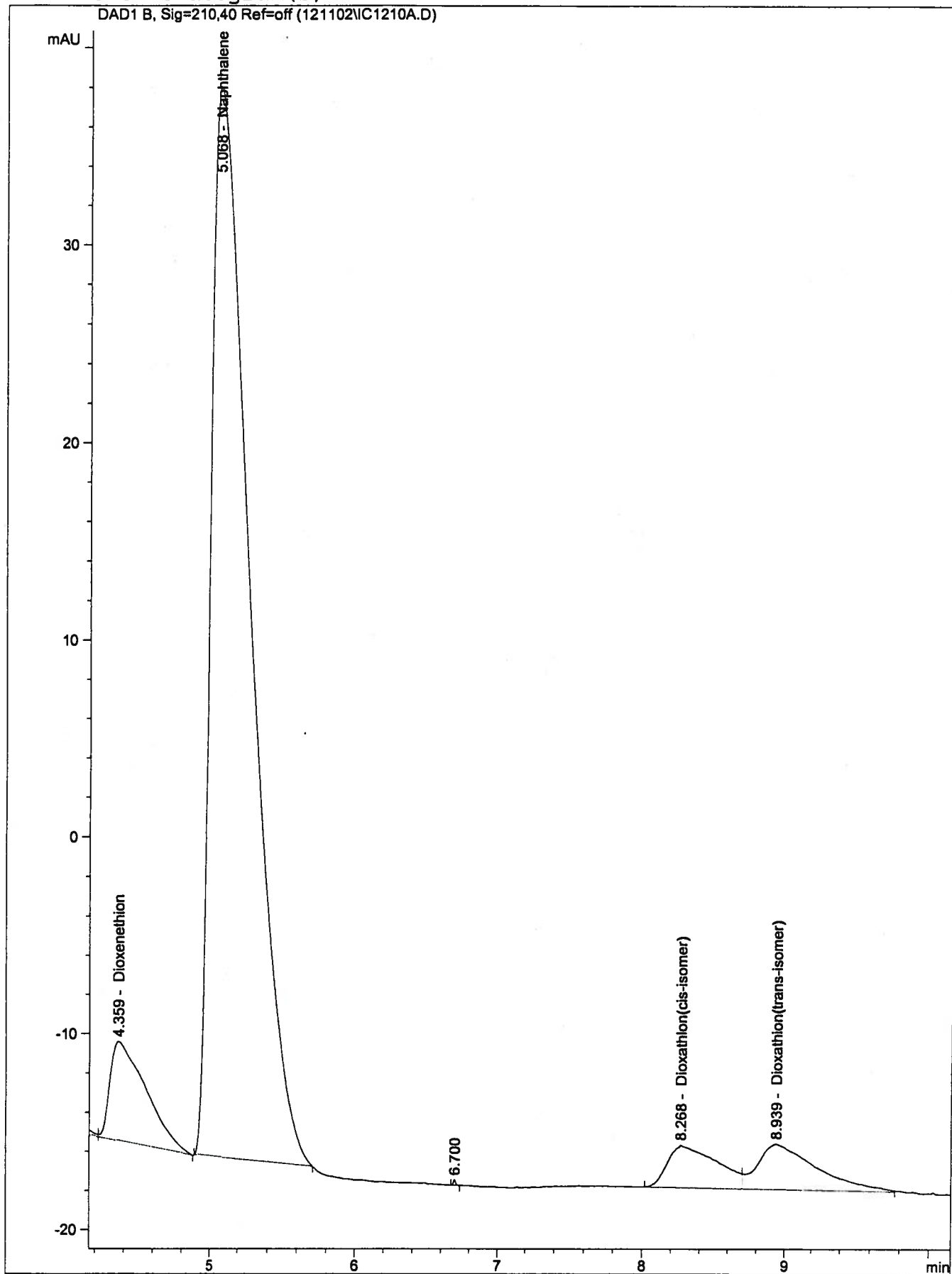
Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

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*** End of Report ***

Current Chromatogram(s)

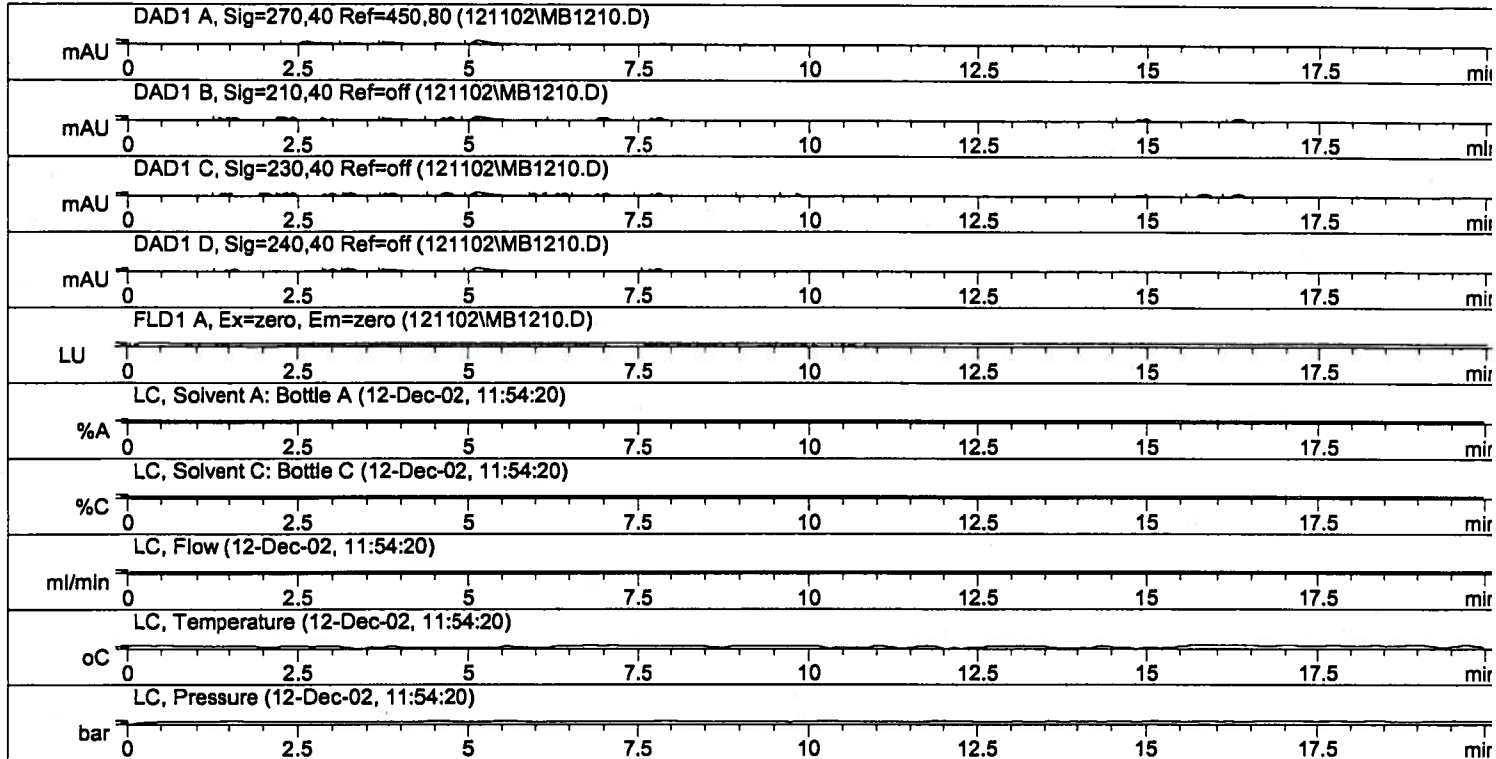


Method Blank for Hercules Dioxathion 12/11/02

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Injection Date   : 12/12/02 11:54:20 AM           Seq. Line :    5
Sample Name      : Method Blank                   Vial       :    0
Acq. Operator    : Steve Flowers                  Inj        :    1
                                                    Inj Volume : 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/12/02 5:27:12 PM by Steve Flowers
                (modified after loading)
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DIOXATHION METHOD



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External Standard Report
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Sorted By           :      Signal
Calib. Data Modified :      12/12/02 4:44:53 PM
Multiplier          :      1.0000
Dilution            :      1.0000
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Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.434		-	-	-		Dioxenethion
5.131	MM	960.71741	4.02041e-3	3.86248		Naphthalene
8.375		-	-	-		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 3.86248

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

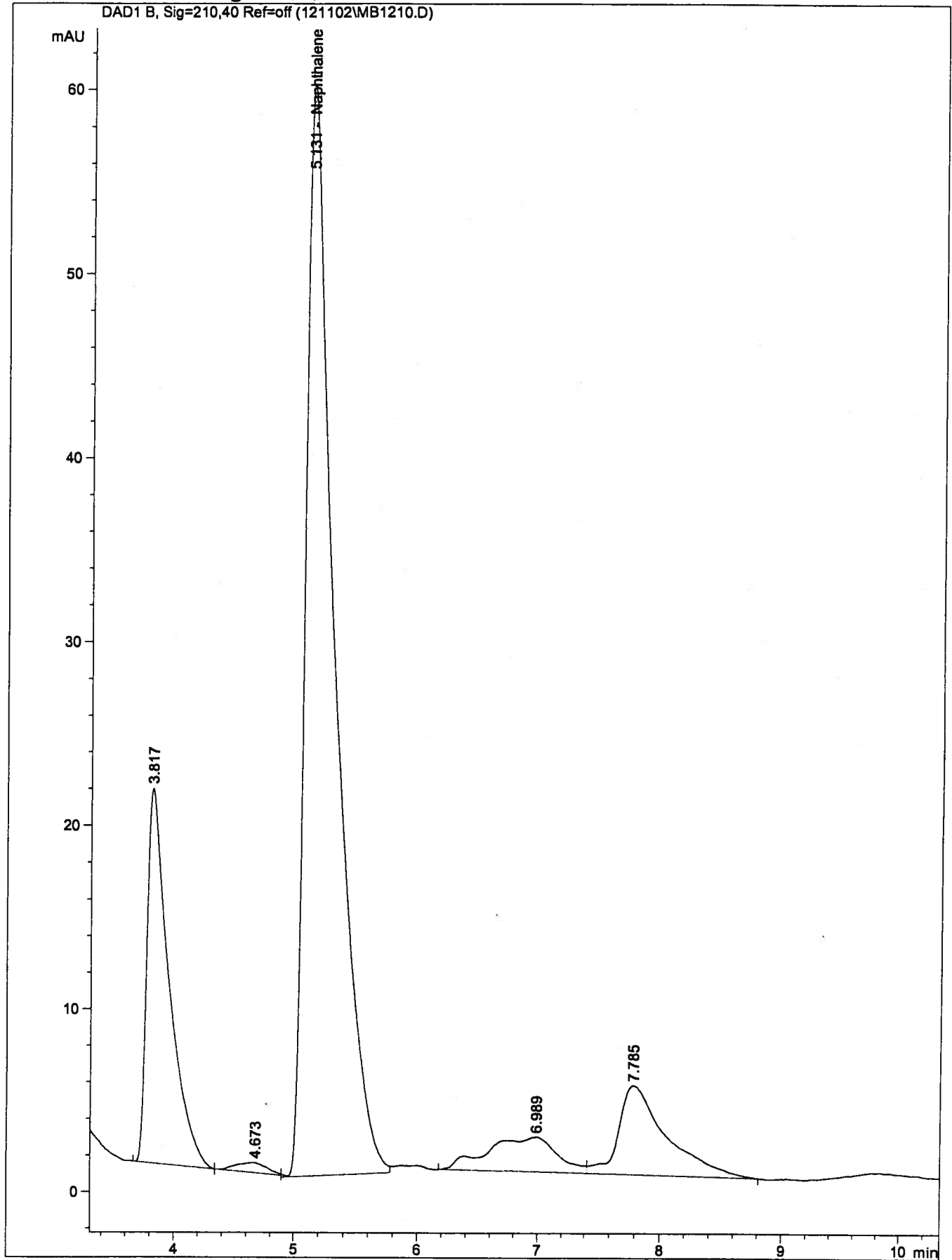
Signal 5: FLD1 A, Ex=zero, Em=zero

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

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*** End of Report ***

Current Chromatogram(s)



Lab Control for Hercules Dioxathion 12/11/02

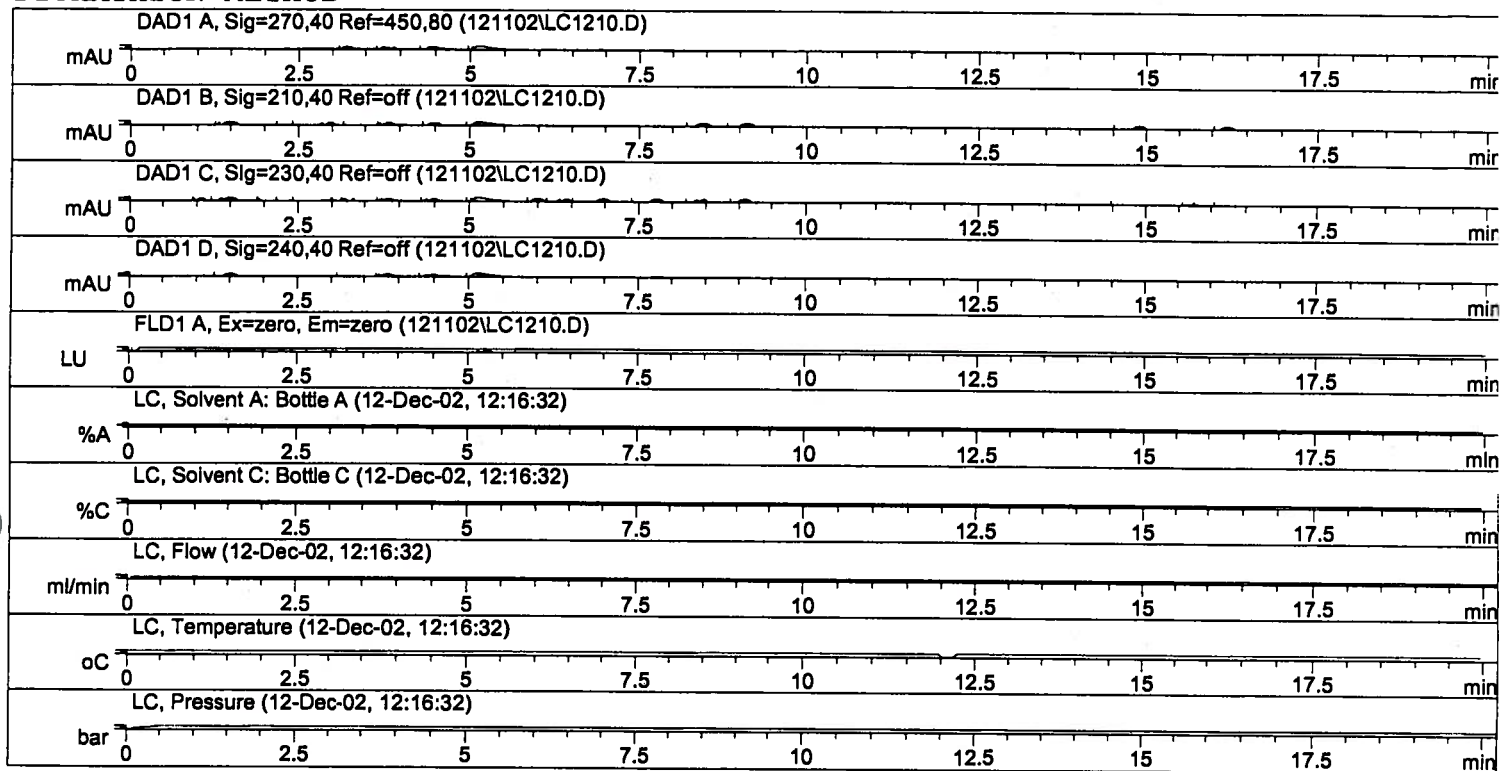
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Injection Date   : 12/12/02 12:16:32 PM           Seq. Line :    6
Sample Name     : Lab Control                     Vial      :    1
Acq. Operator   : Steve Flowers                  Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method    : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed   : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method: C:\HPCHEM\1\METHODS\DX121002.M
Last changed   : 12/12/02 5:27:12 PM by Steve Flowers
                (modified after loading)

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DIOXATHION METHOD



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External Standard Report
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Sorted By      : Signal
Calib. Data Modified : 12/12/02 4:44:53 PM
Multiplier    : 1.0000
Dilution      : 1.0000

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Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.456	MM	92.11987	5.64420e-2	5.19943		Dioxenethion
5.126	MM	995.12347	4.02785e-3	4.00821		Naphthalene
8.427	MM	51.06858	9.74299e-2	4.97561		Dioxathion(cis-isomer)
9.083	MM	68.58360	7.35561e-2	5.04474		Dioxathion(trans-isomer)

Totals : 19.22799

Results obtained with enhanced integrator!

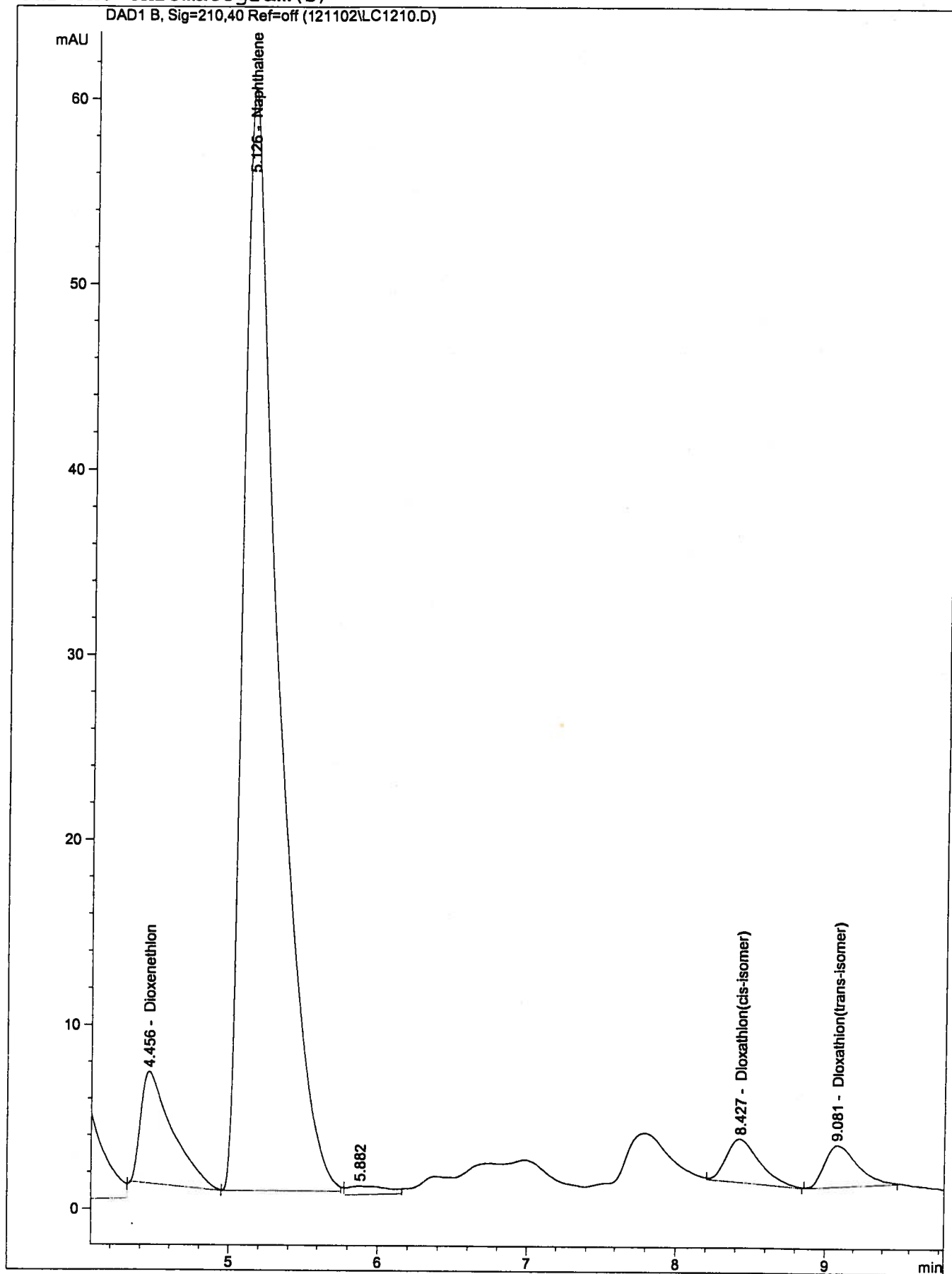
Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

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*** End of Report ***

Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\LC1210.D)



Hercules: Monitoring Well #1

Collected 12/4/02 @ 1045 MGJ, Extracted 12/11/02@ 0900

SCF

Volume Collected= 820 mL

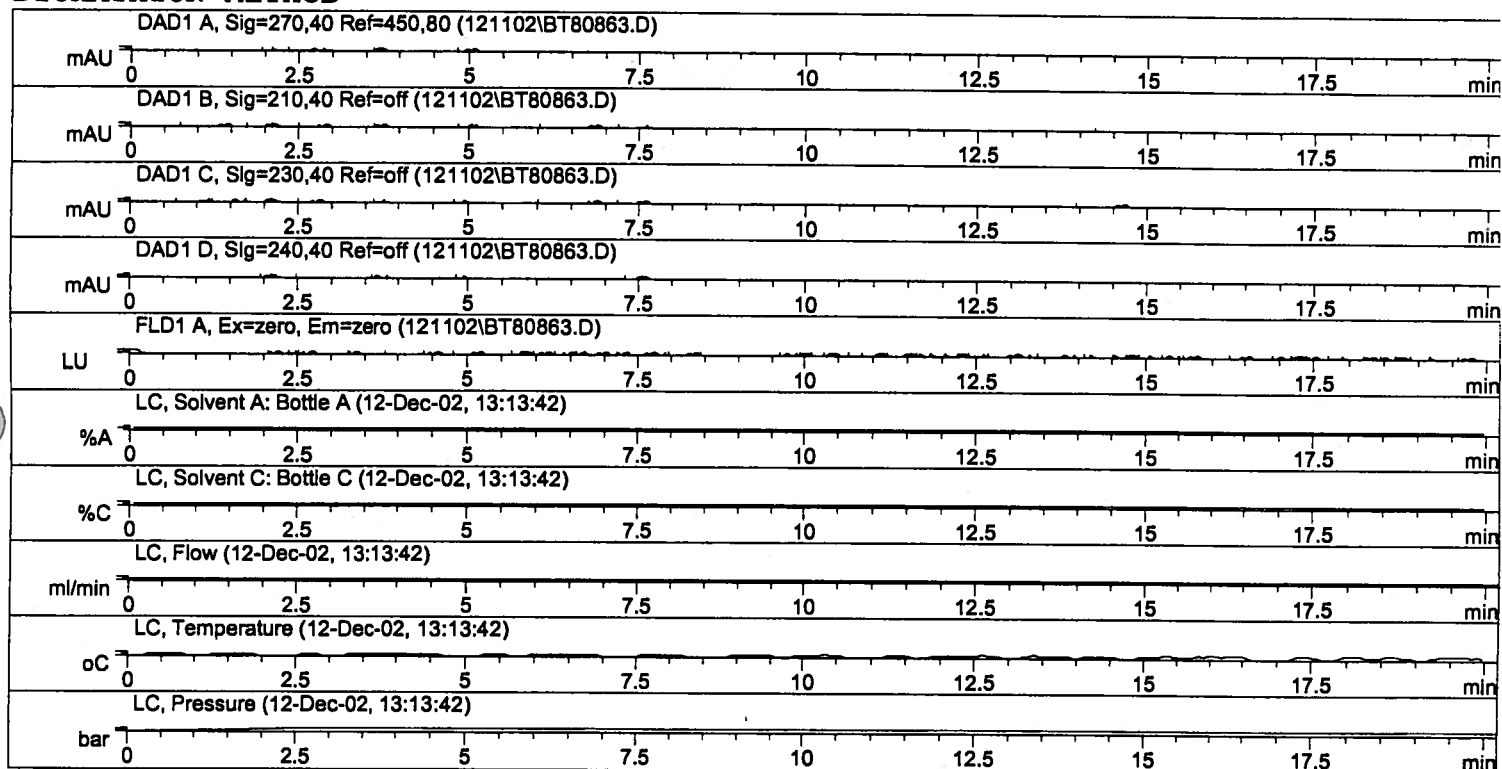
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=====
Injection Date   : 12/12/02 1:13:42 PM           Seq. Line :   10
Sample Name     : MW-1                          Vial      :    2
Acq. Operator   : Steve Flowers                 Inj       :    1
                                                Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/12/02 4:57:23 PM by Steve Flowers
                  (modified after loading)

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DIOXATHION METHOD



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External Standard Report
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Sorted By       : Signal
Calib. Data Modified : 12/12/02 4:44:53 PM
Multiplier     : 1.2200
Dilution       : 1.0000

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Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.434		-	-	-		Dioxenethion
5.036	MM	854.19910	3.99356e-3	4.16178		Naphthalene
8.375		-	-	-		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 4.16178

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

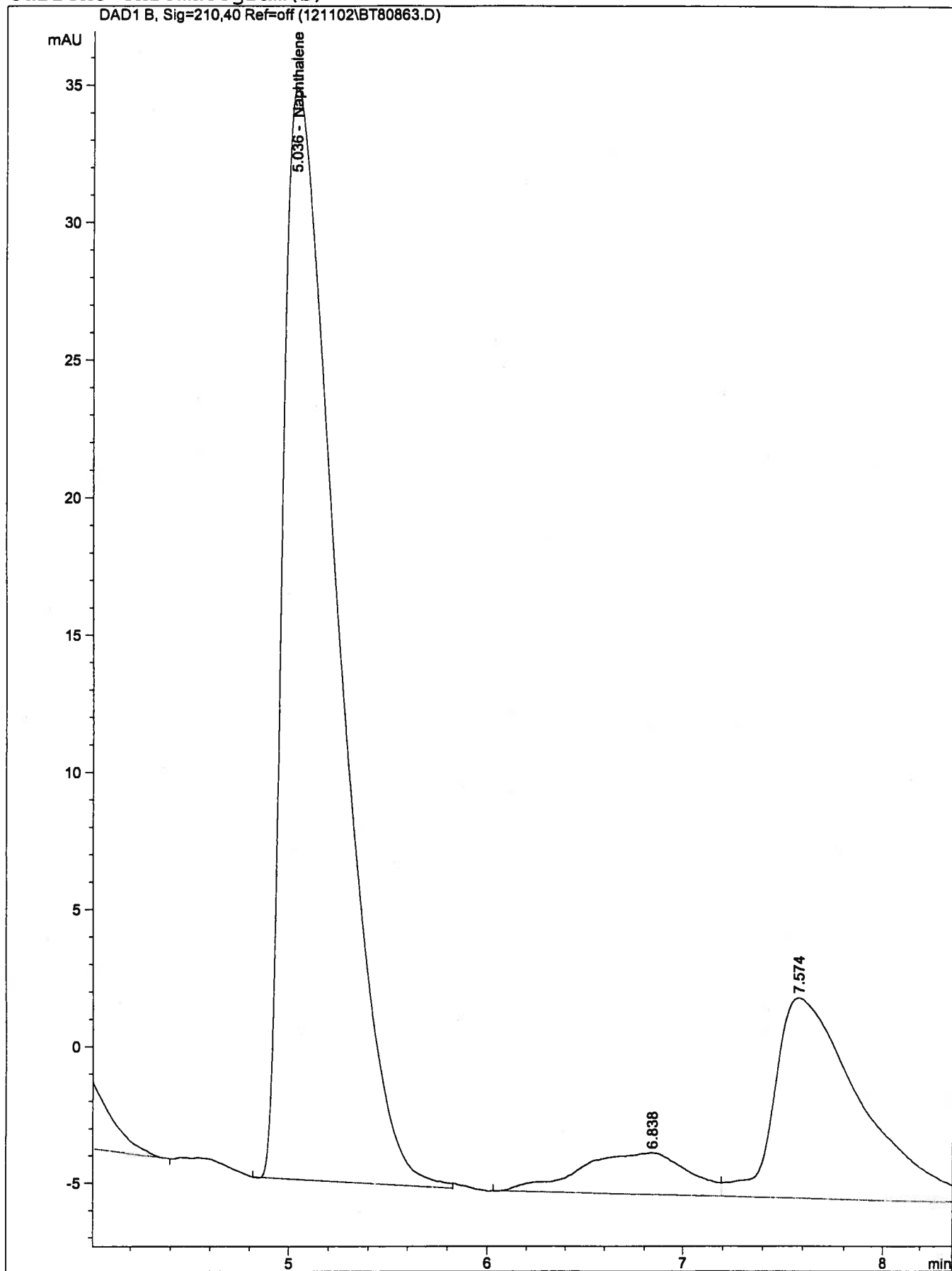
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

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*** End of Report ***

Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80863.D)



Hercules:Monitoring Well #11

Collected 12/4/02 @ 1210 MGJ, Extracted 12/11/02@ 0900

SCF

Volume Collected= 835 mL

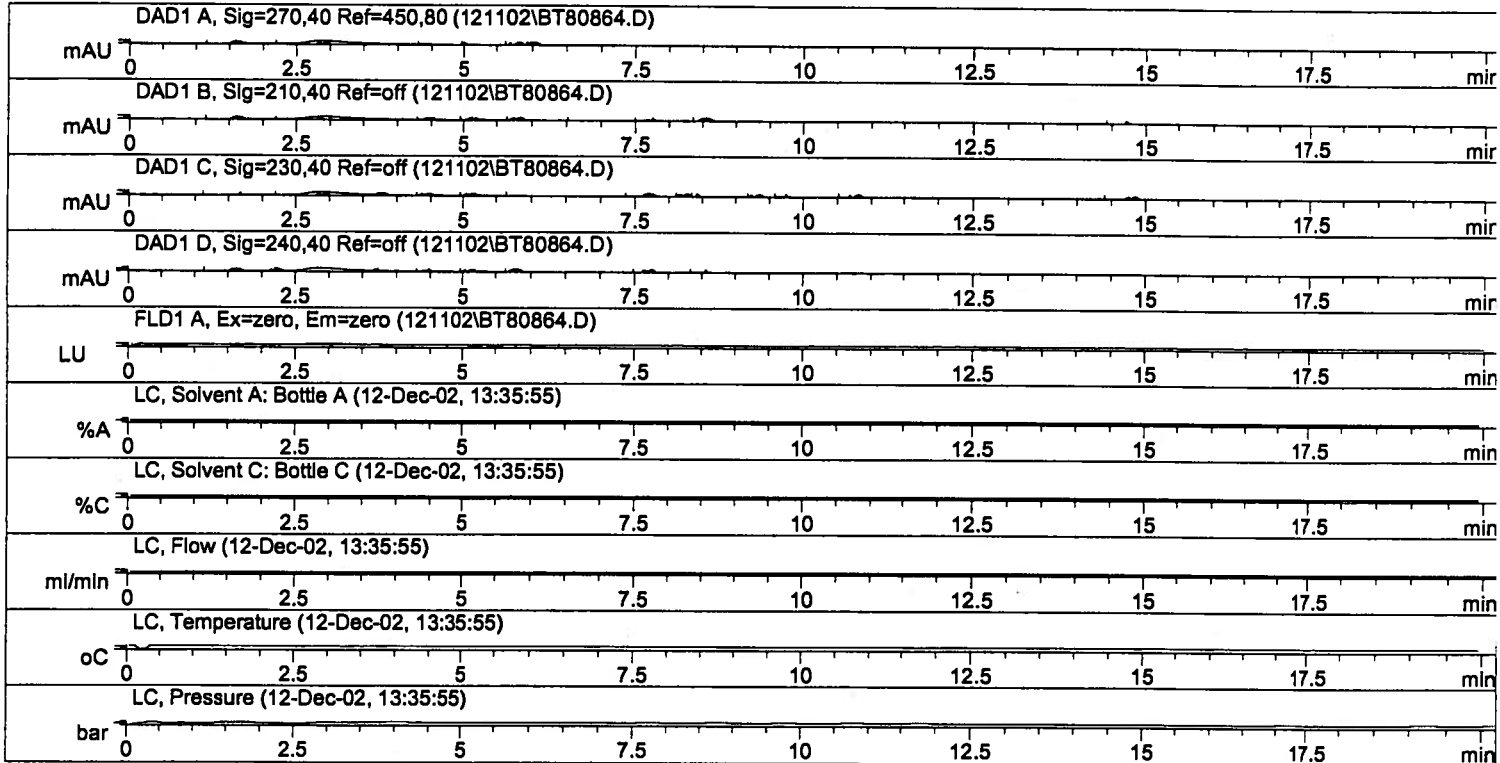
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=====
Injection Date   : 12/12/02 1:35:55 PM           Seq. Line :   11
Sample Name     : MW-11                         Vial      :    3
Acq. Operator   : Steve Flowers                 Inj       :    1
                                                Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/12/02 4:58:45 PM by Steve Flowers
                  (modified after loading)

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DIOXATHION METHOD



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External Standard Report
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Sorted By           :      Signal
Calib. Data Modified :      12/12/02 4:44:53 PM
Multiplier          :      1.2000
Dilution            :      1.0000

```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.438	MM	766.99939	5.46513e-2	50.30099		Dioxenethion
5.111	MM	1028.19360	4.03454e-3	4.97794		Naphthalene
8.518	MM	42.65938	9.77541e-2	5.00415		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 60.28308

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

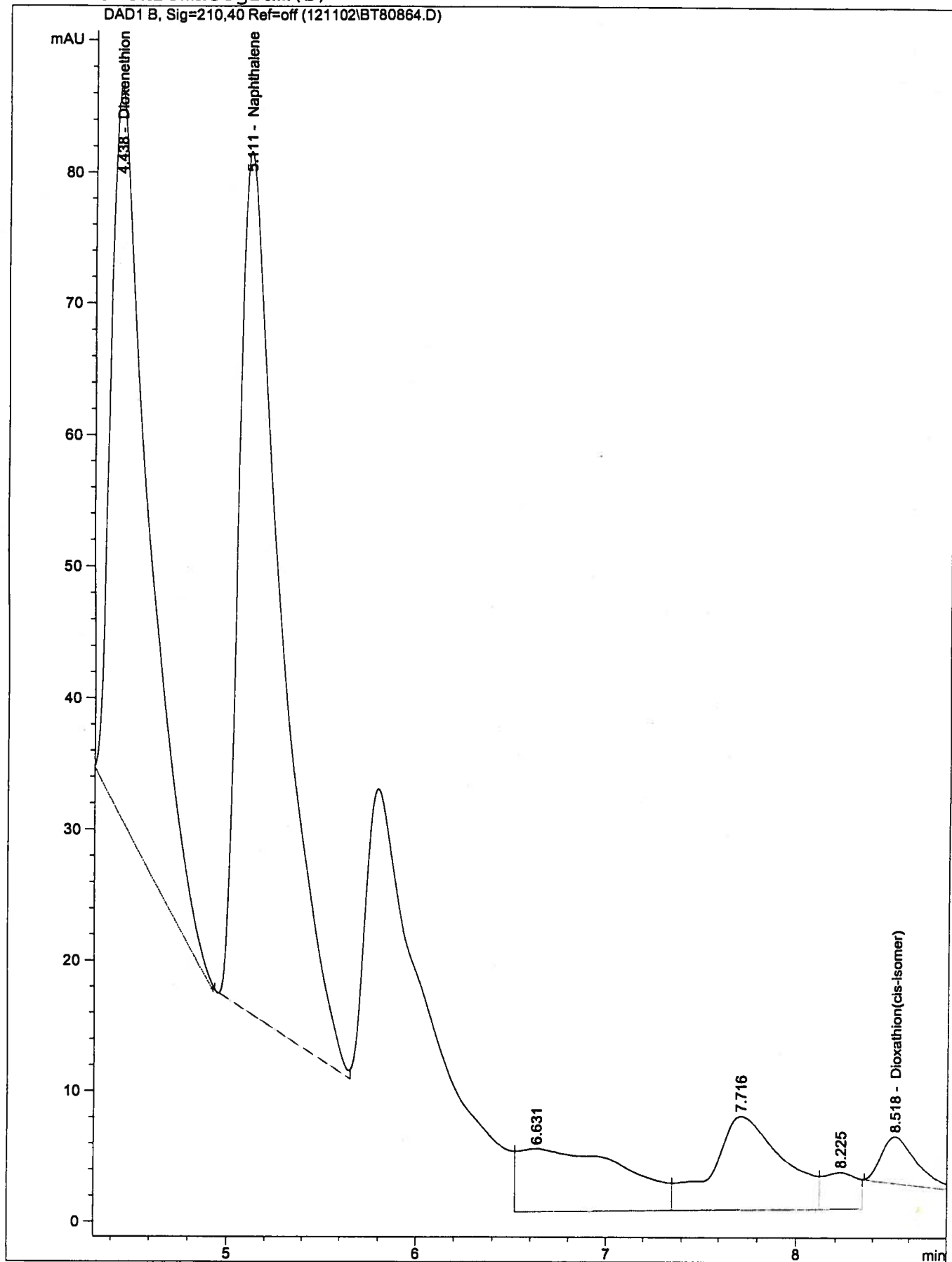
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

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*** End of Report ***

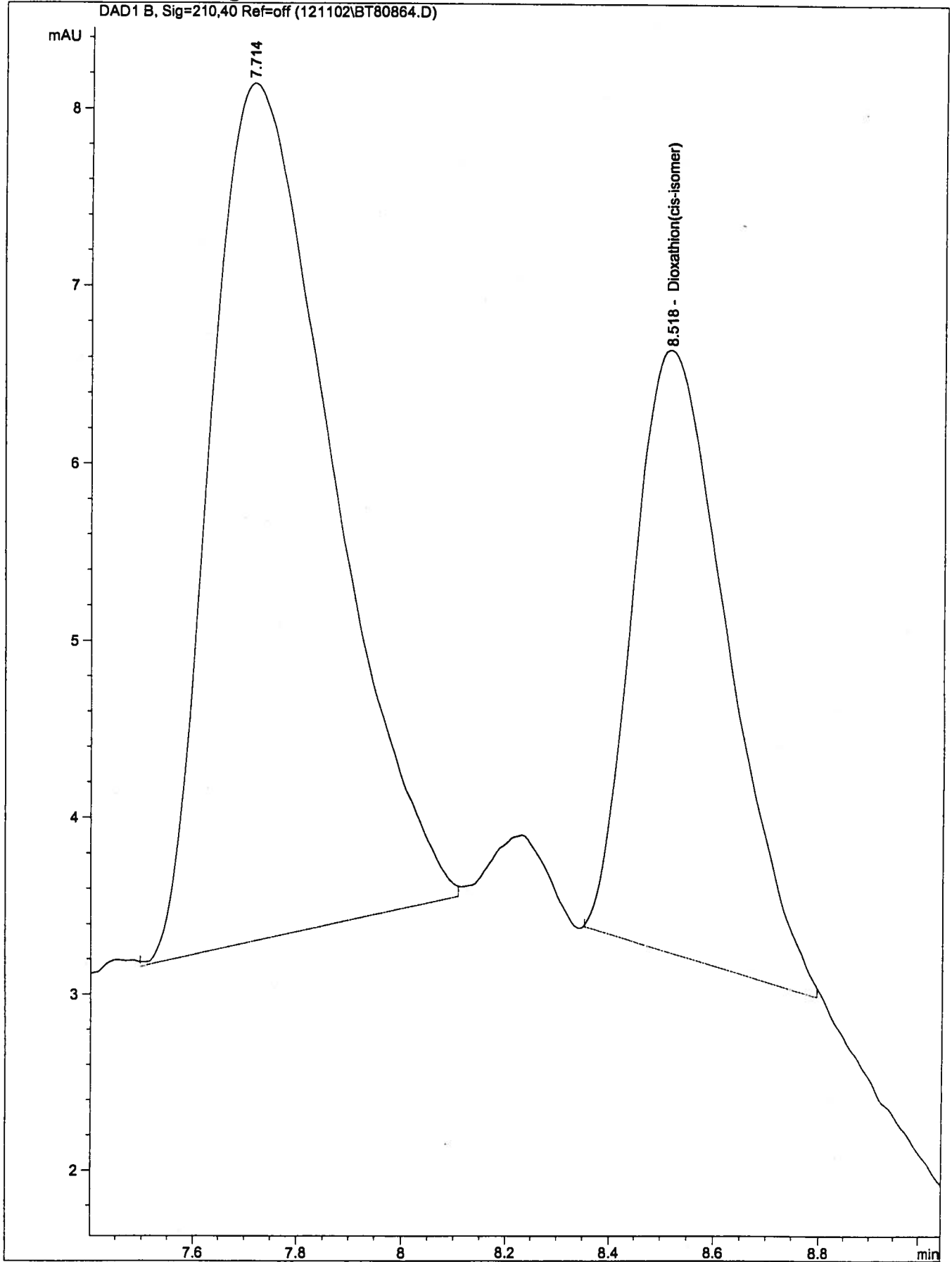
Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (1211021BT80864.D)



Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80864.D)



Hercules:Monitoring Well #3

Collected 12/4/02 @ 1500 MGJ, Extracted 12/11/02@ 0900

SCF

Volume Collected= 860 mL

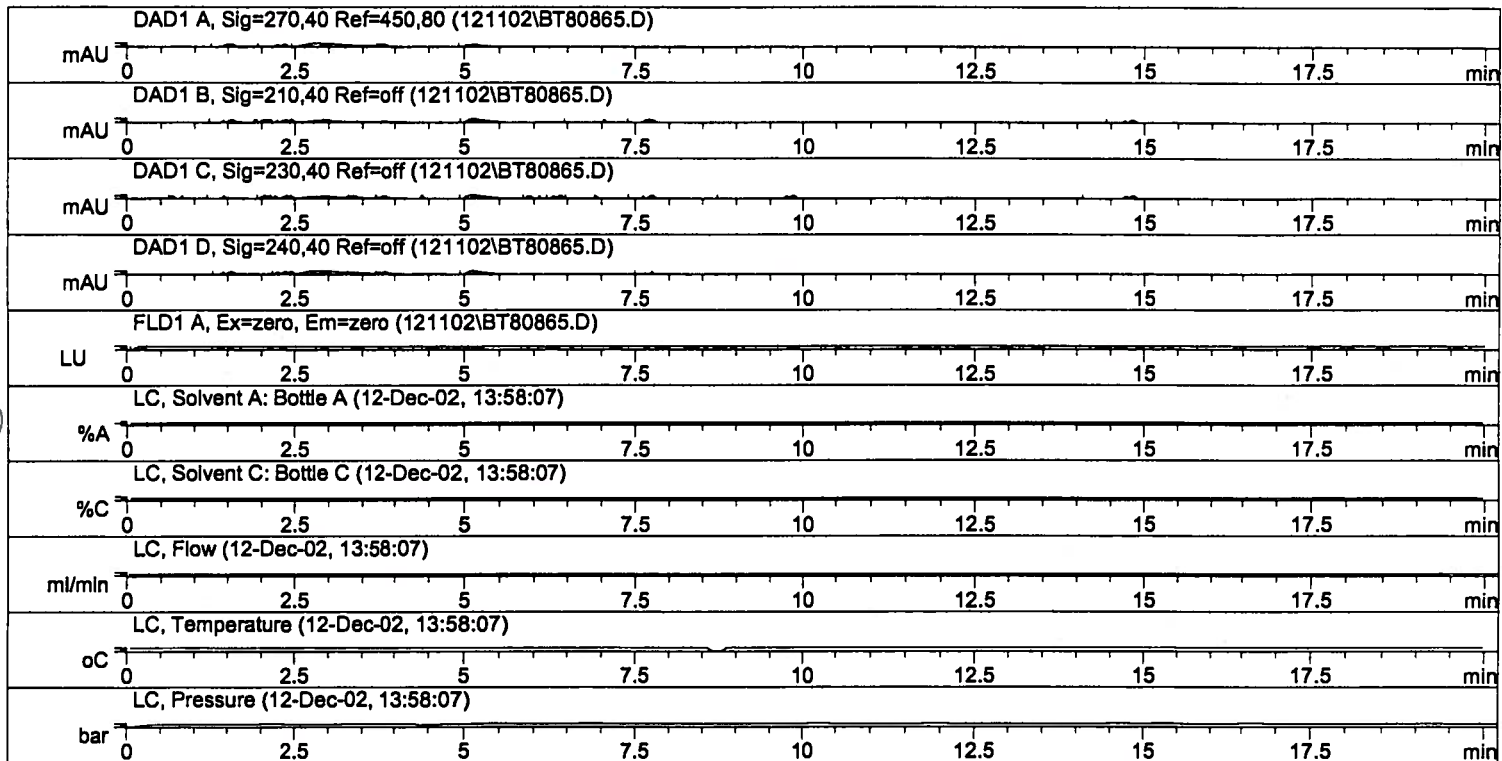
```

=====
Injection Date   : 12/12/02 1:58:07 PM           Seq. Line :   12
Sample Name     : MW-3                          Vial      :    4
Acq. Operator   : Steve Flowers                 Inj       :    1
                                           Inj Volume: 25 µl

Acq. Method    : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed   : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method: C:\HPCHEM\1\METHODS\DX121002.M
Last changed   : 12/12/02 5:02:38 PM by Steve Flowers
                (modified after loading)

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DIOXATHION METHOD



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External Standard Report
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Sorted By      :      Signal
Calib. Data Modified :      12/12/02 4:44:53 PM
Multiplier     :      1.1600
Dilution       :      1.0000

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Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.434		-	-	-		Dioxenethion
5.114	MM	964.64648	4.02129e-3	4.49978		Naphthalene
8.375		-	-	-		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 4.49978

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

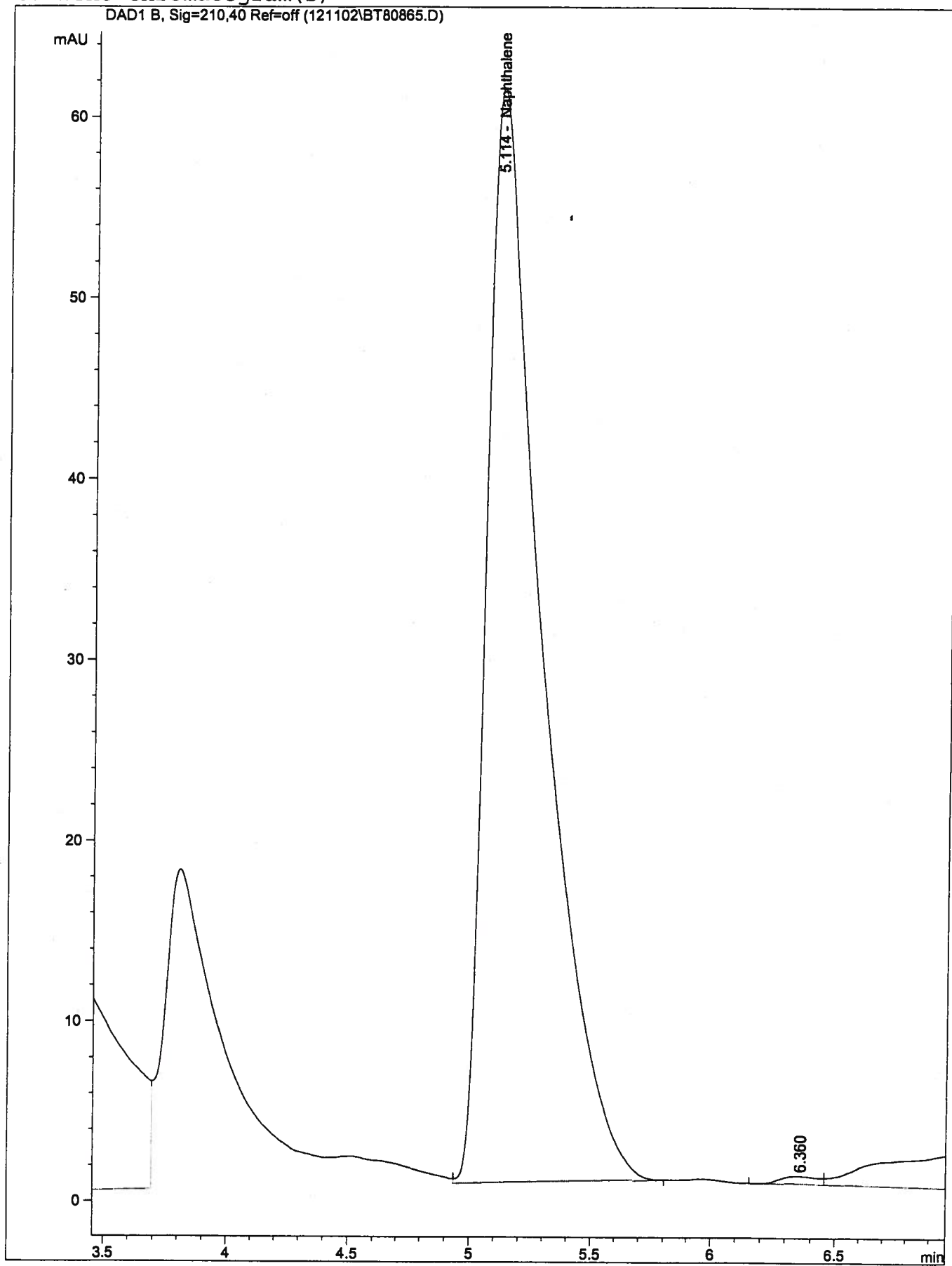
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

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 *** End of Report ***

Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80865.D)



Hercules:Monitoring Well #2

Collected 12/4/02 @ 1545 MGJ, Extracted 12/11/02@ 0900

SCF

Volume Collected= 900 mL

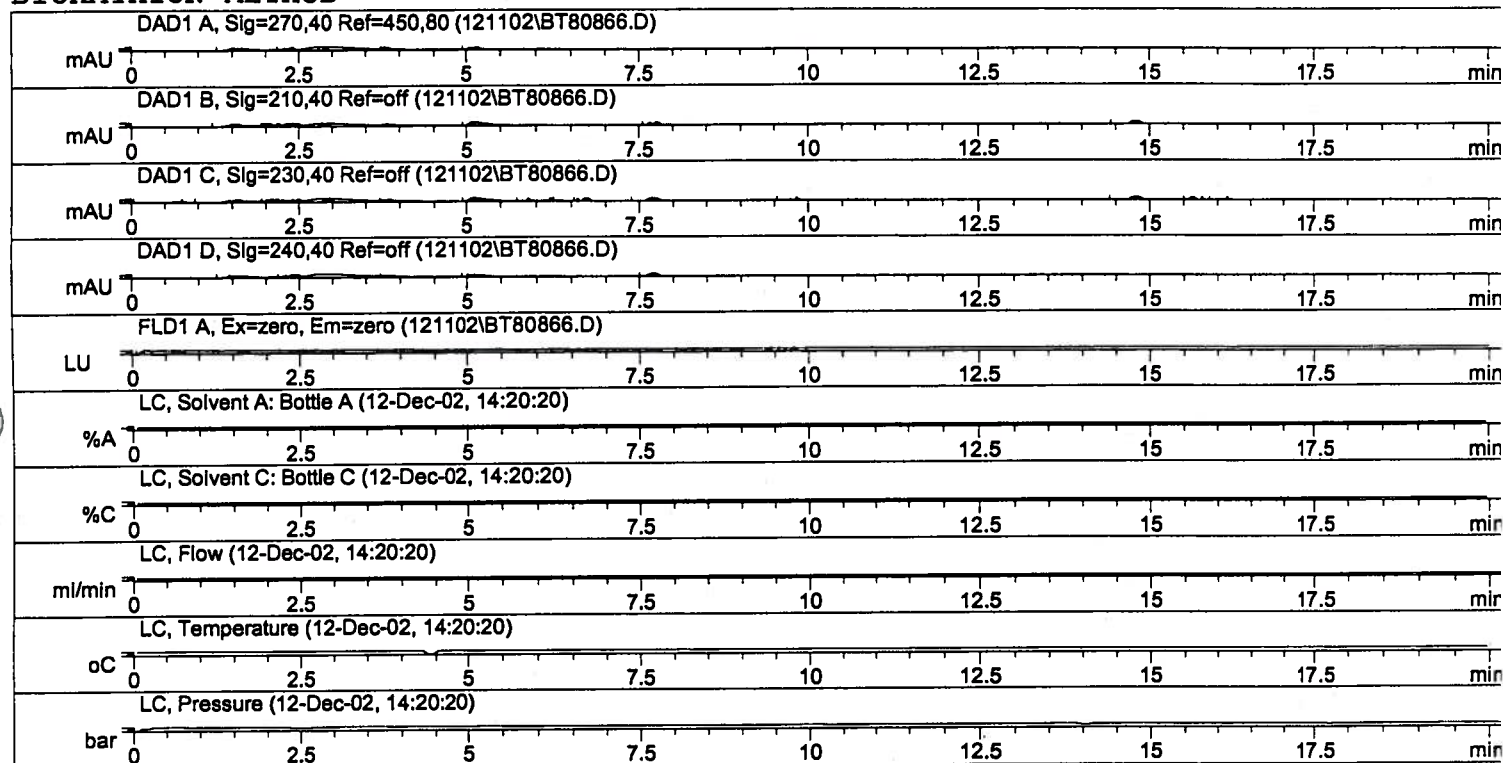
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=====
Injection Date   : 12/12/02 2:20:20 PM           Seq. Line :   13
Sample Name     : MW-2                           Vial      :    5
Acq. Operator   : Steve Flowers                  Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method    : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed   : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method: C:\HPCHEM\1\METHODS\DX121002.M
Last changed   : 12/12/02 5:03:21 PM by Steve Flowers
                (modified after loading)

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DIOXATHION METHOD



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External Standard Report
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Sorted By           :      Signal
Calib. Data Modified :      12/12/02 4:44:53 PM
Multiplier          :      1.1100
Dilution            :      1.0000

```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.434		-	-	-		Dioxenethion
5.108	MM	981.10571	4.02488e-3	4.38321		Naphthalene
8.375		-	-	-		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 4.38321

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

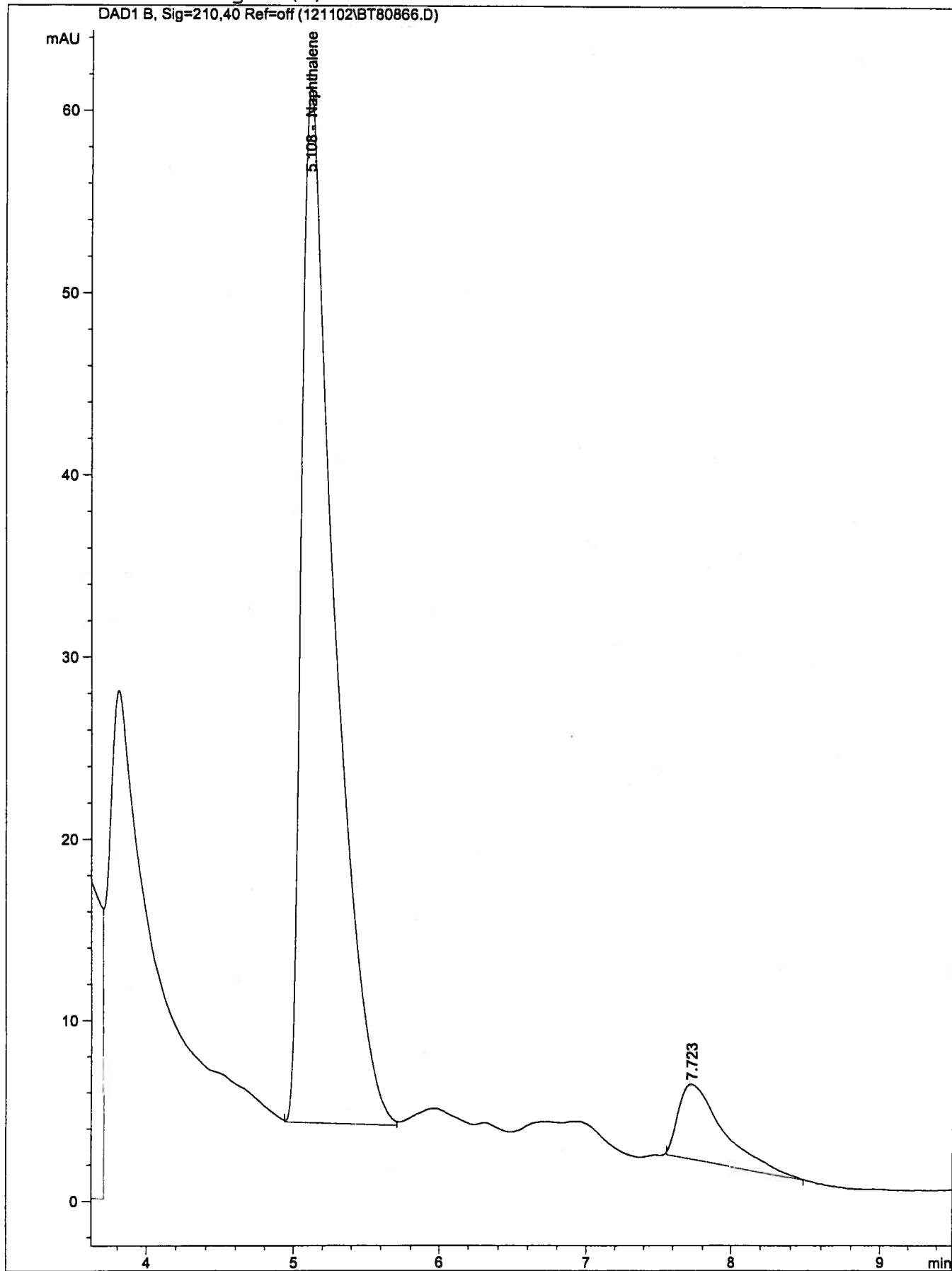
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

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*** End of Report ***

Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (1211021BT80866.D)



Hercules:Monitoring Well #10

Collected 12/4/02 @ 1640 MGJ, Extracted 12/11/02@ 0900

SCF

Volume Collected= 930 mL

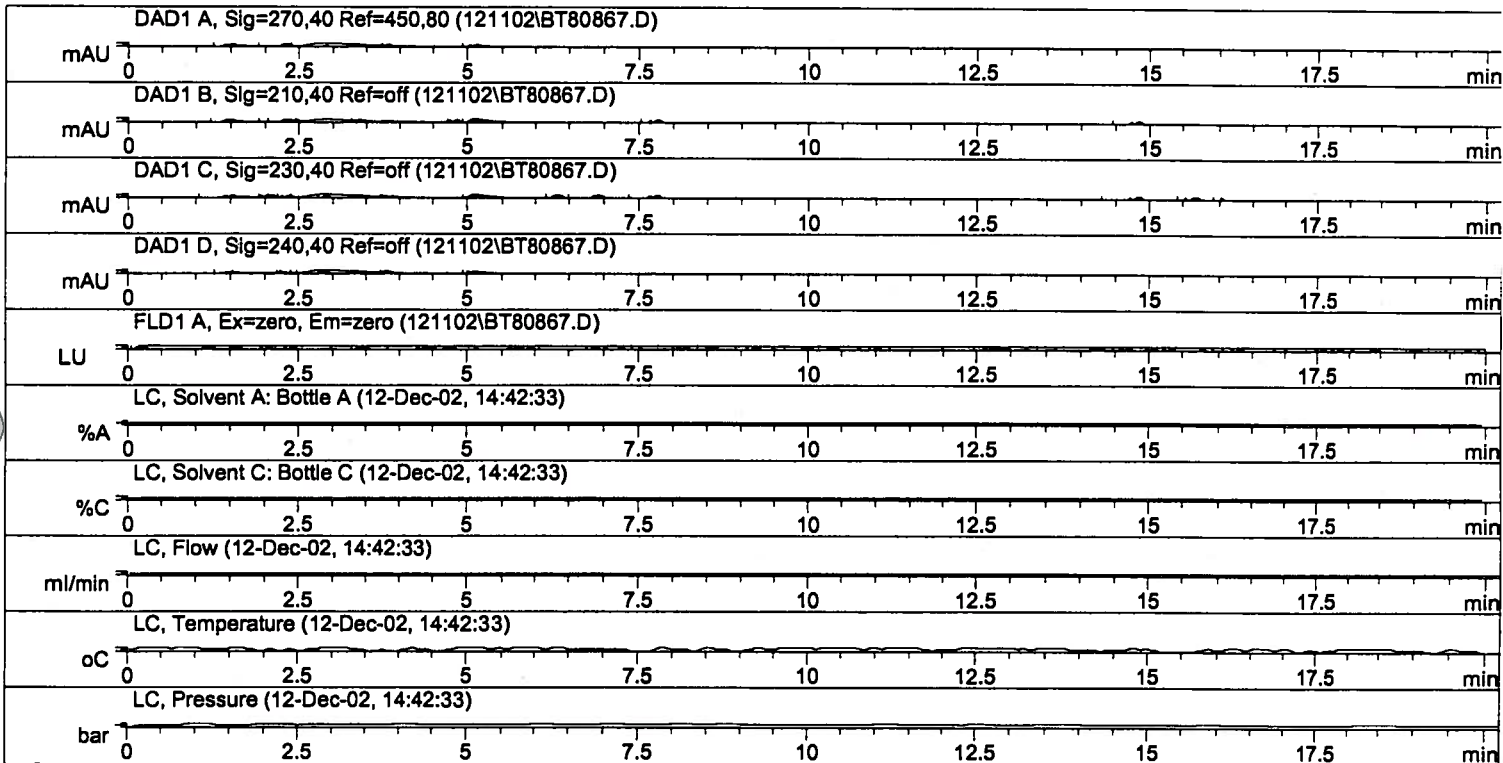
```

=====
Injection Date   : 12/12/02 2:42:33 PM           Seq. Line :   14
Sample Name     : MW-10                          Vial      :    6
Acq. Operator   : Steve Flowers                   Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/12/02 5:05:11 PM by Steve Flowers
                  (modified after loading)

```

DIOXATHION METHOD



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      12/12/02 4:44:53 PM
Multiplier          :      1.0800
Dilution            :      1.0000

```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.434		-	-	-		Dioxenethion
5.107	MM	1009.11115	4.03073e-3	4.39286		Naphthalene
8.375		-	-	-		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 4.39286

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

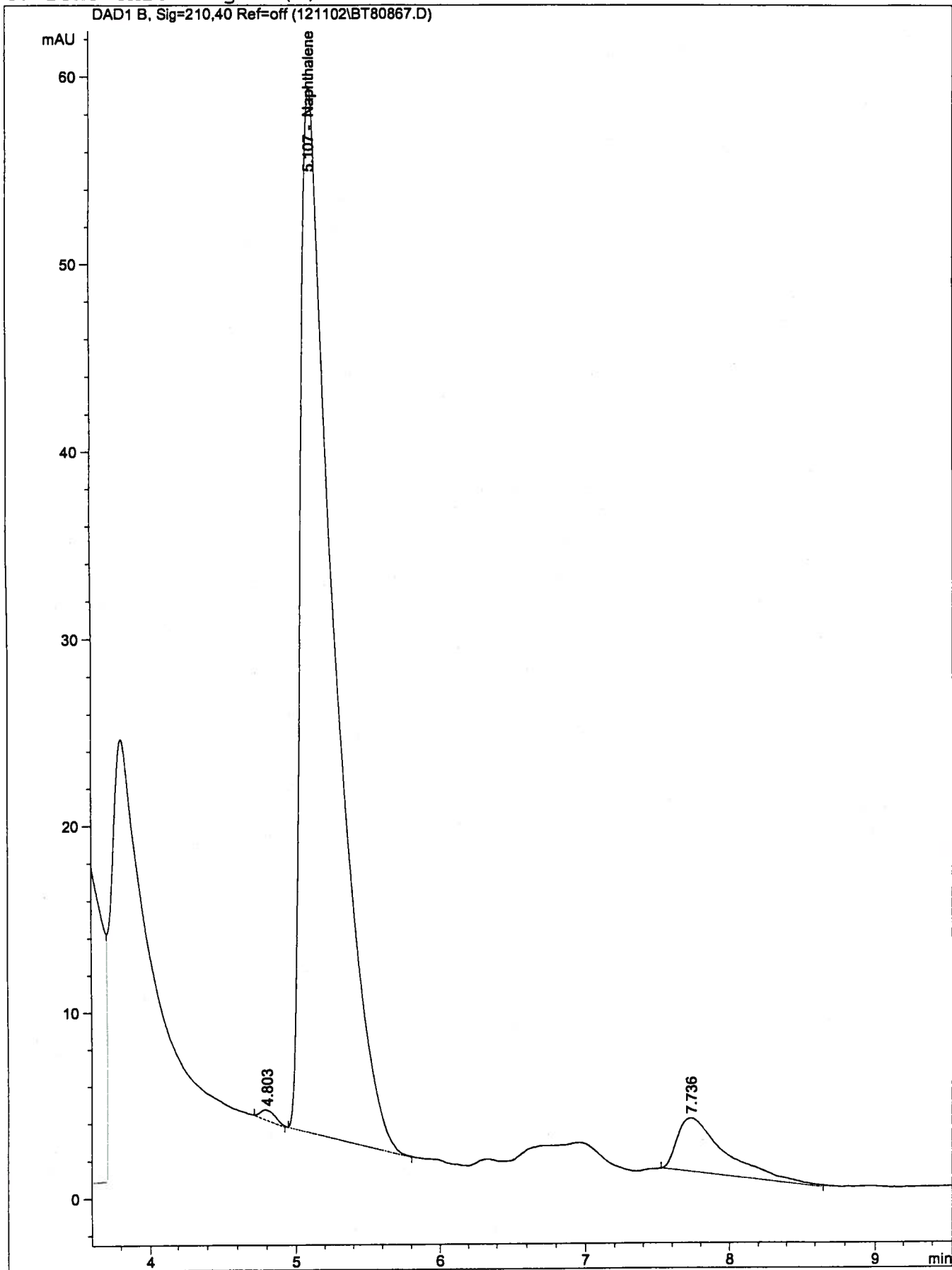
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

=====
*** End of Report ***

Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80867.D)



Hercules:Monitoring Well #7

Collected 12/4/02 @ 1620 MGJ, Extracted 12/11/02@ 0900

SCF

Volume Collected= 850 mL

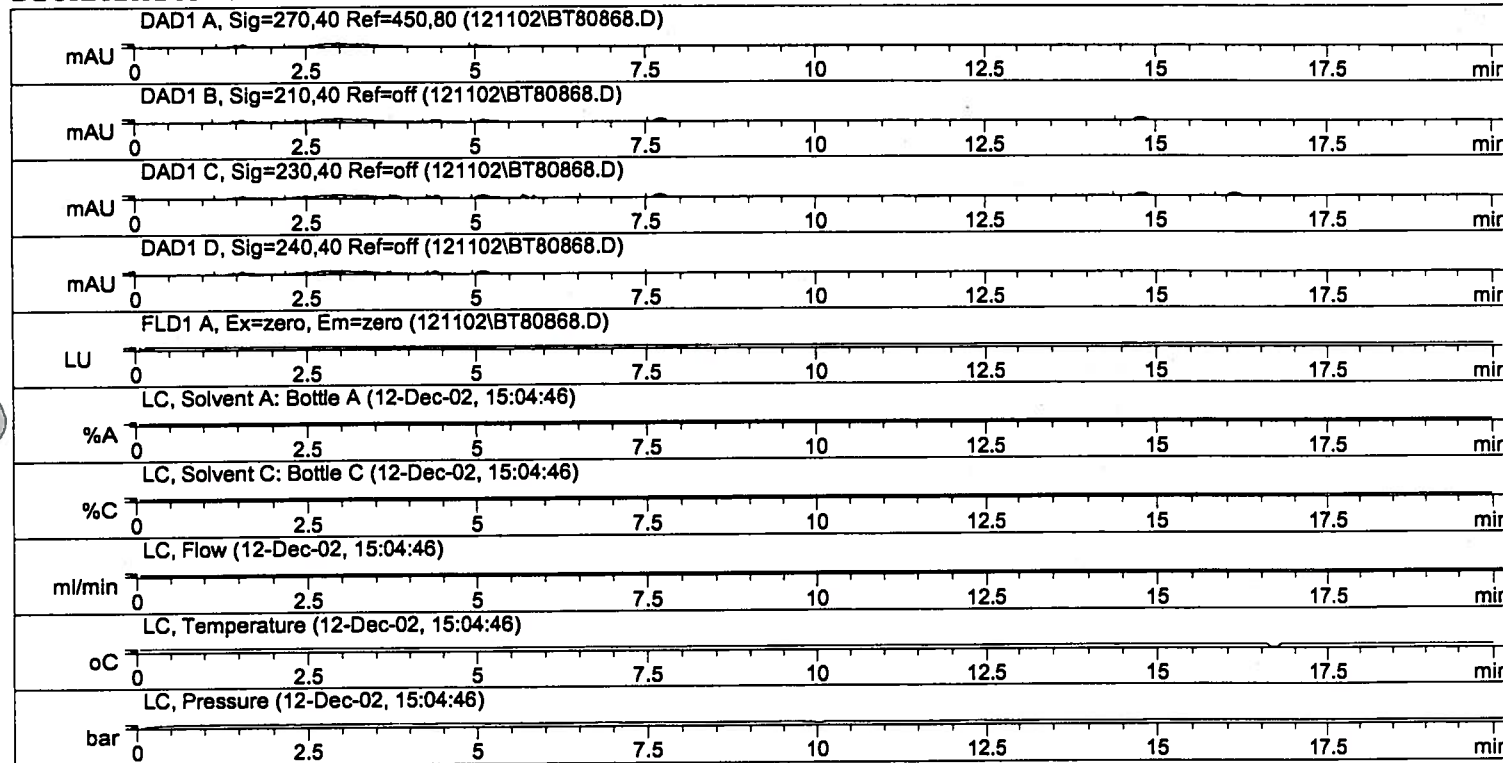
```

=====
Injection Date   : 12/12/02 3:04:46 PM           Seq. Line :   15
Sample Name     : MW-7                           Vial      :    7
Acq. Operator   : Steve Flowers                   Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/12/02 5:07:02 PM by Steve Flowers
                  (modified after loading)

```

DIOXATHION METHOD



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      12/12/02 4:44:53 PM
Multiplier          :      1.1800
Dilution            :      1.0000

```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.380	MM	145.69127	5.56937e-2	9.57462		Dioxenethion
5.109	MM	845.59491	3.99110e-3	3.98233		Naphthalene
8.375		-	-	-		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 13.55694

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

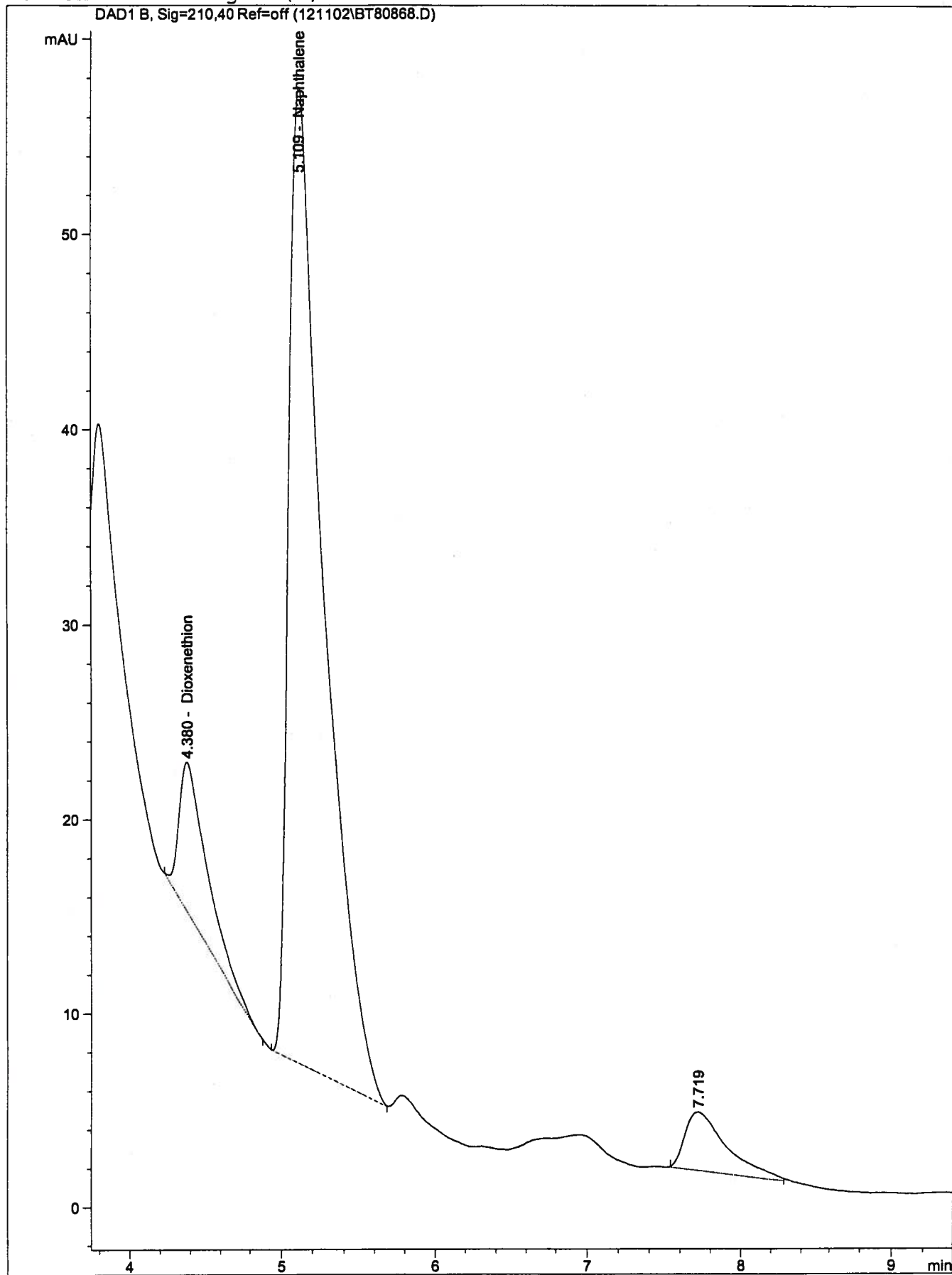
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

=====
*** End of Report ***

Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80868.D)



Hercules:Monitoring Well #9

Collected 12/5/02 @ 1015 MGJ, Extracted 12/11/02@ 0900

SCF

Volume Collected= 880 mL

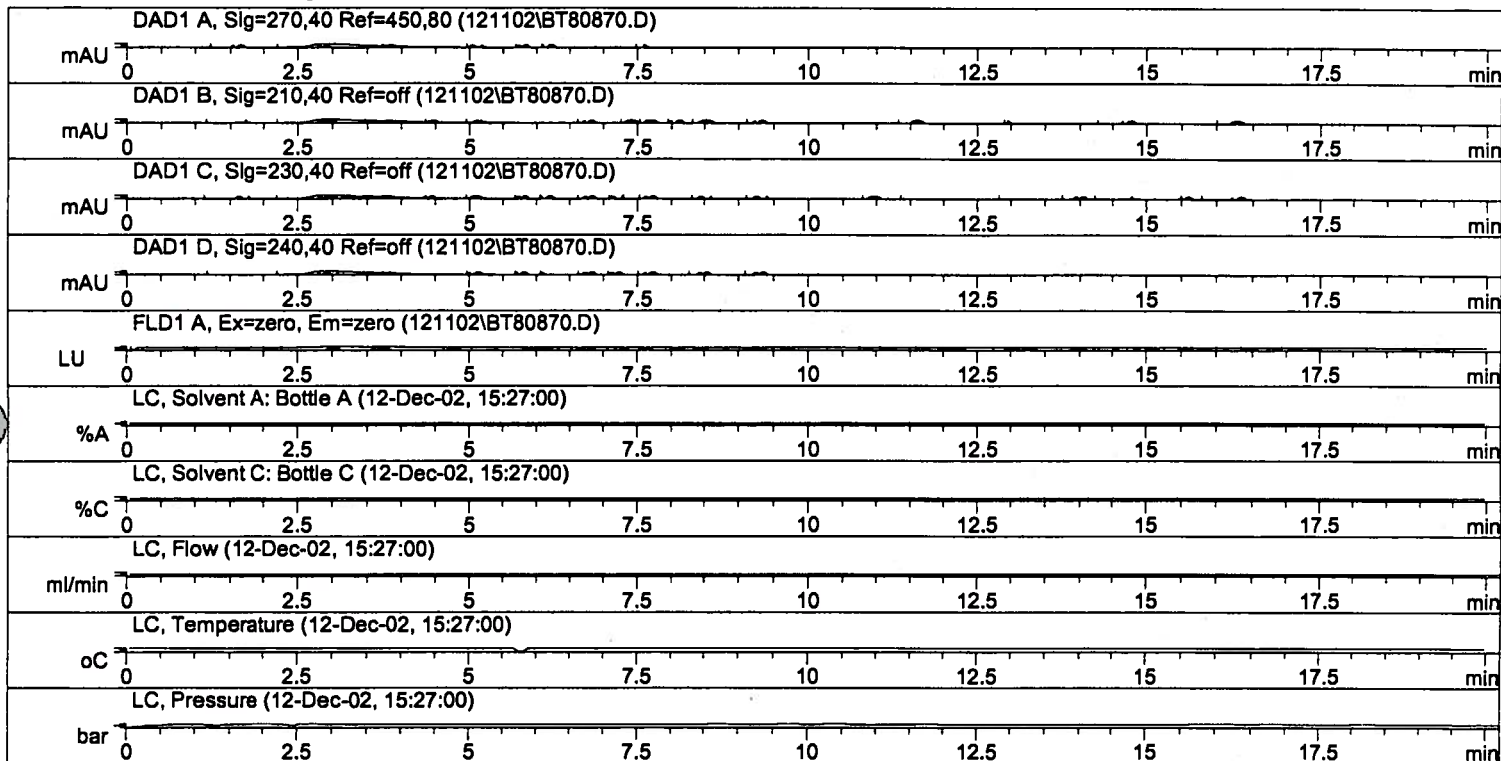
```

=====
Injection Date   : 12/12/02 3:27:00 PM           Seq. Line :   16
Sample Name     : MW-9                          Vial      :    8
Acq. Operator  : Steve Flowers                  Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method    : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed   : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method: C:\HPCHEM\1\METHODS\DX121002.M
Last changed   : 12/12/02 5:09:54 PM by Steve Flowers
                (modified after loading)

```

DIOXATHION METHOD



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=====
External Standard Report
=====

```

```

Sorted By      :      Signal
Calib. Data Modified : 12/12/02 4:44:53 PM
Multiplier    :      1.1400
Dilution      :      1.0000

```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.426	MM	91.75594	5.64501e-2	5.90478		Dioxenethion
5.098	MM	1561.12073	4.10321e-3	7.30239		Naphthalene
8.501	MM	116.14562	9.65084e-2	12.77829		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 25.98547

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

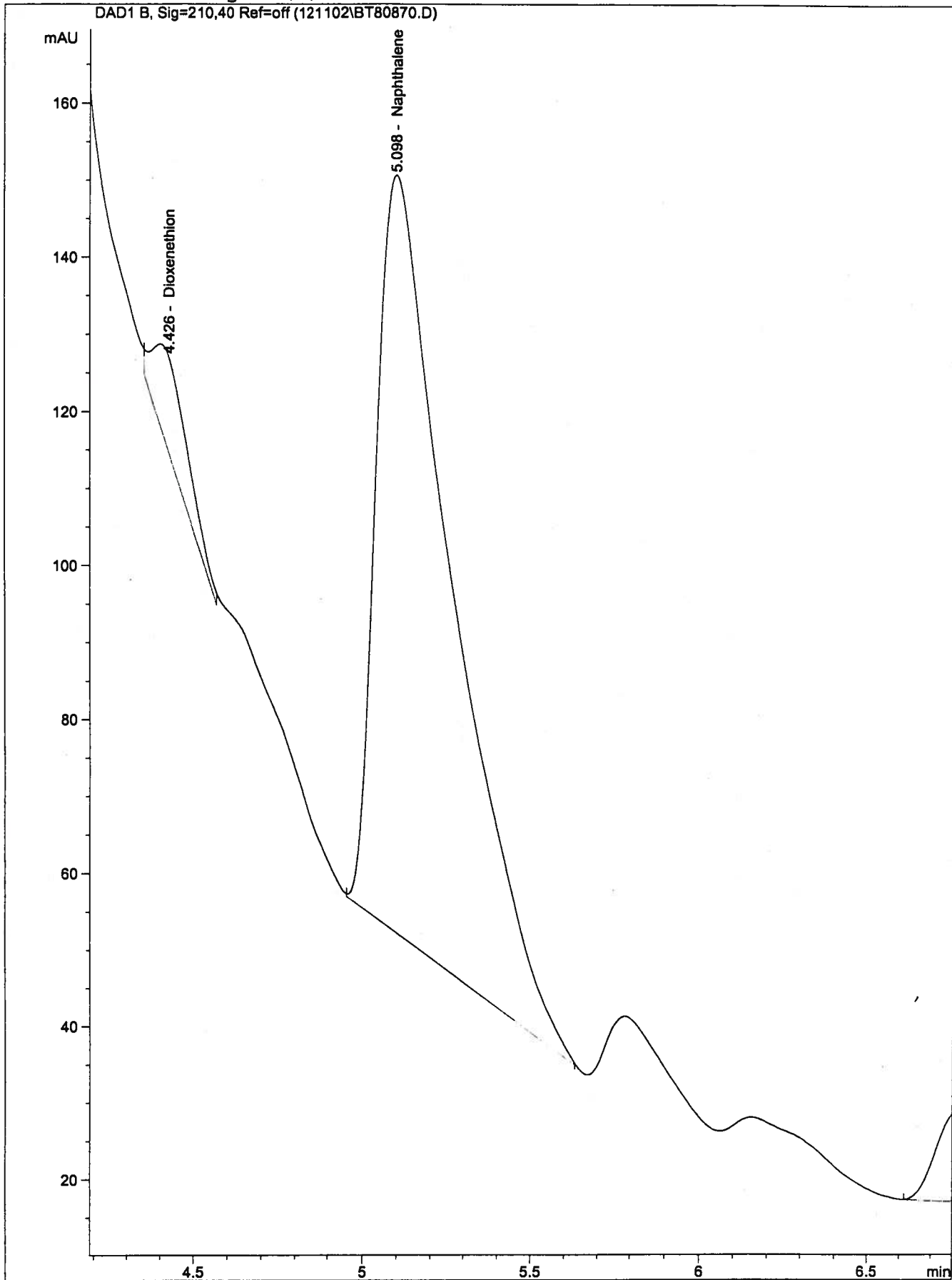
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

=====
*** End of Report ***

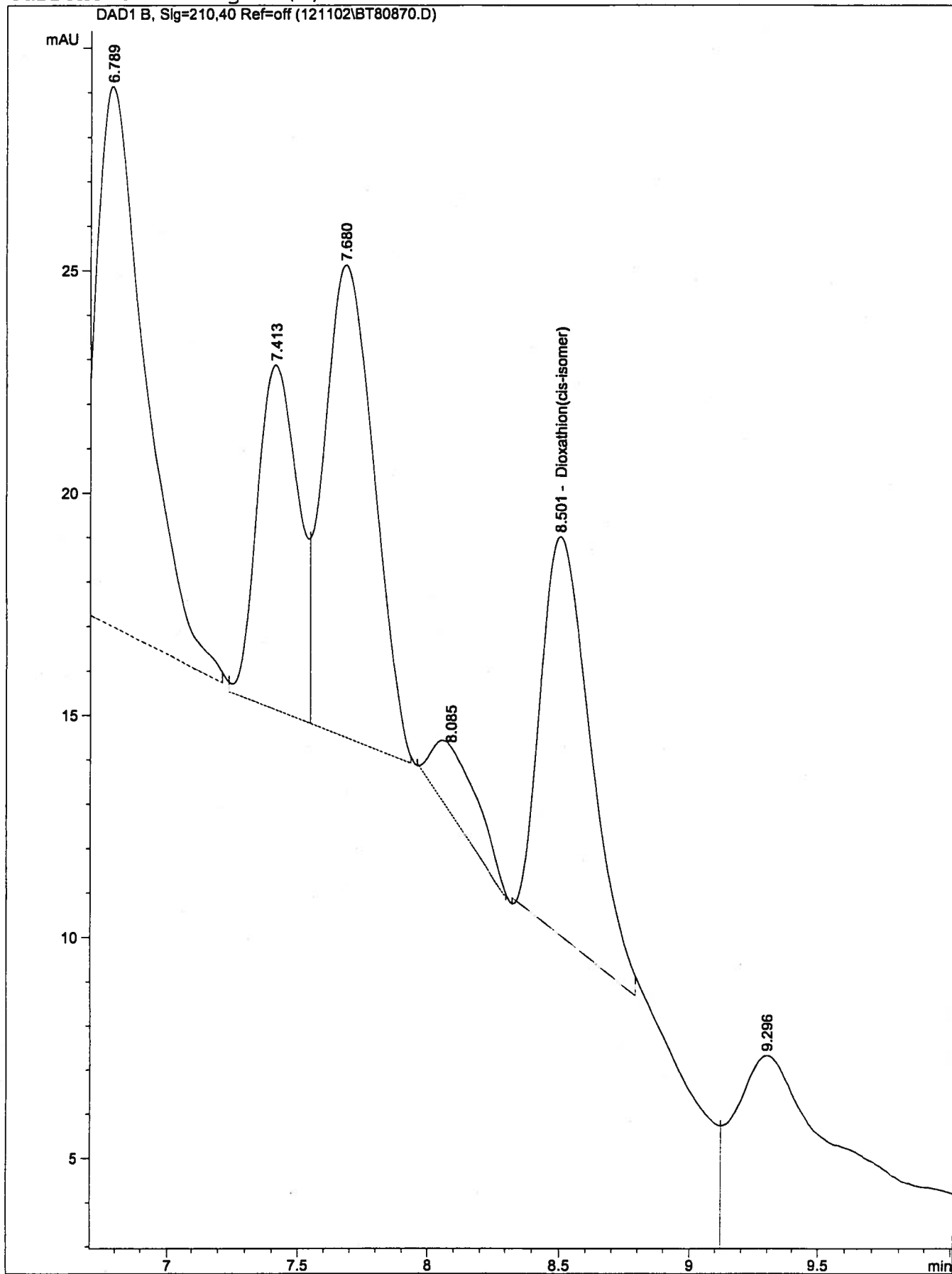
Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80870.D)



Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (1211021BT80870.D)



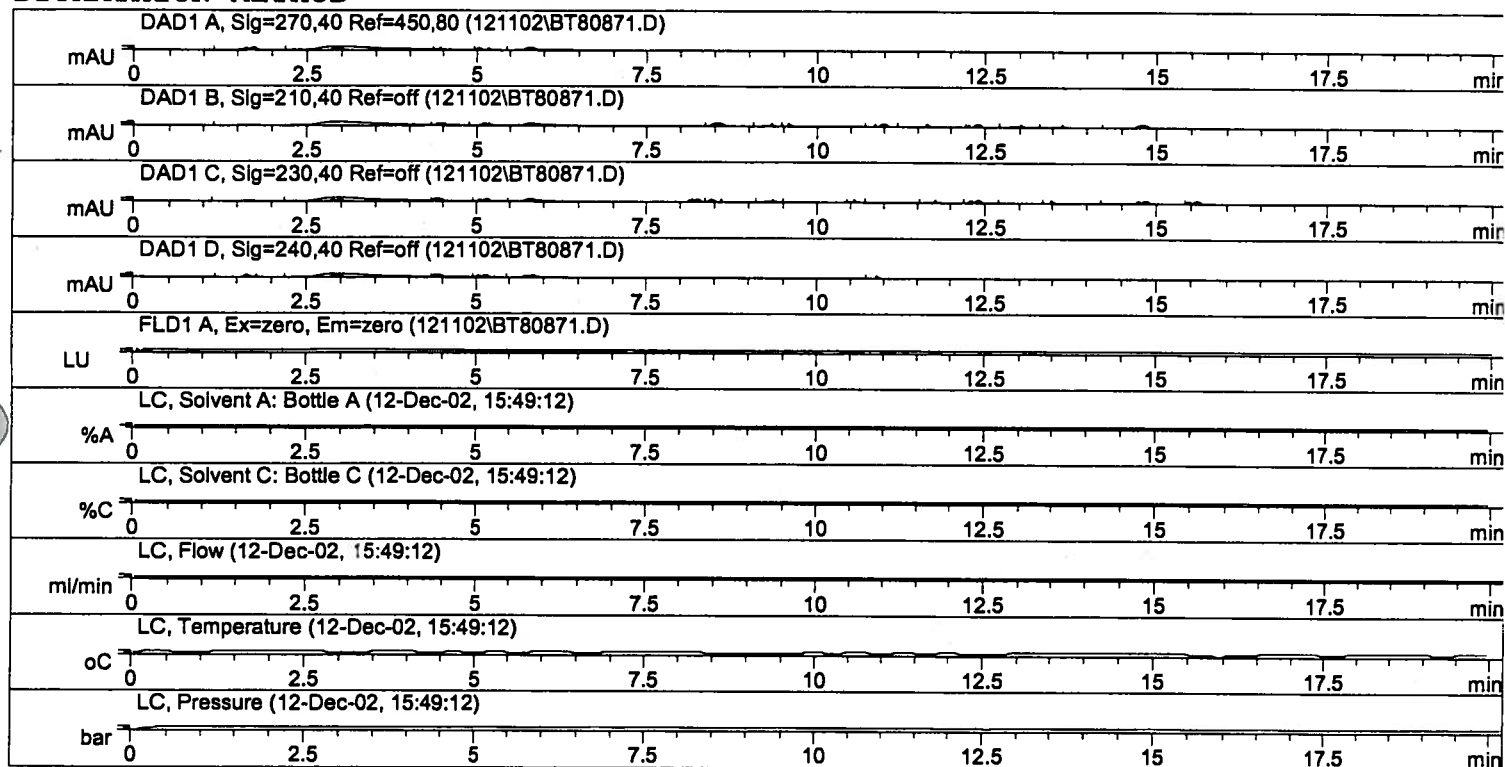
Hercules:Monitoring Well #4
 Collected 12/5/02 @ 1315 MGJ, Extracted 12/11/02@ 0900
 SCF
 Volume Collected= 900 mL

```

=====
Injection Date   : 12/12/02 3:49:12 PM           Seq. Line :   17
Sample Name     : MW-4                          Vial      :    9
Acq. Operator   : Steve Flowers                 Inj       :    1
                                                Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/12/02 5:14:23 PM by Steve Flowers
                  (modified after loading)
  
```

DIOXATHION METHOD



```

=====
External Standard Report
=====
  
```

```

Sorted By       : Signal
Calib. Data Modified : 12/12/02 4:44:53 PM
Multiplier      : 1.1100
Dilution        : 1.0000
  
```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.435	MM	209.94608	5.52998e-2	12.88708		Dioxenethion
5.107	MM	962.18555	4.02074e-3	4.29425		Naphthalene
8.514	MM	30.57523	9.85322e-2	3.34404		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 20.52537

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

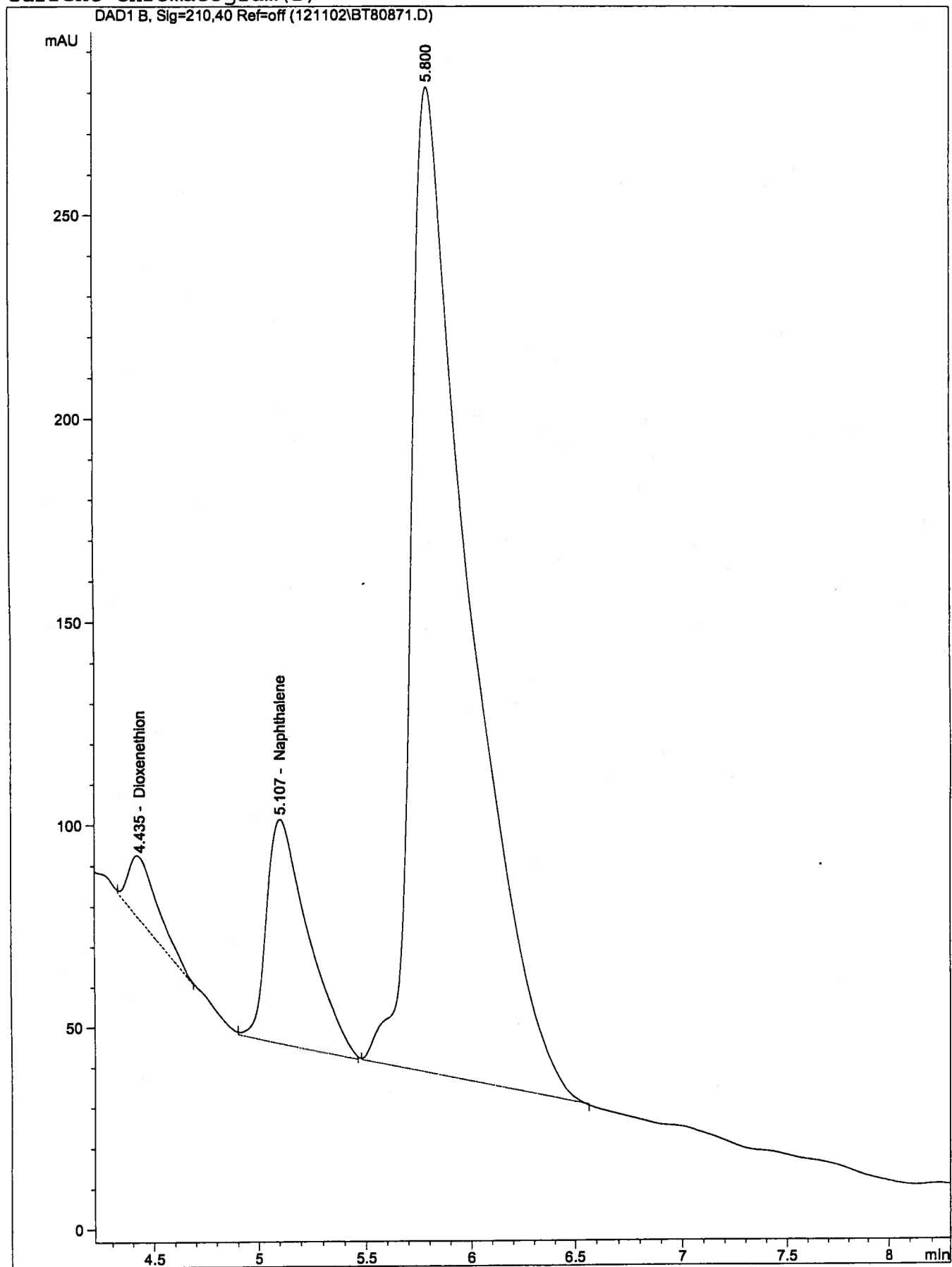
Signal 5: FLD1 A, Ex=zero, Em=zero

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

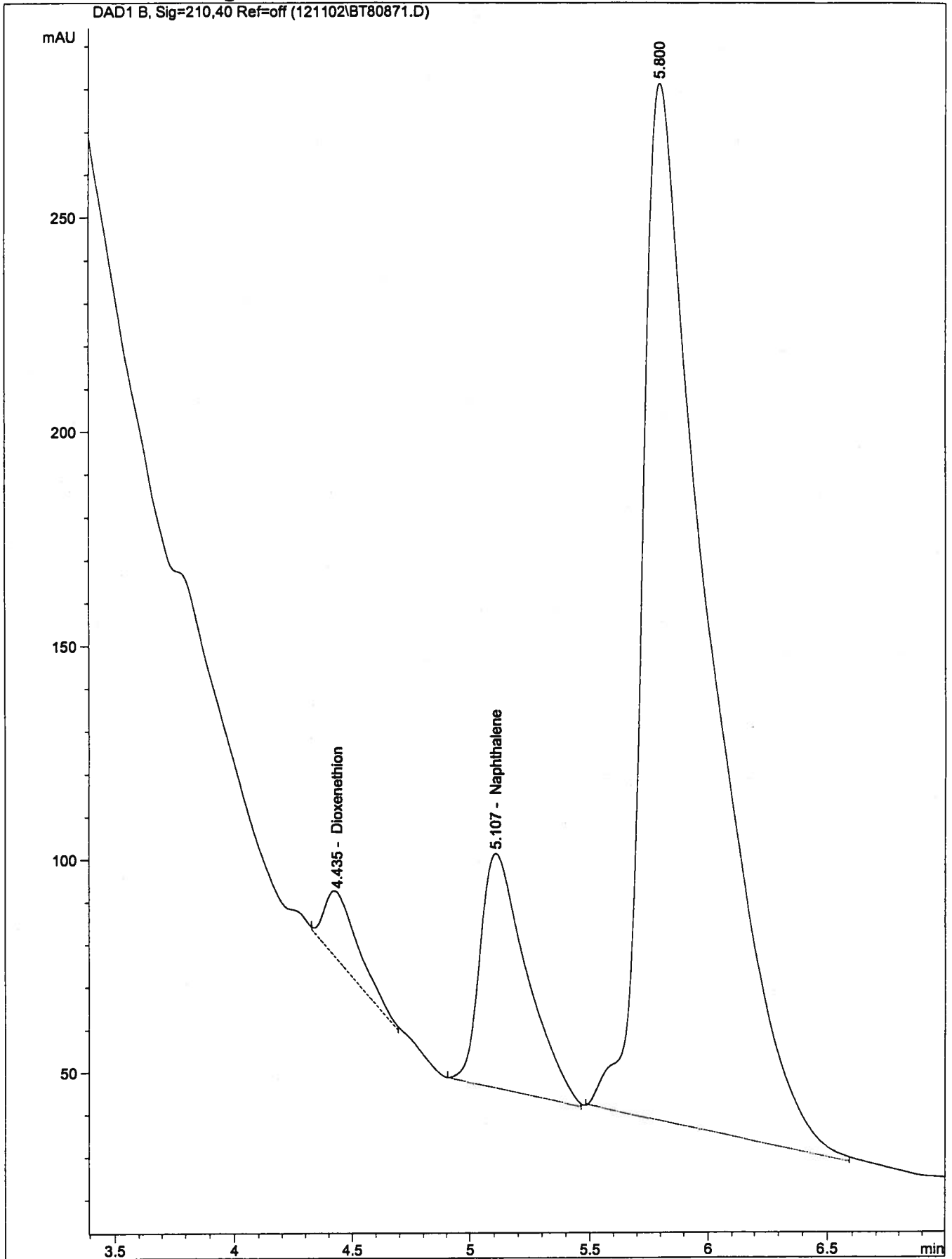
=====
*** End of Report ***

Current Chromatogram(s)



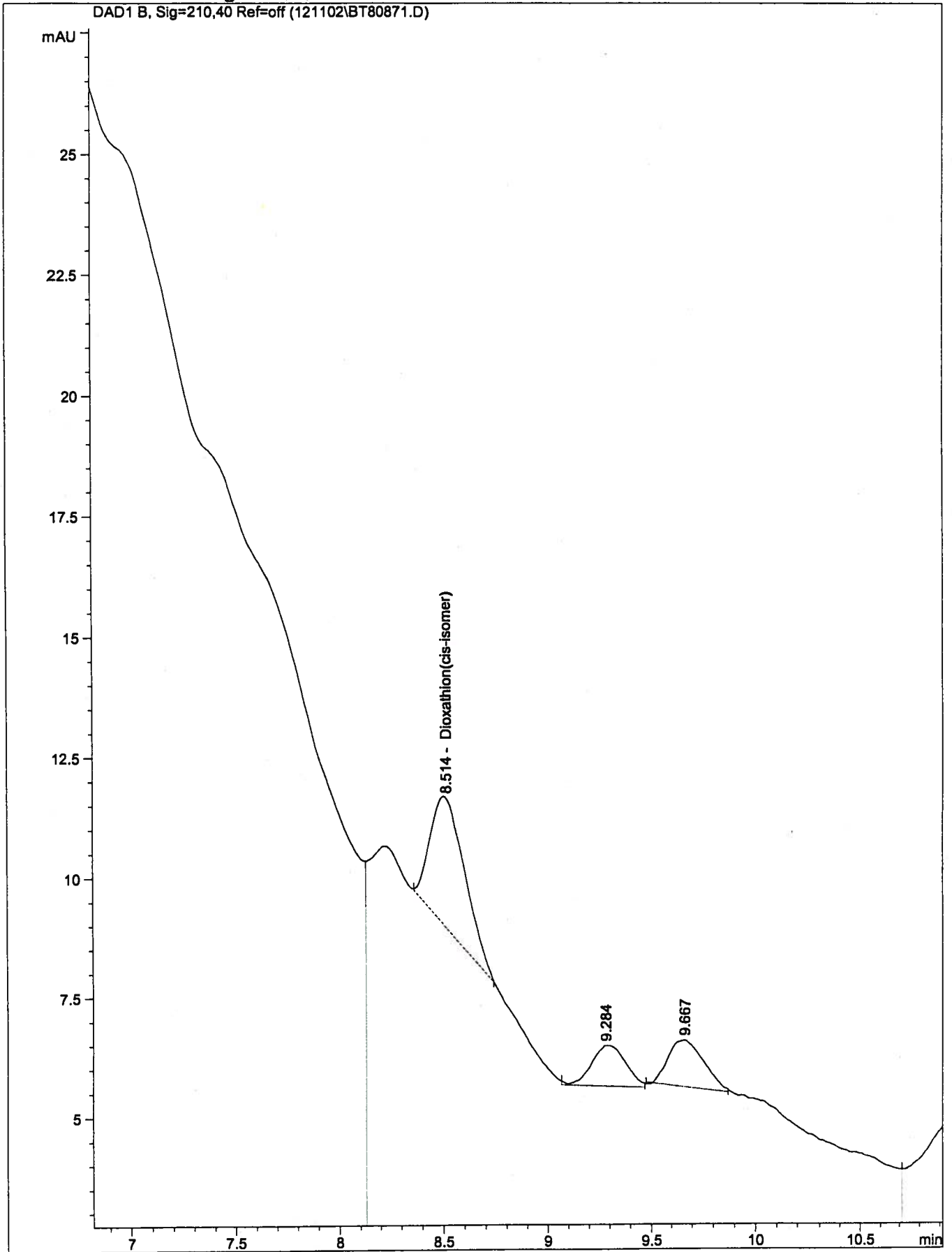
Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (1211021BT80871.D)



Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80871.D)



Hercules:Monitoring Well #5

Collected 12/5/02 @ 1420 MGJ, Extracted 12/11/02@ 0900

SCF

Volume Collected= 910 mL

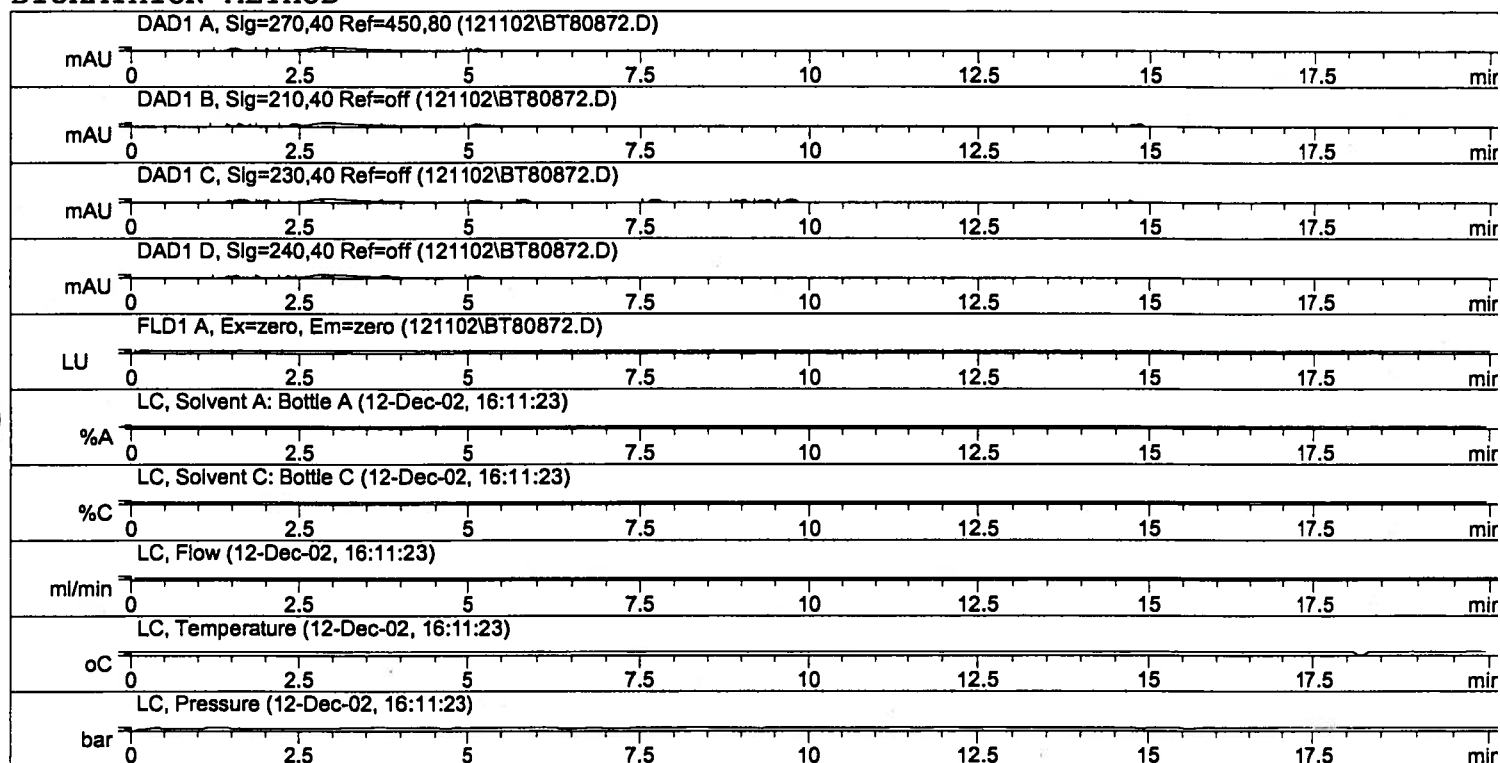
```

=====
Injection Date   : 12/12/02 4:11:23 PM           Seq. Line :   18
Sample Name     : MW-5                           Vial      :   10
Acq. Operator   : Steve Flowers                  Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/12/02 5:17:18 PM by Steve Flowers
                  (modified after loading)

```

DIOXATHION METHOD



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=====
External Standard Report
=====

```

```

Sorted By       : Signal
Calib. Data Modified : 12/12/02 4:44:53 PM
Multiplier     : 1.1000
Dilution       : 1.0000

```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.434		-	-	-		Dioxenethion
5.108	MM	932.32599	4.01385e-3	4.11644		Naphthalene
8.375		-	-	-		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 4.11644

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

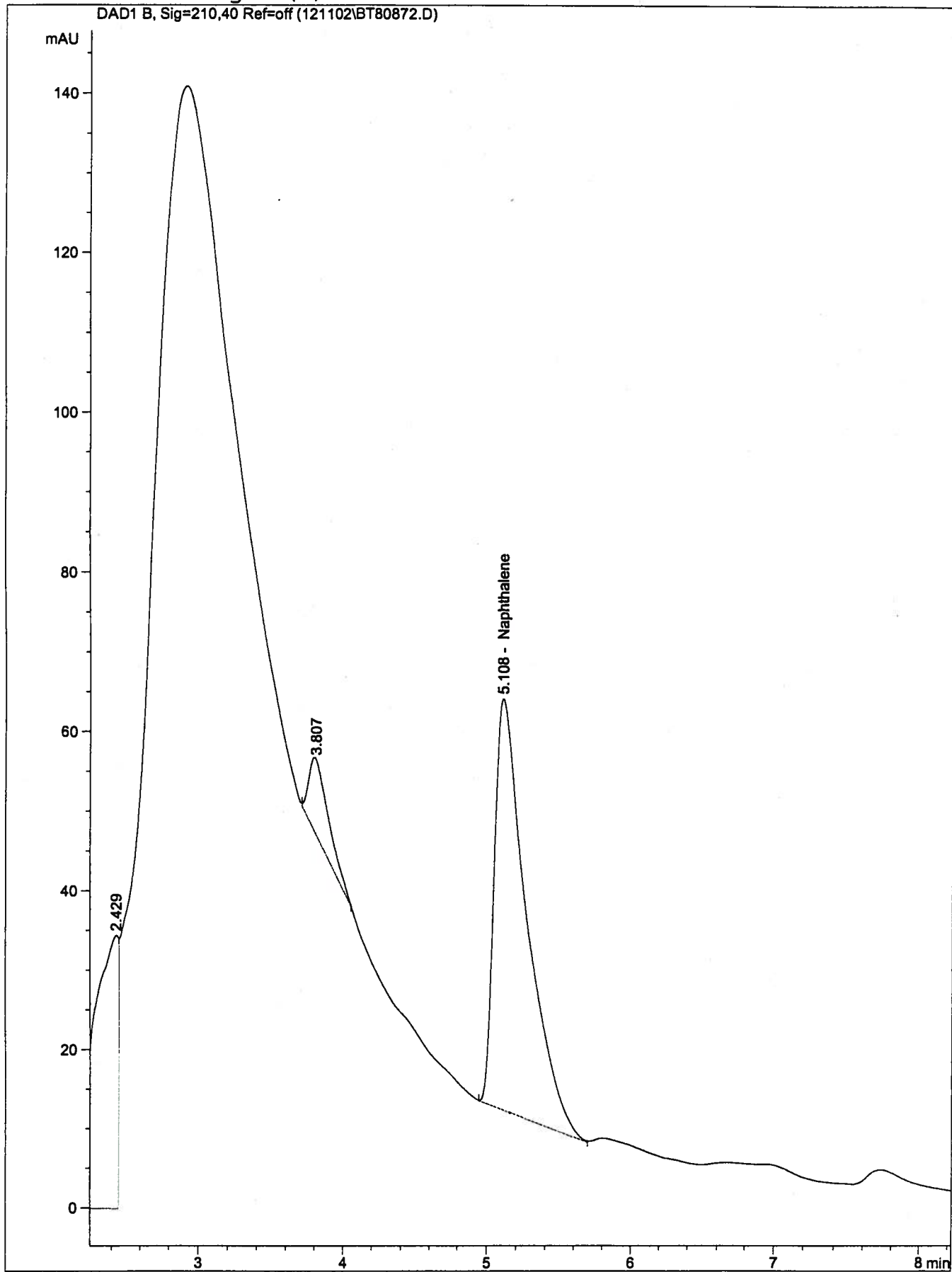
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

=====
*** End of Report ***

Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80872.D)



Hercules:Monitoring Well #6

Collected 12/5/02 @1530 MGJ, Extracted 12/11/02@ 0900 S

CF

Volume Collected= 920 mL

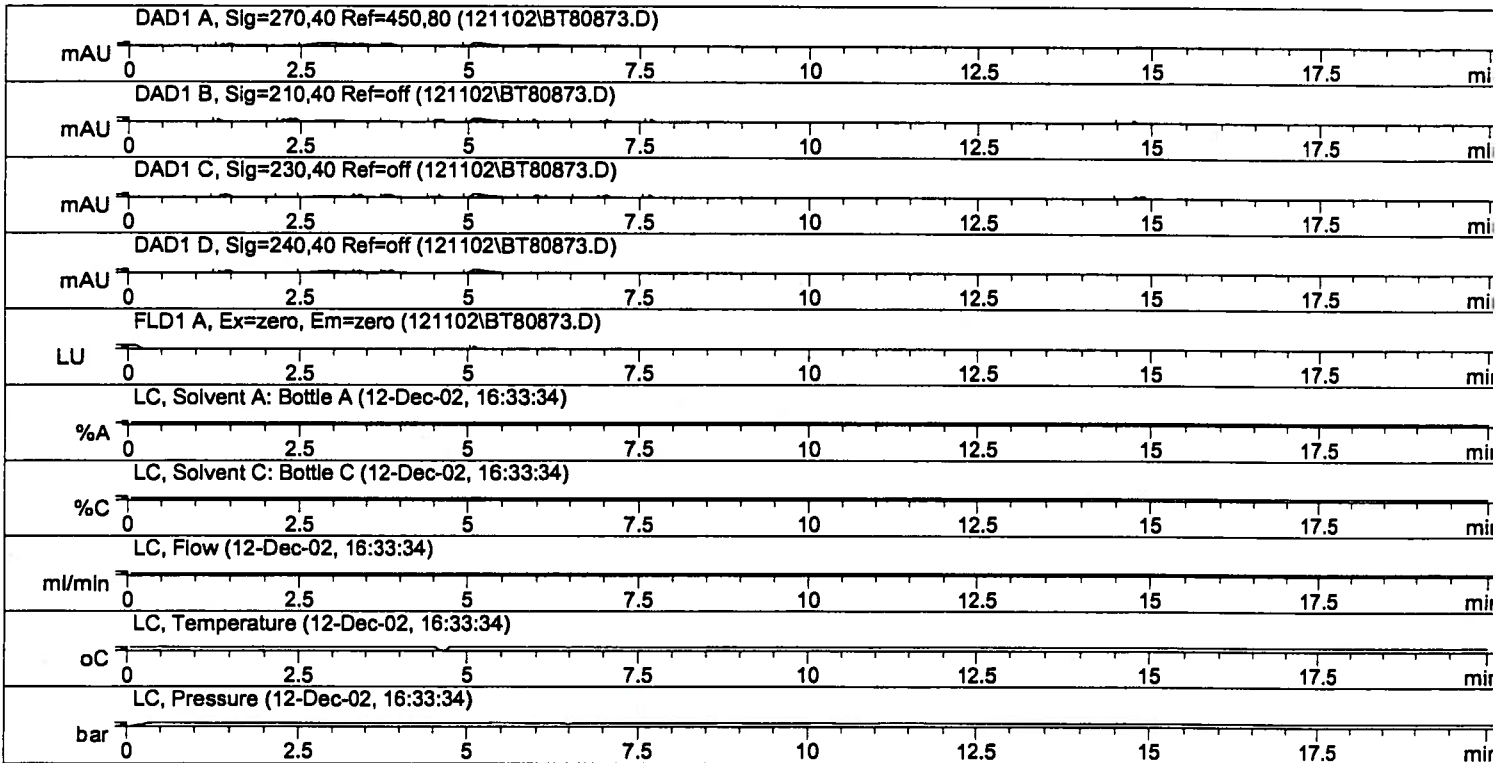
```

=====
Injection Date   : 12/12/02 4:33:34 PM           Seq. Line :   19
Sample Name     : MW-6                           Vial      :   11
Acq. Operator   : Steve Flowers                   Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/12/02 5:19:24 PM by Steve Flowers
                  (modified after loading)

```

DIOXATHION METHOD



```

=====
External Standard Report
=====

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```

Sorted By           : Signal
Calib. Data Modified : 12/12/02 4:44:53 PM
Multiplier          : 1.0900
Dilution            : 1.0000

```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.531	MM	15.41975	6.65655e-2	1.11880		Dioxenethion
5.113	MM	873.01483	3.99878e-3	3.80518		Naphthalene
8.375		-	-	-		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 4.92399

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

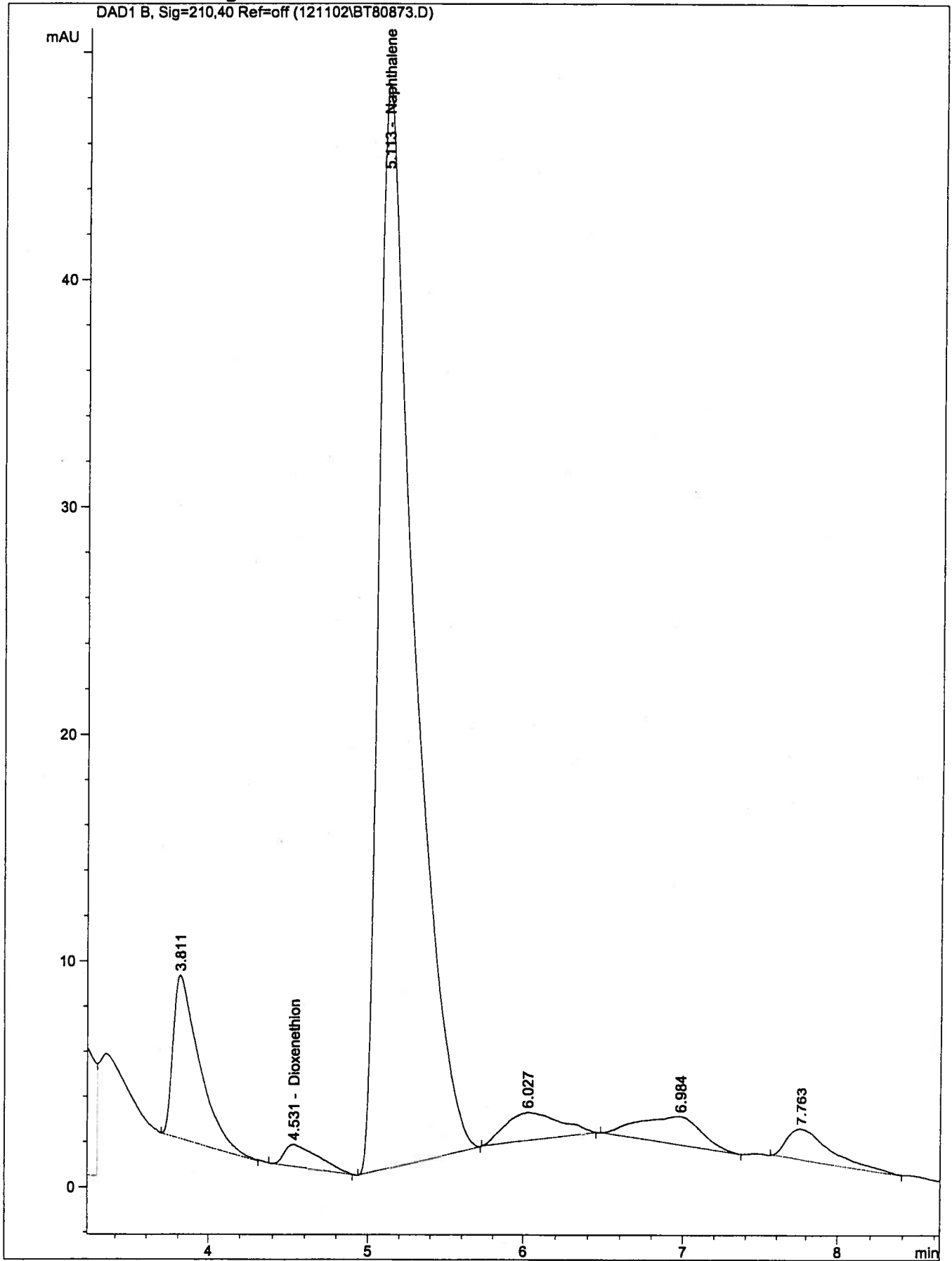
Signal 5: FLD1 A, Ex=zero, Em=zero

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

=====
*** End of Report ***

Current Chromatogram(s)



Continuing Calibration Mid Point 5 ppm Diox mix, 4 ppm Naphthylene

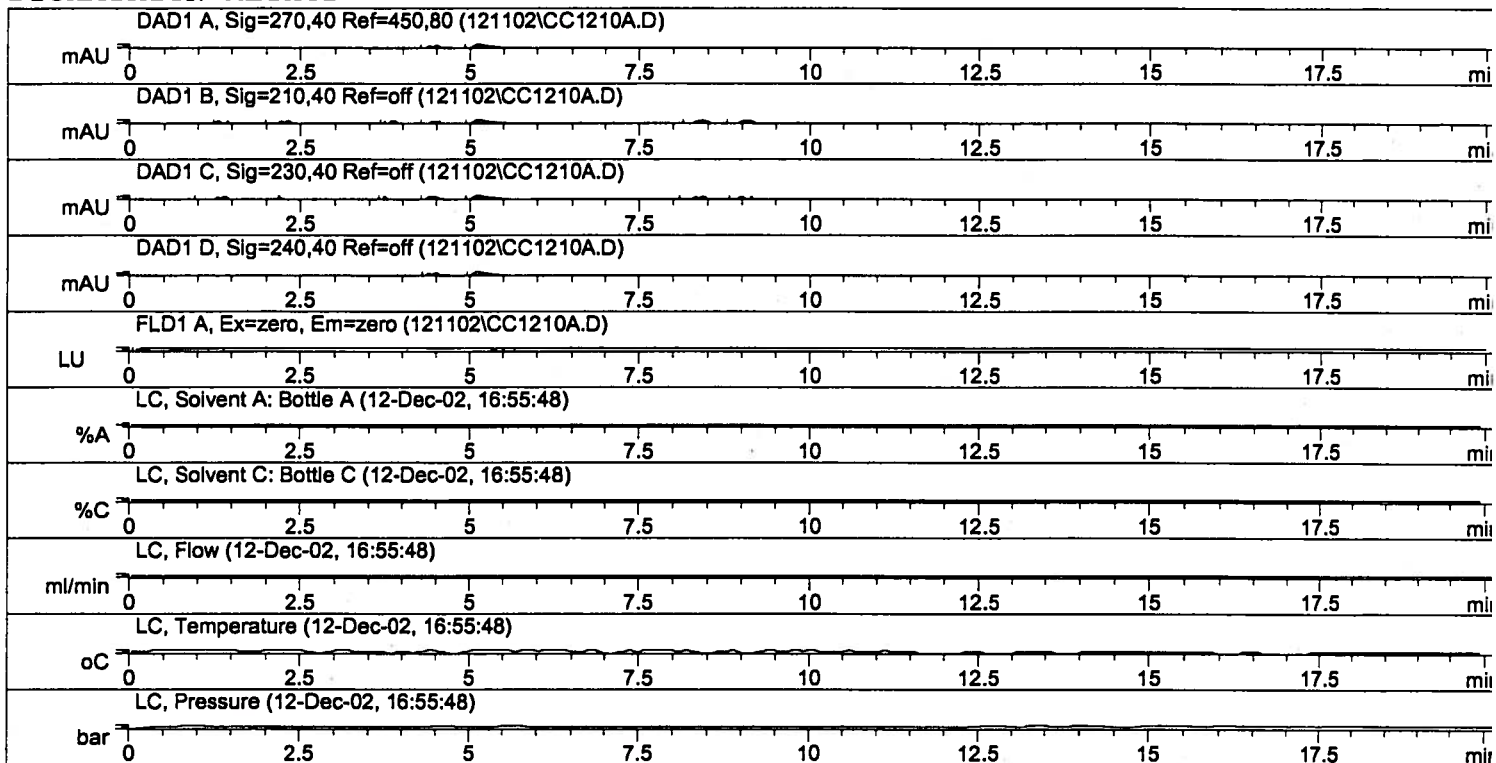
```

=====
Injection Date   : 12/12/02 4:55:48 PM           Seq. Line :   20
Sample Name     : CC4                           Vial      :   19
Acq. Operator   : Steve Flowers                 Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/13/02 9:17:51 AM by Steve Flowers
                  (modified after loading)

```

DIOXATHION METHOD



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=====
External Standard Report
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```

```

Sorted By           :      Signal
Calib. Data Modified :      12/13/02 9:17:48 AM
Multiplier          :      1.0000
Dilution            :      1.0000

```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.448	PV	89.95110	5.64911e-2	5.08144		Dioxenethion
5.119	VP	1019.40265	4.03280e-3	4.11105		Naphthalene
8.381	MF	50.11940	9.74610e-2	4.88469		Dioxathion(cis-isomer)
9.043	FM	63.84961	7.39441e-2	4.72130		Dioxathion(trans-isomer)

Totals : 18.79848

Results obtained with enhanced integrator!

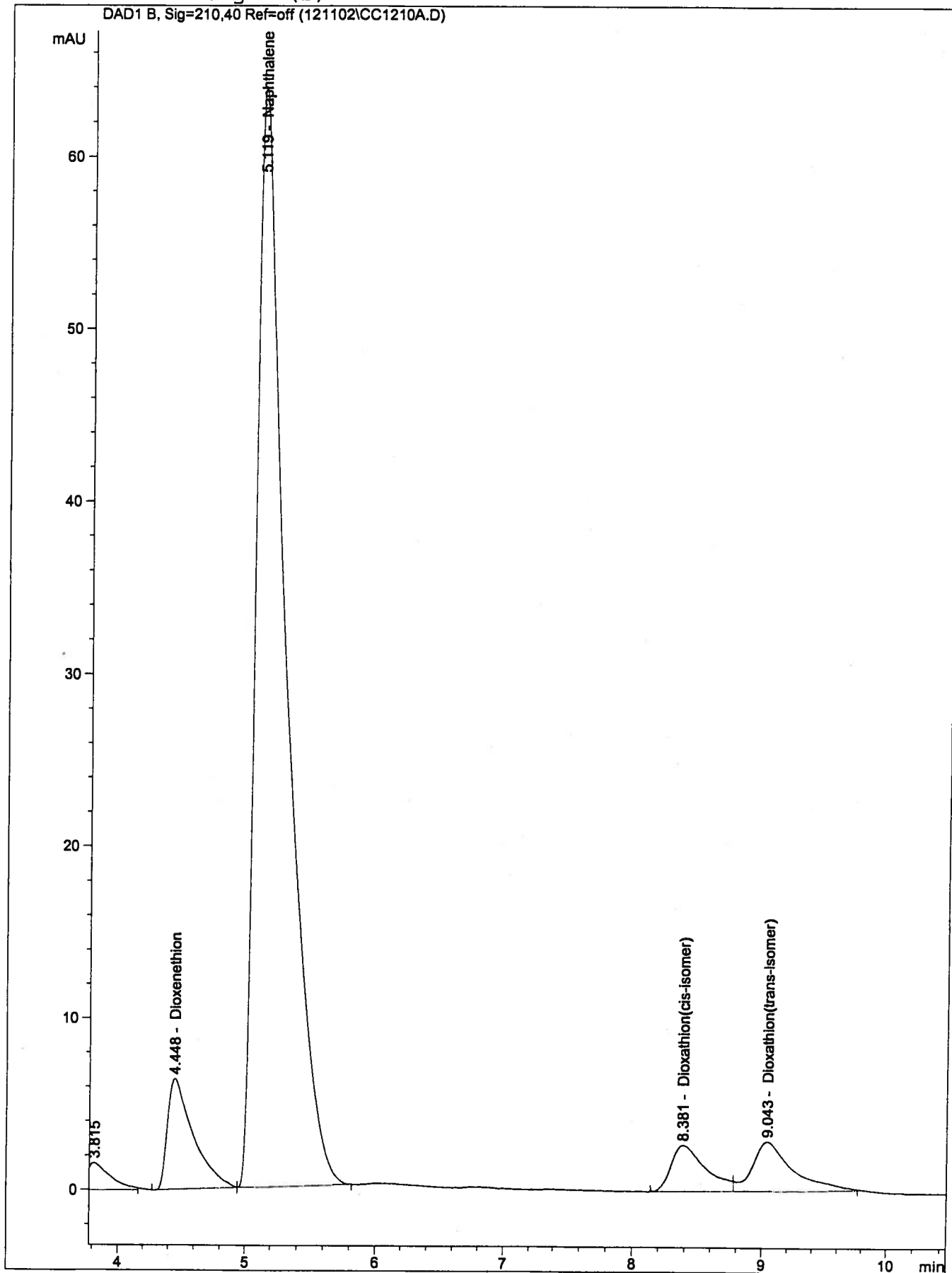
Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

=====
*** End of Report ***

Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\CC1210A.D)



Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.475	MM	1503.17822	5.45316e-2	94.26624		Dioxenethion
5.133	MM	4248.78369	4.18702e-3	20.45822		Naphthalene
8.375		-	-	-		Dioxathion(cis-isomer)
9.132	MM	681.28156	6.88490e-2	53.94137		Dioxathion(trans-isomer)

Totals : 168.66583

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

1 Warnings or Errors :

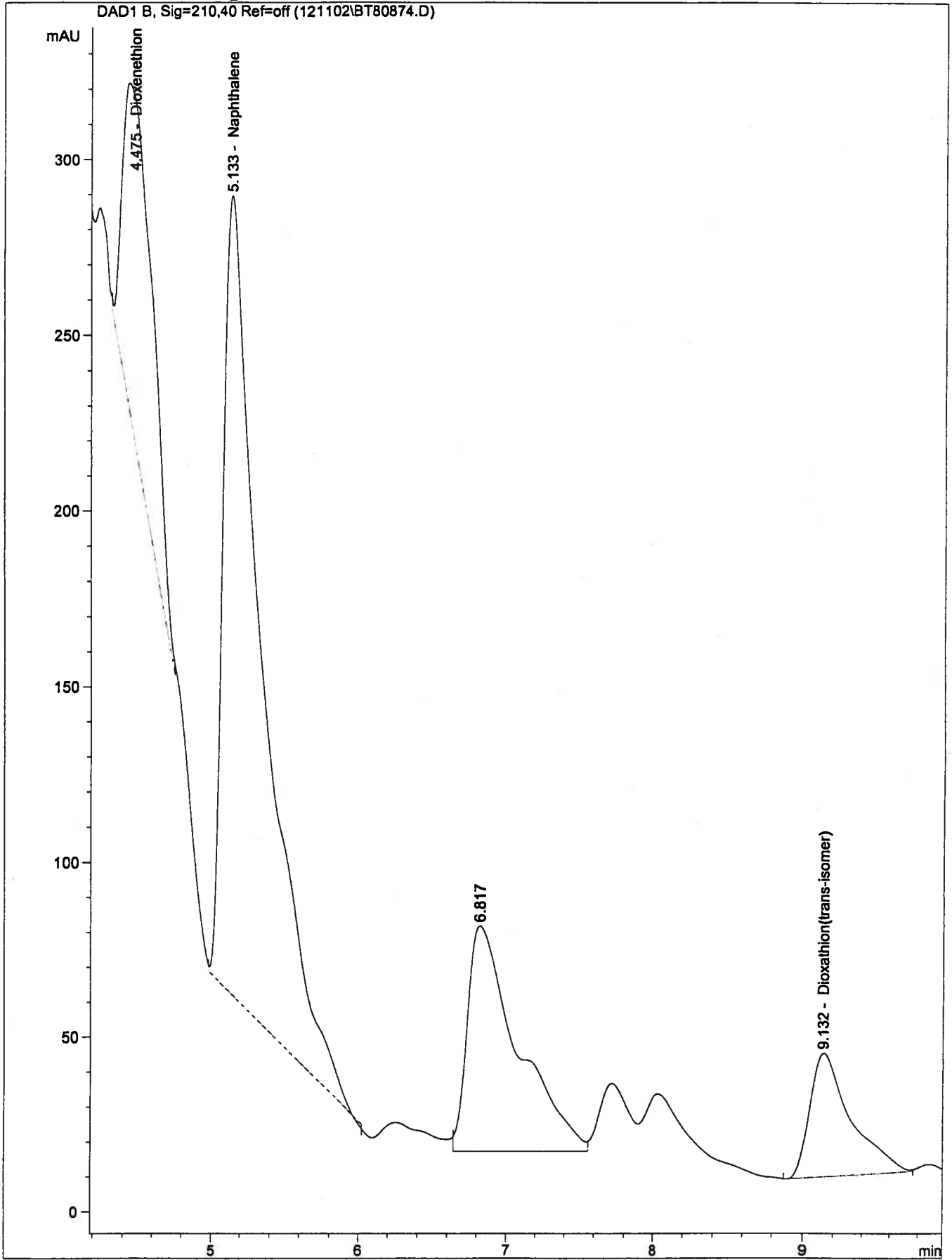
Warning : Calibrated compound(s) not found

=====
*** End of Report ***

20.45 - 5.00
= 15.45 ppm Naph.

Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80874.D)



Hercules:Monitoring Well #8

Collected 12/5/02 @ 1610 MGJ, Extracted 12/11/02@ 0900

SCF

Volume Collected= 870 mL

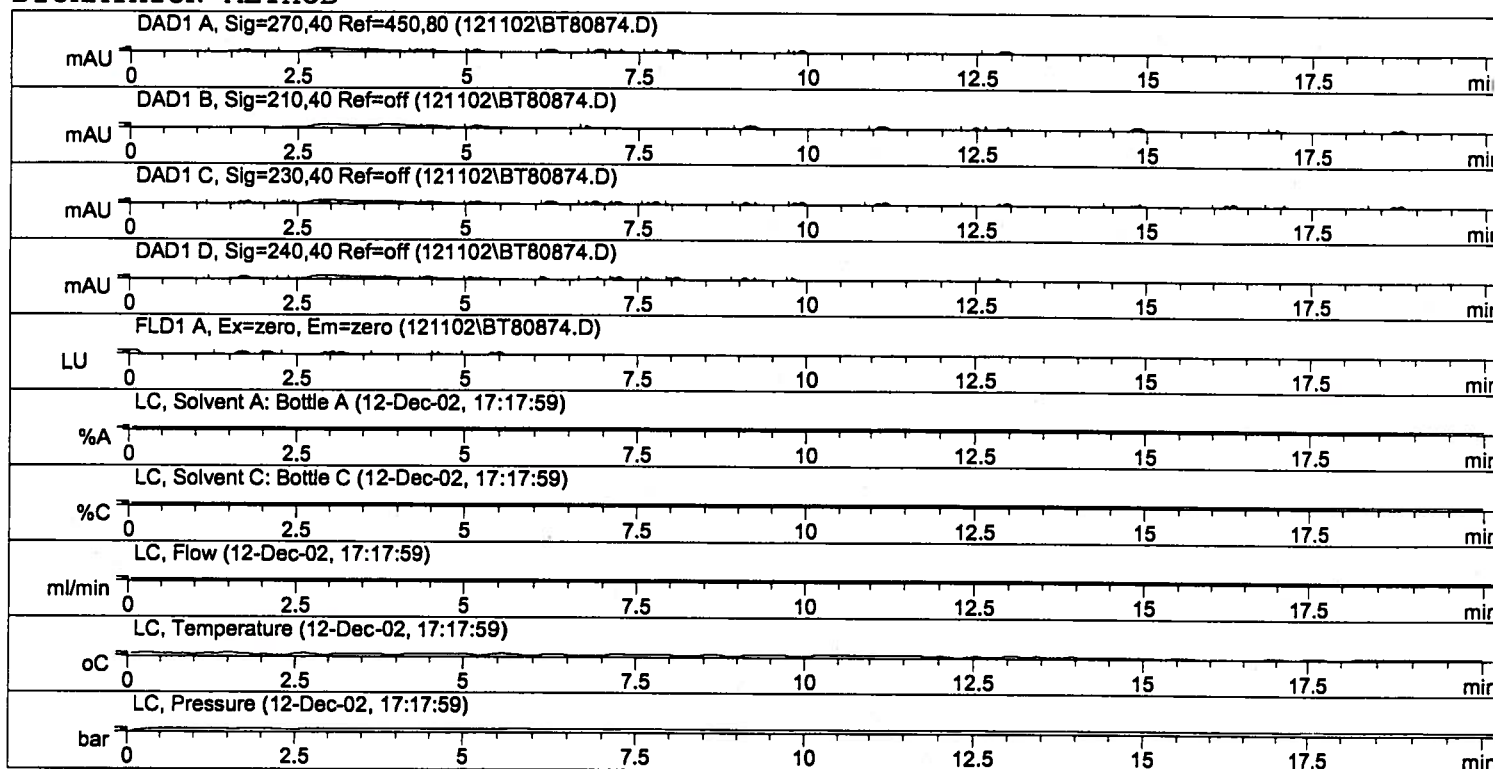
```

=====
Injection Date   : 12/12/02 5:17:59 PM           Seq. Line :   21
Sample Name     : MW-8                           Vial      :   12
Acq. Operator   : Steve Flowers                   Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/13/02 7:46:41 AM by Steve Flowers
                  (modified after loading)

```

DIOXATHION METHOD



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=====
External Standard Report
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```

Sorted By       : Signal
Calib. Data Modified : 12/12/02 4:44:53 PM
Multiplier     : 1.1500
Dilution       : 1.0000

```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

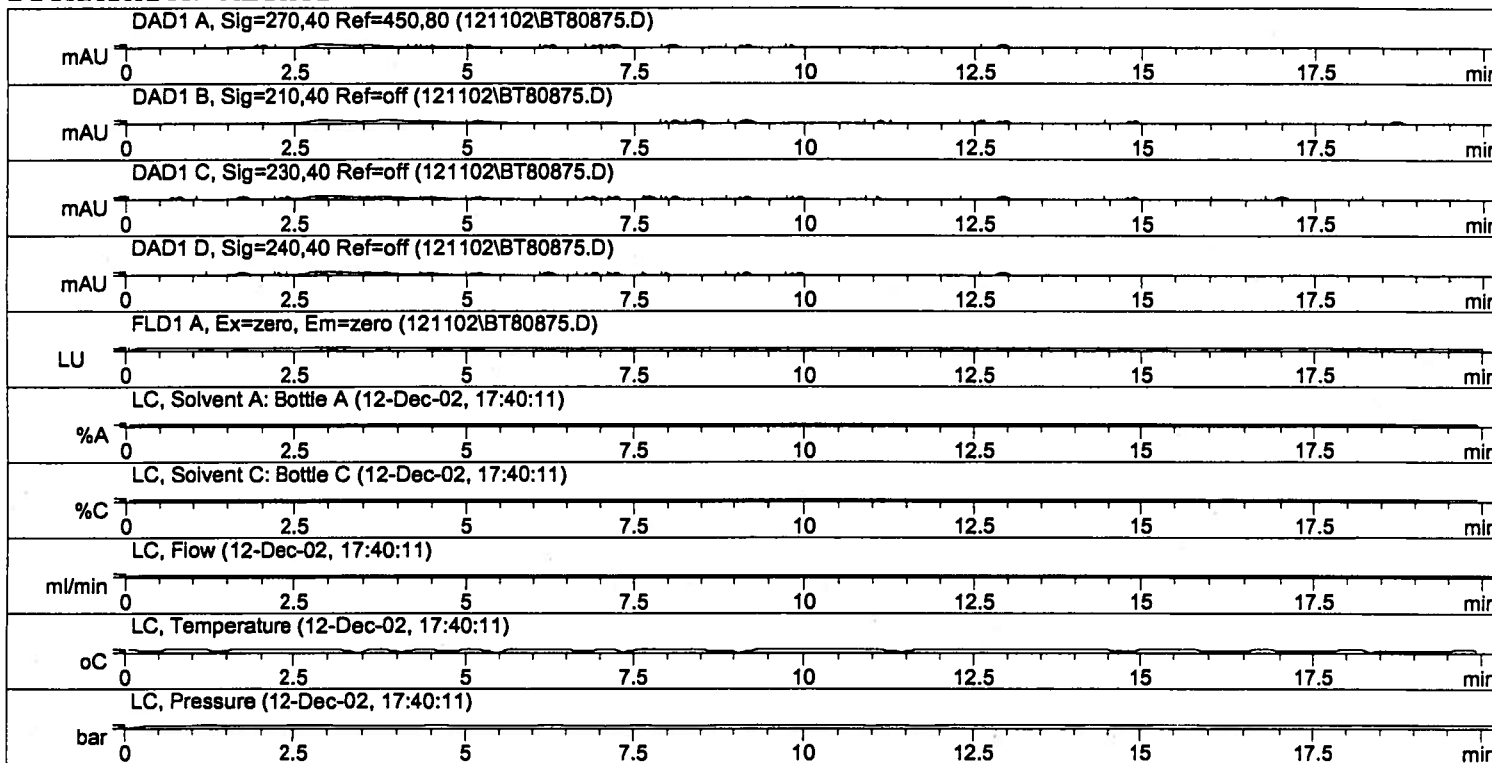
Hercules:Monitoring Well #8 Matrix Spike
 Collected 12/5/02 @ 1610 MGJ, Extracted 12/11/02@ 0900
 SCF
 Volume Collected= 870 mL

```

=====
Injection Date   : 12/12/02 5:40:11 PM           Seq. Line :   22
Sample Name     : MW-8 MS                       Vial      :   13
Acq. Operator   : Steve Flowers                 Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/13/02 7:46:41 AM by Steve Flowers
                  (modified after loading)
  
```

DIOXATHION METHOD



```

=====
External Standard Report
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```

```

Sorted By       : Signal
Calib. Data Modified : 12/12/02 4:44:53 PM
Multiplier     : 1.1500
Dilution       : 1.0000
  
```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.458	MM	1576.71619	5.45257e-2	98.86735		Dioxenethion
5.146	MM	4297.11035	4.18757e-3	20.69363		Naphthalene
8.405	MM	47.70303	9.75459e-2	5.35122		Dioxathion(cis-isomer)
9.145	MM	738.03577	6.88085e-2	58.40057		Dioxathion(trans-isomer)

Totals : 183.31277

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

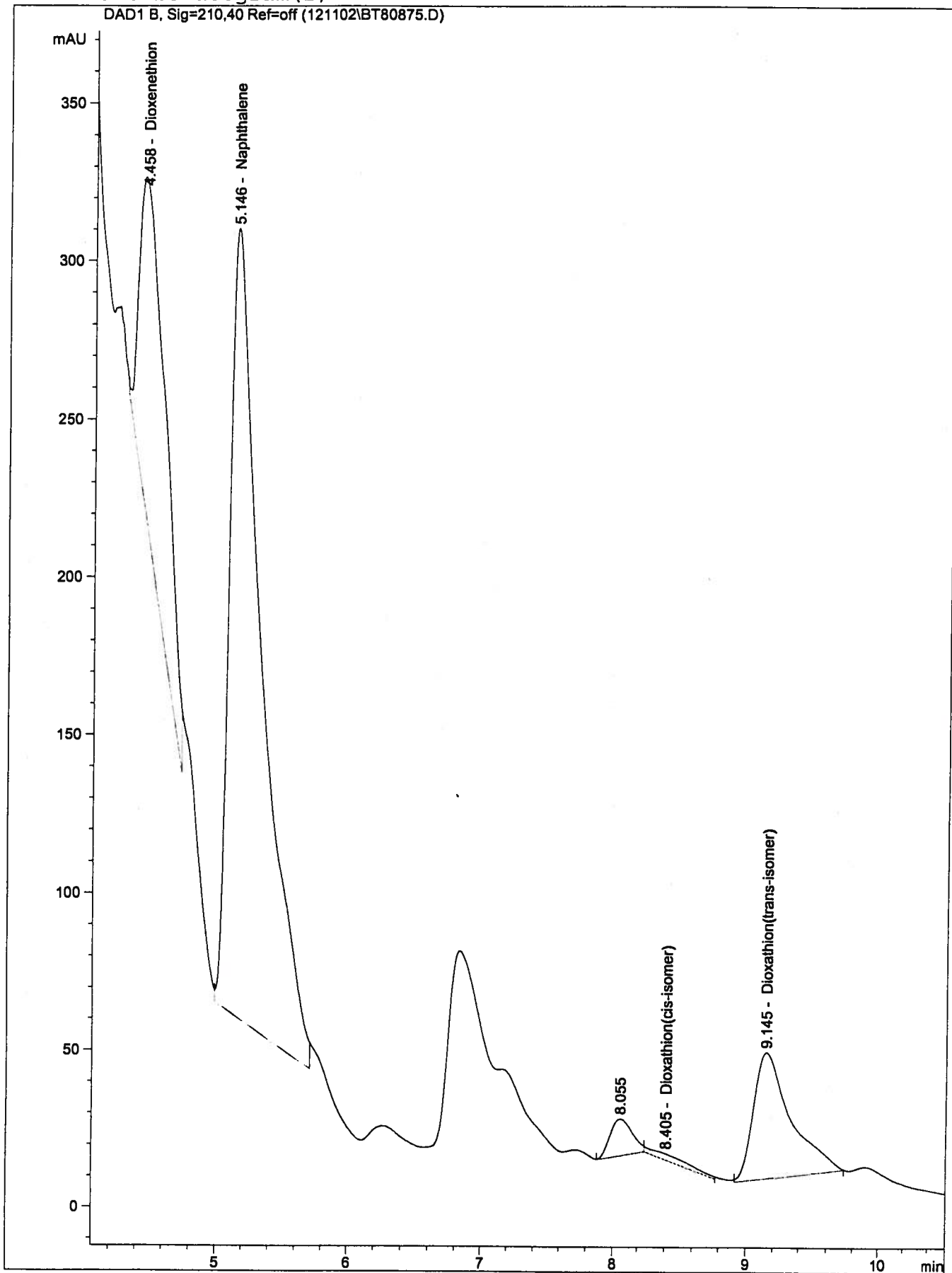
Signal 5: FLD1 A, Ex=zero, Em=zero

=====
 *** End of Report ***
 =====

Dioxenethion 98,87 - 94,27 = 4.61 92.2%
 Dioxathion(trans) 58,40 - 53,94 = 4.46 89.2%
 5,35
 5 = 107%

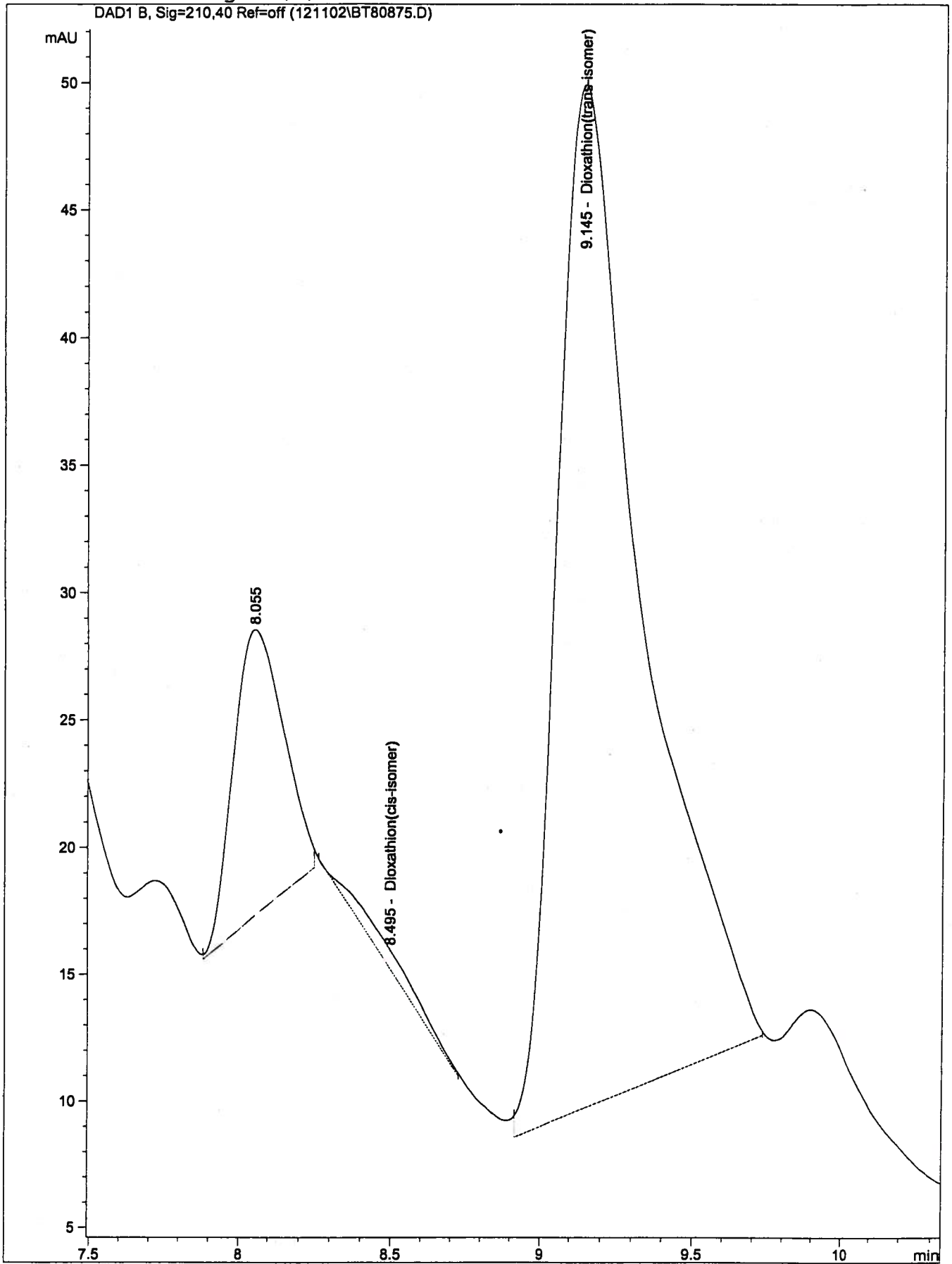
Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80875.D)



Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80875.D)

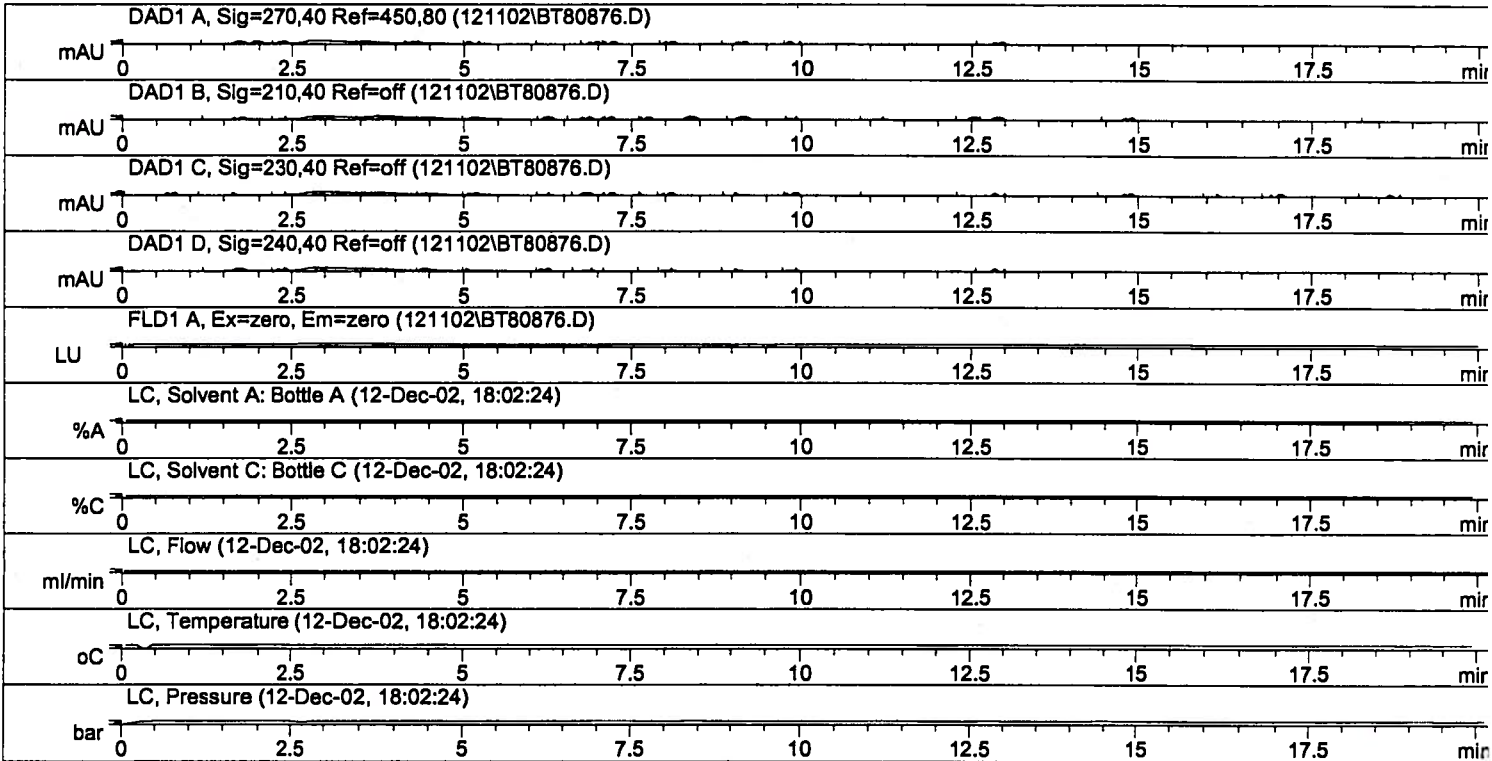


Hercules:Monitoring Well #8 Matrix Spike Duplicate
 Collected 12/5/02 @ 1610 MGJ, Extracted 12/11/02@ 0900
 SCF
 Volume Collected= 910 mL

```
=====
Injection Date  : 12/12/02 6:02:24 PM           Seq. Line :   23
Sample Name    : MW-8 MSD                       Vial      :   14
Acq. Operator  : Steve Flowers                  Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method    : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed   : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method: C:\HPCHEM\1\METHODS\DX121002.M
Last changed   : 12/13/02 8:19:40 AM by Steve Flowers
                (modified after loading)
=====
```

DIOXATHION METHOD



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=====
External Standard Report
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```

```
Sorted By      : Signal
Calib. Data Modified : 12/12/02 4:44:53 PM
Multiplier    : 1.1000
Dilution      : 1.0000
```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.455	MM	1643.21631	5.45209e-2	98.54864		Dioxenethion
5.138	MM	4181.07275	4.18624e-3	19.25325		Naphthalene
8.342	MM	47.01553	9.75717e-2	5.04612		Dioxathion(cis-isomer)
9.136	MM	764.51117	6.87916e-2	57.85115		Dioxathion(trans-isomer)

Totals : 180.69916

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

=====
 *** End of Report ***

Dioxanethin 98.55 - 94.27 = 4.28 85.6%

Dioxathion (trans) - 57.85 - 53.94 = 3.91 78.2%

$\frac{5.04}{5} = 1.012$

Hercules:Rinsate Blank

Collected 12/5/02 @ 1525 MGJ, Extracted 12/11/02@ 0900

SCF

Volume Collected= 880 mL

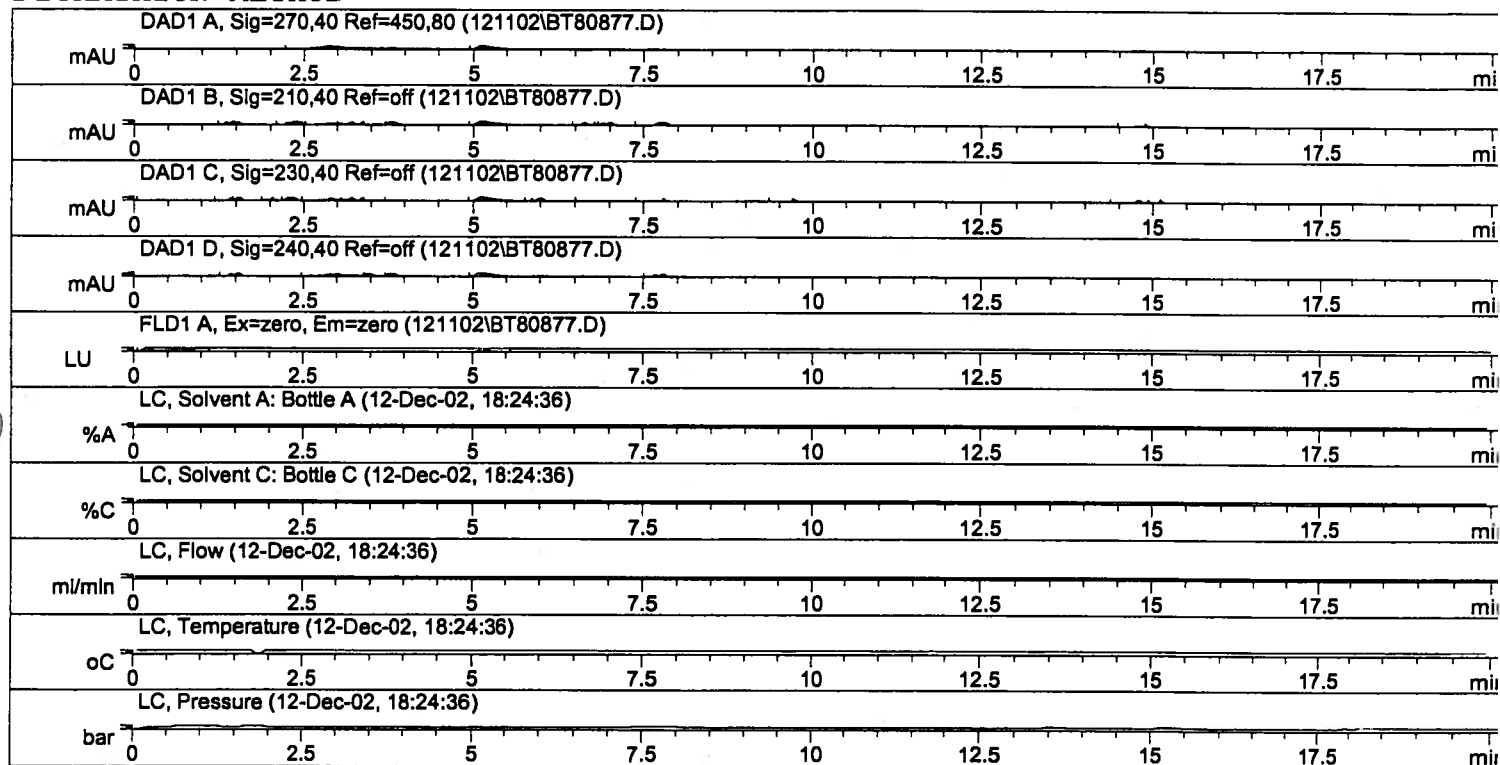
```

=====
Injection Date   : 12/12/02 6:24:36 PM           Seq. Line :   24
Sample Name     : Rinsate Blank                   Vial      :   15
Acq. Operator   : Steve Flowers                   Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/13/02 8:39:38 AM by Steve Flowers
                  (modified after loading)

```

DIOXATHION METHOD



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      12/12/02 4:44:53 PM
Multiplier          :      1.1400
Dilution            :      1.0000

```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.434		-	-	-		Dioxenethion
5.117	MM	973.86743	4.02332e-3	4.46672		Naphthalene
8.375		-	-	-		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 4.46672

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

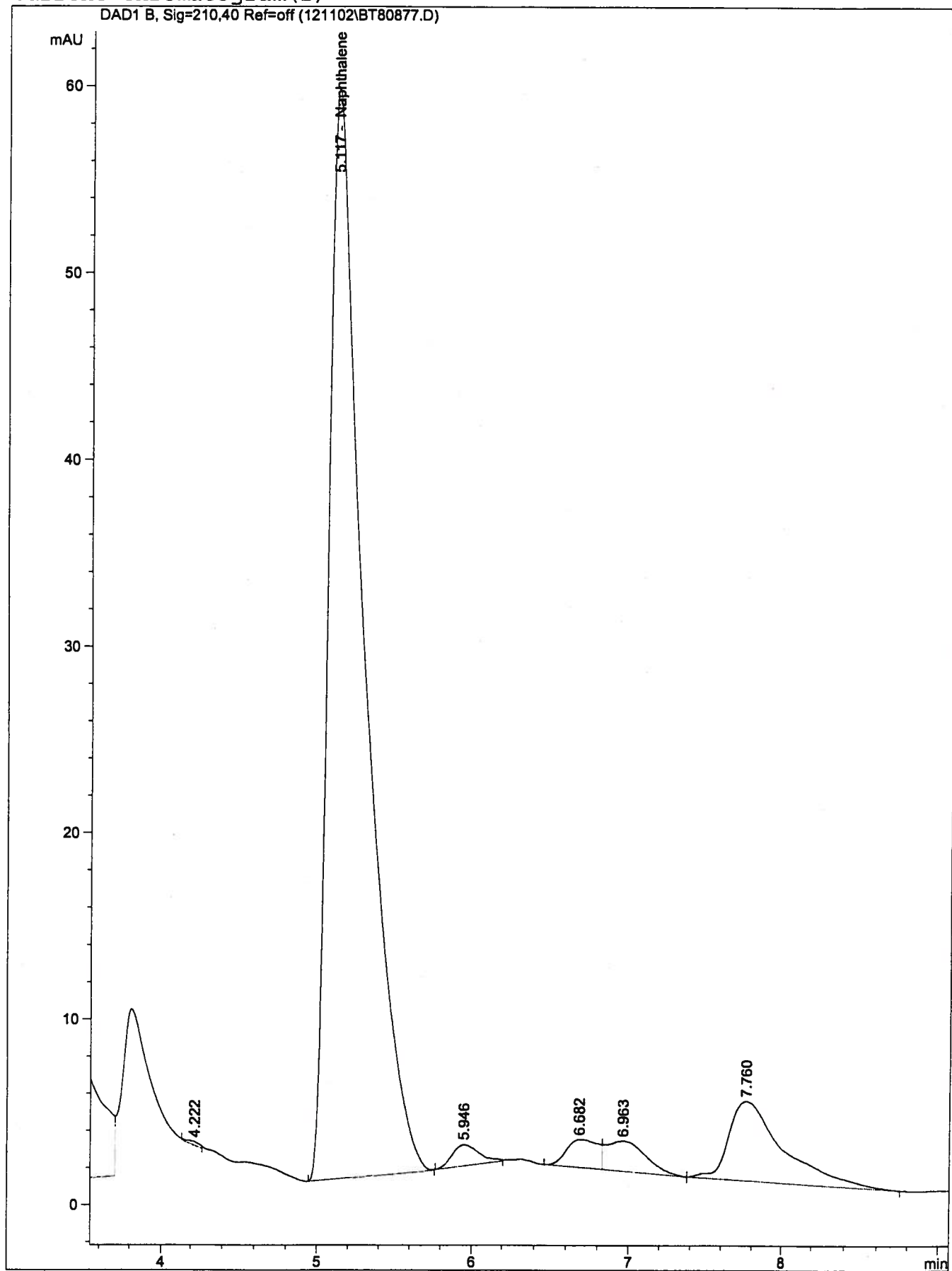
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

=====
*** End of Report ***

Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80877.D)



Hercules:Sample Duplicate

Collected 12/5/02 @ 1315 MGJ, Extracted 12/11/02@ 0900

SCF

Volume Collected= 880 mL

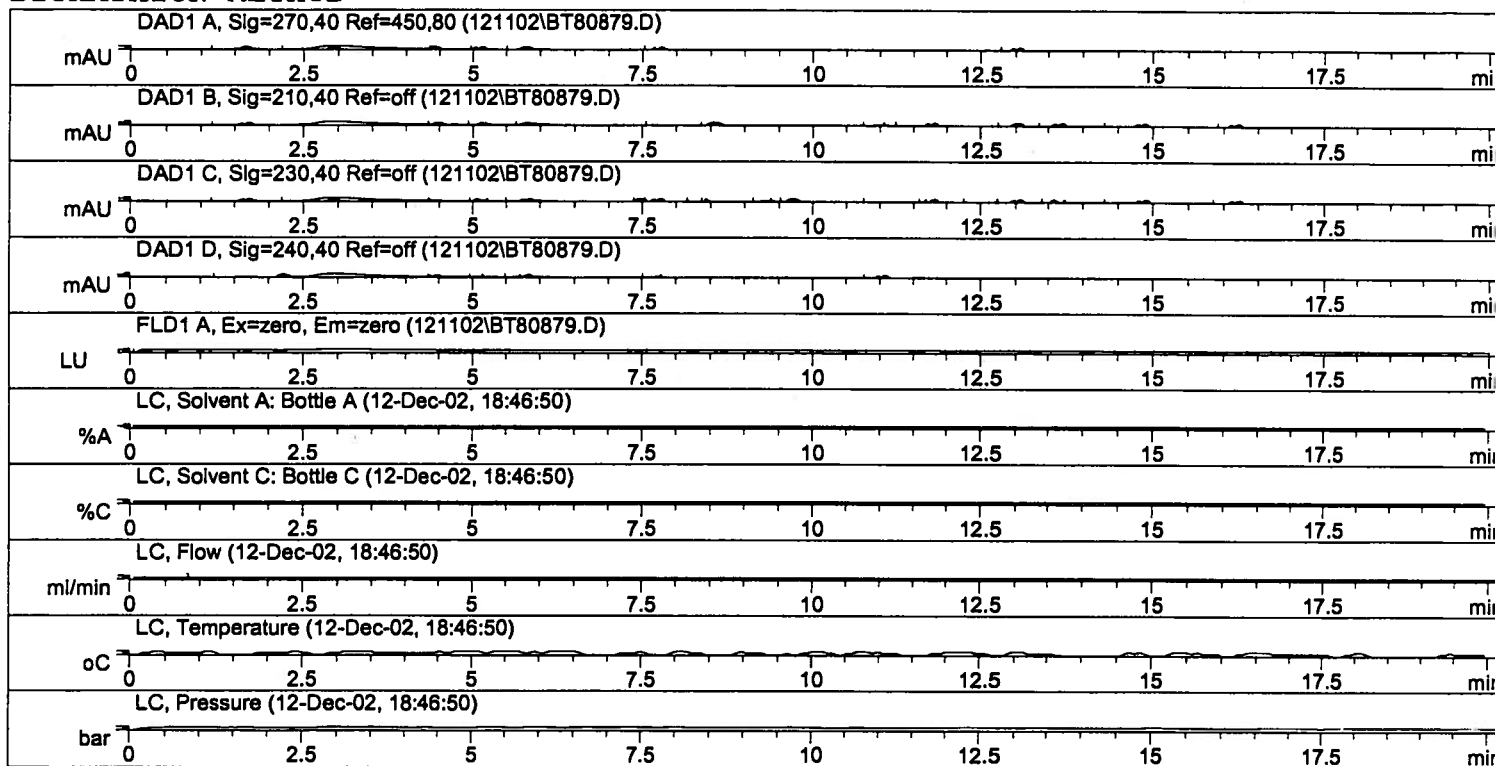
```

=====
Injection Date   : 12/12/02 6:46:50 PM           Seq. Line :   25
Sample Name     : Duplicate                       Vial      :   16
Acq. Operator   : Steve Flowers                  Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/13/02 8:39:38 AM by Steve Flowers
                  (modified after loading)

```

DIOXATHION METHOD



```

=====
External Standard Report
=====

```

```

Sorted By           :      Signal
Calib. Data Modified :      12/12/02 4:44:53 PM
Multiplier          :      1.1400
Dilution            :      1.0000

```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.445	MM	191.41591	5.53863e-2	12.08607		Dioxenethion
5.117	MM	870.61438	3.99813e-3	3.96814		Naphthalene
8.531	MM	28.67832	9.87139e-2	3.22728		Dioxathion(cis-isomer)
9.033		-	-	-		Dioxathion(trans-isomer)

Totals : 19.28150

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

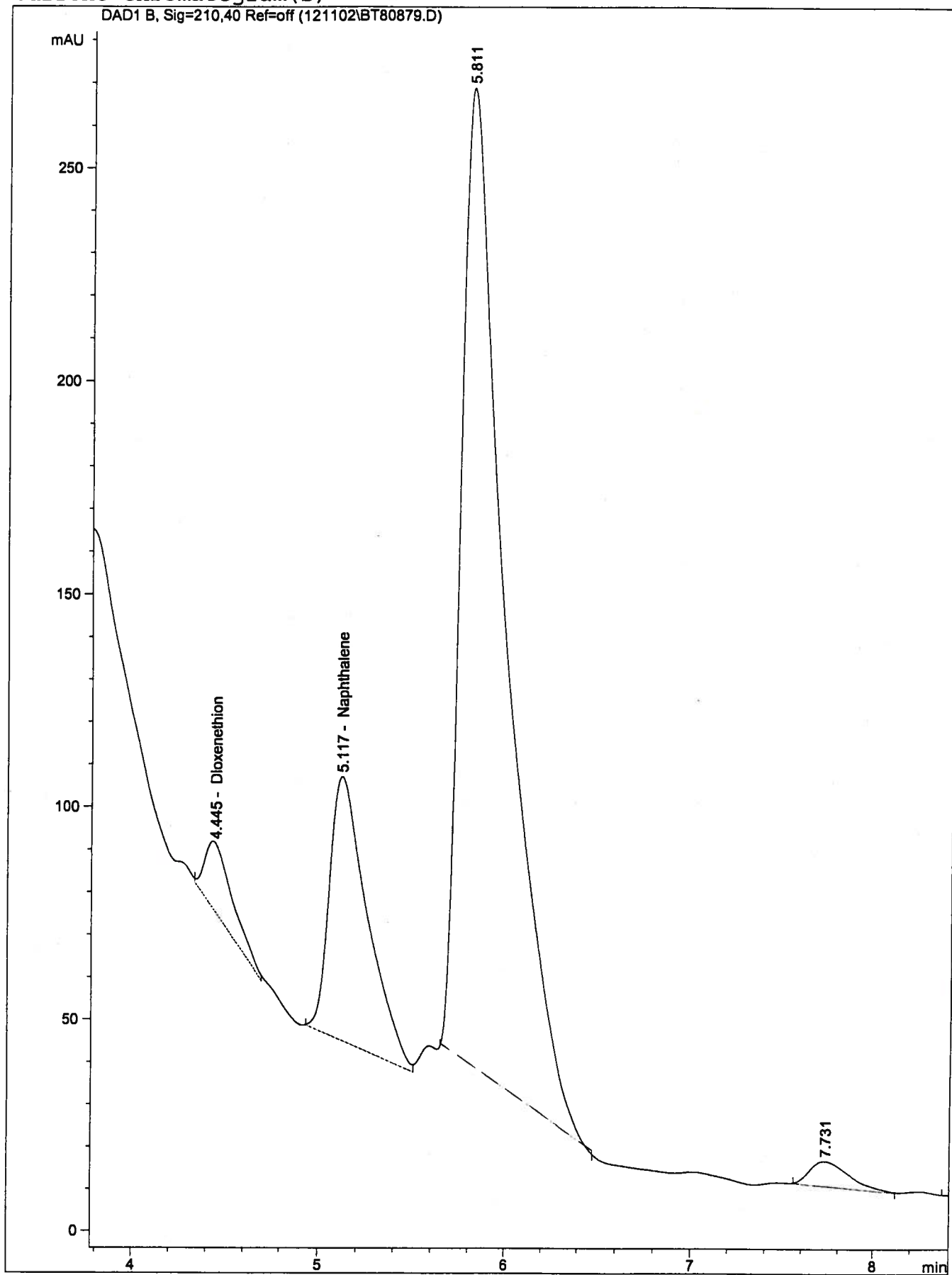
1 Warnings or Errors :

Warning : Calibrated compound(s) not found

=====
*** End of Report ***

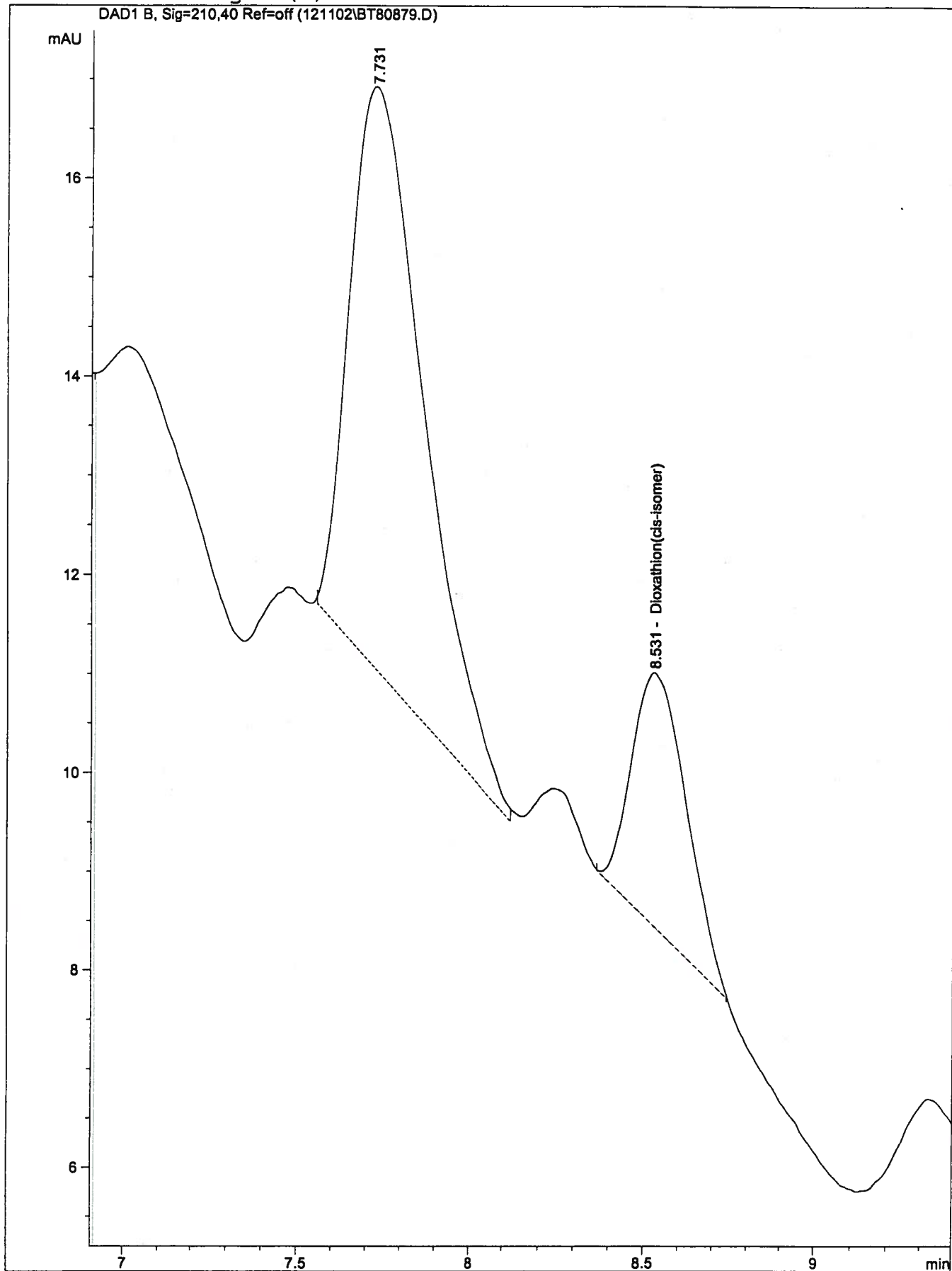
Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80879.D)



Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\BT80879.D)



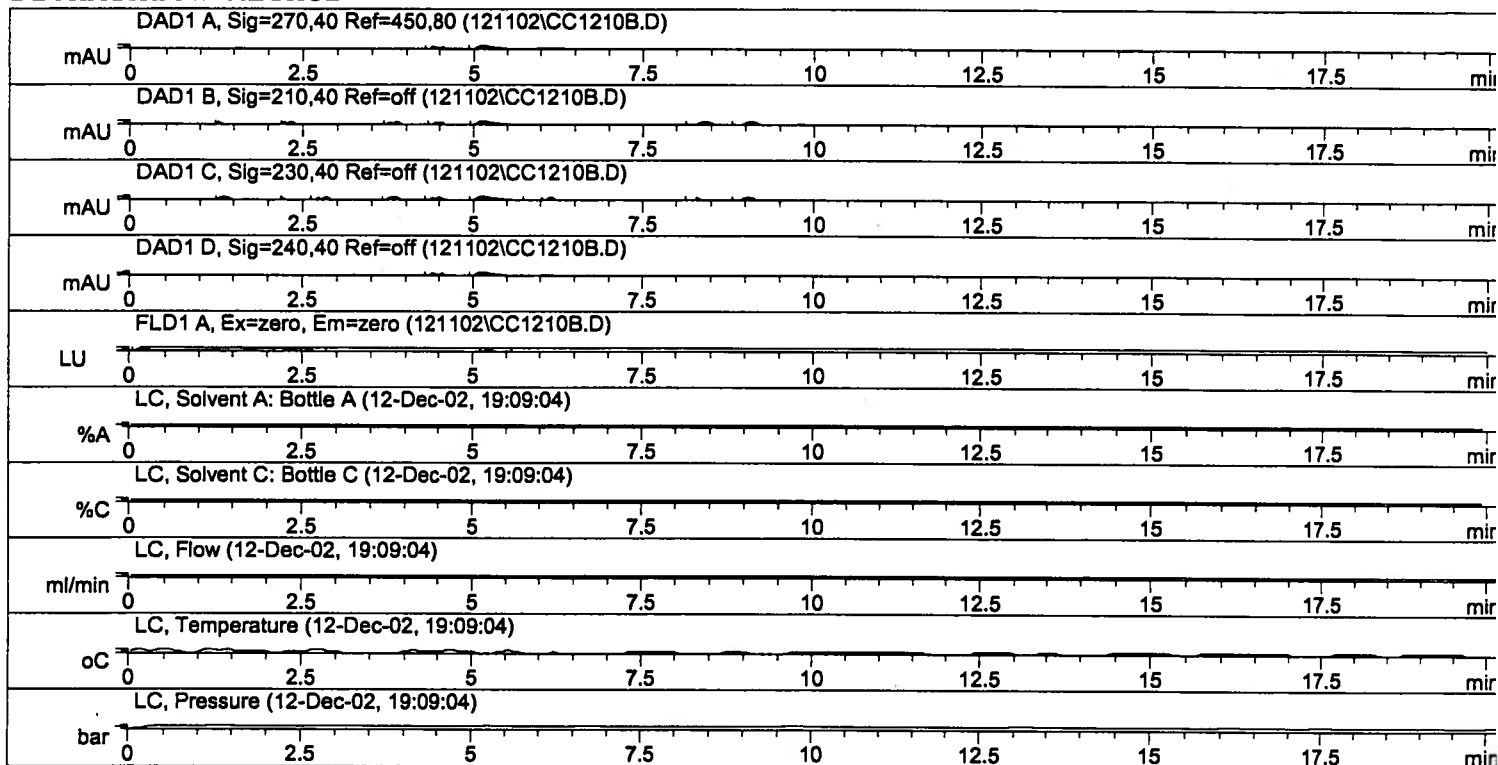
Continuing Calibration Mid Point 5 ppm Diox mix, 4 ppm
Naphthylene

```

=====
Injection Date   : 12/12/02 7:09:04 PM           Seq. Line :   26
Sample Name     : CC4                           Vial      :   19
Acq. Operator   : Steve Flowers                 Inj       :    1
                                                    Inj Volume: 25 µl

Acq. Method     : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed    : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method : C:\HPCHEM\1\METHODS\DX121002.M
Last changed    : 12/13/02 9:17:51 AM by Steve Flowers
                  (modified after loading)
  
```

DIOXATHION METHOD



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=====
External Standard Report
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```

```

Sorted By           :      Signal
Calib. Data Modified :      12/13/02 9:17:48 AM
Multiplier         :      1.0000
Dilution           :      1.0000
  
```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.453	MM	87.94305	5.65387e-2	4.97219		Dioxenethion
5.119	MM	997.82861	4.02842e-3	4.01967		Naphthalene
8.387	MF	52.88025	9.73736e-2	5.14914		Dioxathion(cis-isomer)
9.050	FM	67.06596	7.36745e-2	4.94105		Dioxathion(trans-isomer)

Totals : 19.08204

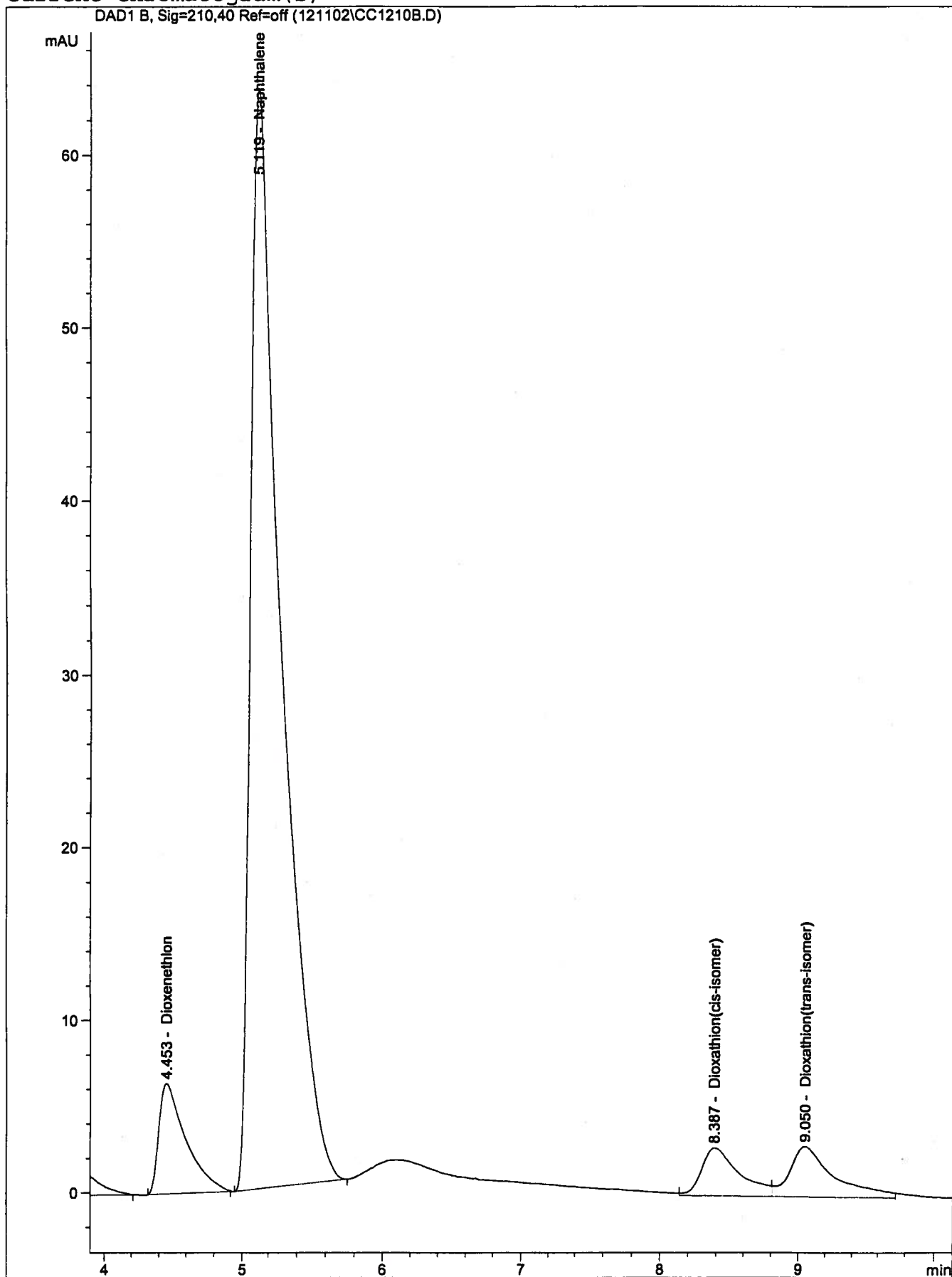
Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

=====
*** End of Report ***

Current Chromatogram(s)

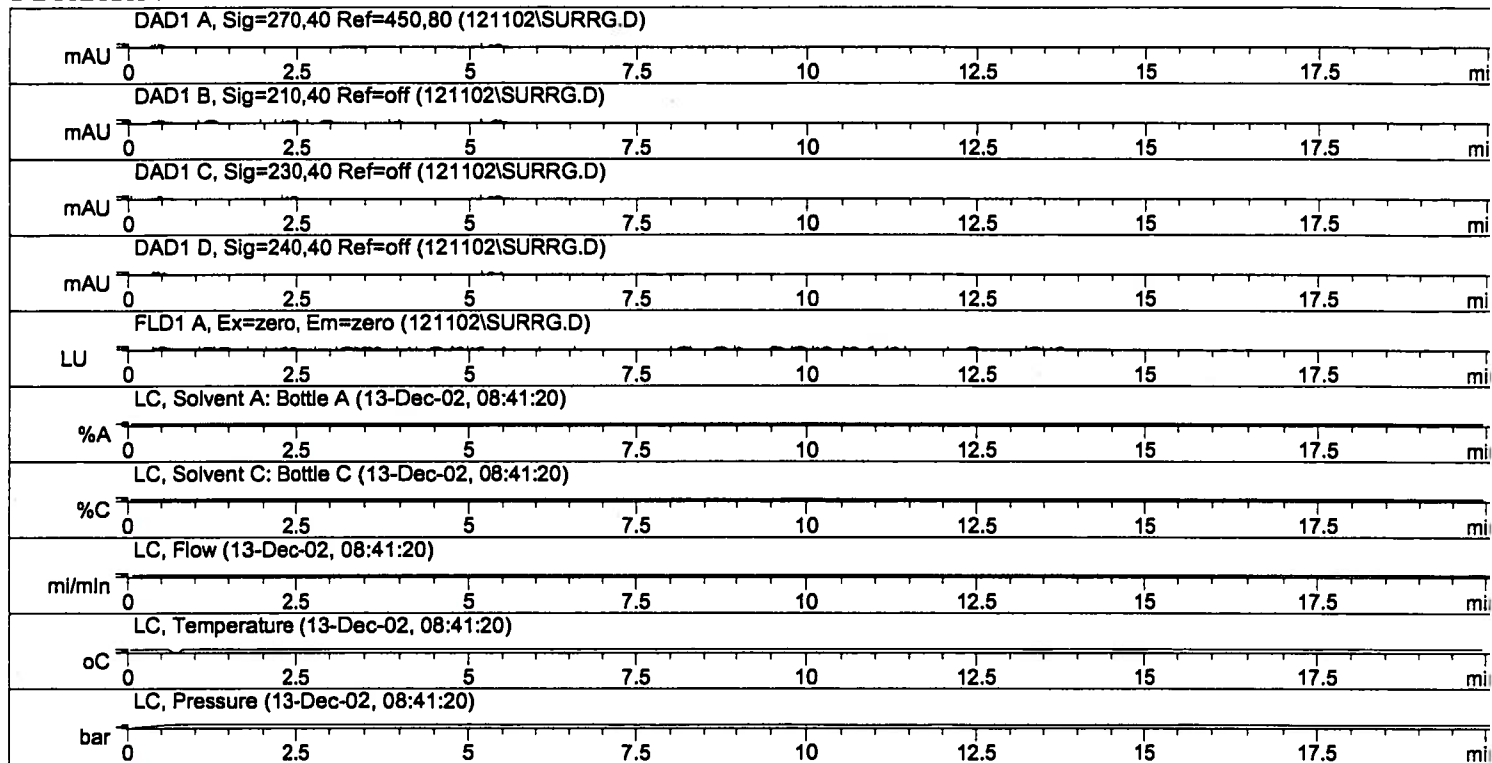


```

=====
Injection Date   : 12/13/02 8:41:20 AM           Seq. Line :    1
Sample Name     : Surrogate                       Vial      :   17
Acq. Operator   : Steve Flowers                  Inj       :    1
                                                    Inj Volume: 25 µl
Acq. Method    : C:\HPCHEM\1\METHODS\DIOXFULL.M
Last changed   : 10/22/02 11:31:11 AM by Steve Flowers
Analysis Method: C:\HPCHEM\1\METHODS\DX121002.M
Last changed   : 12/13/02 9:15:26 AM by Steve Flowers
                (modified after loading)

```

DIOXATHION METHOD



```

=====
External Standard Report
=====

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```

Sorted By      : Signal
Calib. Data Modified : 12/13/02 9:13:39 AM
Multiplier    : 1.0000
Dilution      : 1.0000

```

Signal 1: DAD1 A, Sig=270,40 Ref=450,80

Signal 2: DAD1 B, Sig=210,40 Ref=off

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
4.434		-	-	-		Dioxenethion
5.373	BB	1275.69507	4.07357e-3	5.19663		Naphthalene
8.375		-	-	-		Dioxathion(cis-isomer)

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [wt%]	Grp	Name
9.033	-	-	-	-	-	Dioxathion(trans-isomer)

Totals : 5.19663

Results obtained with enhanced integrator!

Signal 3: DAD1 C, Sig=230,40 Ref=off

Signal 5: FLD1 A, Ex=zero, Em=zero

1 Warnings or Errors :

Warning : Calibrated compound(s) not found

=====
*** End of Report ***

Current Chromatogram(s)

DAD1 B, Sig=210,40 Ref=off (121102\SURRG.D)

