



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 51

Groundwater Monitoring
Results Report
for
Defense Depot
Memphis, Tennessee

Volume 8 of 9

Prepared for:
U.S. Army Corps of Engineers,
Huntsville Division

Prepared by:
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& Engineering, Inc.

ESE No. 3-93-5021G

January 1994

APPENDIX D

CLP-LIKE DATA RESULTS FOR
MW-9, MW-10, MW-11, MW-12,
MW-22, AND MW-37

VOLUMES 3 THROUGH 9

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THIODIGLYCOL - UW22

002815

THIODIGLYCOL - UW22

SDG No. G44757

002816

ANALYTICAL DATA

002817

CROSS REFERENCE TABLE FOR SDG: G44757 15:43:11 10 JAN 1994

THIS SDG INCLUDES THE FOLLOWING BATCHES :
G44757

51 8

PRINTED BY : RUBY WYROSDICK

ABBREVIATION	COMPLETE NAME
AA	MW44EBLK

002818

COVER PAGE

Lab Name: ESE

Project No.: 7934082G

SDG No: G44757

Client ID	Laboratory ID	Matrix (S/W)	Analysis	Date Collected	Date Received	Date Analyzed
CCV1	CCV*120293*1	W	TDGCL	00/00/00	00/00/00	12/02/93
CCS1	CCS*120793*1	W	TDGCL	00/00/00	00/00/00	12/07/93
PBLK1	MB*QC*1	W	TDGCL	00/00/00	00/00/00	12/07/93
SP1	SP1*QC*1	W	TDGCL	00/00/00	00/00/00	12/07/93
SP2	SP2*QC*1	W	TDGCL	00/00/00	00/00/00	12/07/93
SP3	SP3*QC*1	W	TDGCL	00/00/00	00/00/00	12/07/93
MW3	CDDMTW*3	W	TDGCL	11/12/93	11/13/93	12/07/93
MW4	CDDMTW*4	W	TDGCL	11/15/93	11/16/93	12/07/93
MW5	CDDMTW*5	W	TDGCL	11/16/93	11/17/93	12/07/93
MW7	CDDMTW*7	W	TDGCL	11/15/93	11/16/93	12/08/93
MW13	CDDMTW*13	W	TDGCL	11/15/93	11/16/93	12/08/93
MW35	CDDMTW*35	W	TDGCL	11/14/93	11/16/93	12/08/93
MW38	CDDMTW*38	W	TDGCL	11/15/93	11/16/93	12/08/93
MW39	CDDMTW*39	W	TDGCL	11/15/93	11/16/93	12/08/93
MW41DUP	CDDMTW*41	W	TDGCL	11/11/93	11/12/93	12/08/93
MW42DUP	CDDMTW*42	W	TDGCL	11/11/93	11/12/93	12/08/93
AA	CDDMTW*44	W	TDGCL	11/16/93	11/17/93	12/08/93
CCS2	CCS*120893*1	W	TDGCL	00/00/00	00/00/00	12/08/93
PBLK2	MB*QC*2	W	TDGCL	00/00/00	00/00/00	12/08/93
SP4	SP1*QC*2	W	TDGCL	00/00/00	00/00/00	12/08/93
SP5	SP2*QC*2	W	TDGCL	00/00/00	00/00/00	12/08/93
SP6	SP3*QC*2	W	TDGCL	00/00/00	00/00/00	12/08/93
MW9	CDDMTW*9	W	TDGCL	11/15/93	11/16/93	12/08/93
MW10SP	CDDMTW*10	W	TDGCL	11/11/93	11/12/93	12/08/93
MW11	CDDMTW*11	W	TDGCL	11/13/93	11/15/93	12/08/93
MW12SP	CDDMTW*12	W	TDGCL	11/11/93	11/12/93	12/08/93
CCS3	CCS*120893*2	W	TDGCL	00/00/00	00/00/00	12/08/93

Comments:

Client ID

ANALYSIS DATA SHEET

CCV1

Date Received: 00/00/00

THIODIGLYCOL (UG/L) _____	9480.
---------------------------	-------

ANALYSIS DATA SHEET

PBLK1

Lab Name: ESE Project No.: 7934082G SDG No.: G44757
Matrix: (soil/water) WATER Lab Sample ID: MB*QC*1
Sample wt/vol: 200. Lab File ID:
%Moisture: pH: Dilution Factor: 1.00
Date Analyzed: 12/07/93 Date Received: 00/00/00

CAS NO.	COMPOUND	Q
	THIODIGLYCOL (UG/L)	44.0 U

ANALYSIS DATA SHEET

51 12

Client ID

SP1

Lab Name: ESE Project No.: 7934082G SDG No.: G44757
 Matrix: (soil/water) WATER Lab Sample ID: SP1*QC*1
 Sample wt/vol: 200. Lab File ID:
 %Moisture: pH: Dilution Factor: 1.00
 Date Analyzed: 12/07/93 Date Received: 00/00/00

CAS NO.	COMPOUND	Q
	THIODIGLYCOL (UG/L)	107.

ANALYSIS DATA SHEET

SP2

Lab Name: ESE Project No.: 7934082G SDG No.: G44757
Matrix: (soil/water) WATER Lab Sample ID: SP2*QC*1
Sample wt/vol: 200. Lab File ID:
%Moisture: pH: Dilution Factor: 1.00
Date Analyzed: 12/07/93 Date Received: 00/00/00

CAS NO.	COMPOUND	Q
	THIODIGLYCOL (UG/L) _____	1580.

ANALYSIS DATA SHEET

SP3

Lab Name: ESE Project No.: 7934082G SDG No.: G44757
Matrix: (soil/water) WATER Lab Sample ID: SP3*QC*1
Sample wt/vol: 200. Lab File ID:
%Moisture: pH: Dilution Factor: 1.00
Date Analyzed: 12/07/93 Date Received: 00/00/00

CAS NO.

COMPOUND

Q

THIODIGLYCOL (UG/L)	1590.	
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51 15

Client ID

ANALYSIS DATA SHEET

PBLK2

Lab Name: ESE

Project No.: 7934082G

SDG No.: G44757

Matrix: (soil/water) WATER

Lab Sample ID: MB*QC*2

Sample wt/vol: 200.

Lab File ID:

%Moisture:

pH:

Dilution Factor: 1.00

Date Analyzed: 12/08/93

Date Received: 00/00/00

CAS NO.

COMPOUND

Q

THIODIGLYCOL (UG/L)	44.0	U
---------------------	------	---

51 16
ANALYSIS DATA SHEET

Client ID

SP4

Lab Name: ESE Project No.: 7934082G SDG No.: G44757
Matrix: (soil/water) WATER Lab Sample ID: SP1*QC*2
Sample wt/vol: 200. Lab File ID:
%Moisture: pH: Dilution Factor: 1.00
Date Analyzed: 12/08/93 Date Received: 00/00/00

CAS NO.	COMPOUND	Q
	THIODIGLYCOL (UG/L)	97.9

51 19

Client ID

ANALYSIS DATA SHEET

MW9

Lab Name: ESE

Project No.: 7934082G

SDG No.: G44757

Matrix: (soil/water) WATER

Lab Sample ID: CDDMTW*9

Sample wt/vol: 200.

Lab File ID:

%Moisture:

pH:

Dilution Factor: 1.00

Date Analyzed: 12/08/93

Date Received: 11/16/93

CAS NO.

COMPOUND

Q

CAS NO.	COMPOUND	Q
	THIODIGLYCOL (UG/L)	44.0 U

MW10SP

Lab Name: ESE Project No.: 7934082G SDG No.: G44757
Matrix: (soil/water) WATER Lab Sample ID: CDDMTW*10
Sample wt/vol: 200. Lab File ID:
%Moisture: pH: Dilution Factor: 1.00
Date Analyzed: 12/08/93 Date Received: 11/12/93

CAS NO.	COMPOUND	Q
	THIODIGLYCOL (UG/L)	44.0 U

ANALYSIS DATA SHEET

51 21 Client ID

MW11

Lab Name: ESE Project No.: 7934082G SDG No.: G44757
Matrix: (soil/water) WATER Lab Sample ID: CDDMTW*11
Sample wt/vol: 200. Lab File ID:
%Moisture: pH: Dilution Factor: 1.00
Date Analyzed: 12/08/93 Date Received: 11/15/93

CAS NO.	COMPOUND	Q
	THIODIGLYCOL (UG/L)	44.0 U

51 22

Client ID

ANALYSIS DATA SHEET

MW12SP

Lab Name: ESE Project No.: 7934082G SDG No.: G44757
Matrix: (soil/water) WATER Lab Sample ID: CDDMTW*12
Sample wt/vol: 200. Lab File ID:
%Moisture: pH: Dilution Factor: 1.00
Date Analyzed: 12/08/93 Date Received: 11/12/93

CAS NO.	COMPOUND	Q
	THIODIGLYCOL (UG/L) _____	44.0 U

QUALITY CONTROL DATA

002833

CALIBRATION CURVES

51 24

Lab Name: ESE

SDG #: G44757

Analyte: THIODIGLYCOL

Instrument ID:

Curve #	Analysis Date	Concentration	Response	Predicted Concentration	Retention Time (min)	Correlation Coeff. (r)
1	12/02/93	0.	0.	90.7	.	1.0000
		880.4	267276.	913.	11.41	
		4402.	1404762.	4410.	11.54	
		8804.	2822469.	8770.	11.46	
		17608.	5641882.	17400.	11.44	
		44020.	4309406.	44100.	11.40	

Control Limits: $r = 0.995$

Comments:

ESE METHOD BLANK SUMMARY

PBLK1

Lab Name: ESE

Project No: 7934082G

SDG No.: G44757

Lab Sample ID: MB*QC*1

Lab File ID:

Matrix: (soil/water) WATER

Instrument ID:

Date Analyzed : 12/07/93

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

CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
=====	=====	=====
MW3	CDDMTW*3	12/07/93
MW4	CDDMTW*4	12/07/93
MW5	CDDMTW*5	12/07/93
MW7	CDDMTW*7	12/08/93
MW13	CDDMTW*13	12/08/93
MW35	CDDMTW*35	12/08/93
MW38	CDDMTW*38	12/08/93
MW39	CDDMTW*39	12/08/93
MW41DUP	CDDMTW*41	12/08/93
MW42DUP	CDDMTW*42	12/08/93
AA	CDDMTW*44	12/08/93
MW9	CDDMTW*9	12/08/93
MW10SP	CDDMTW*10	12/08/93
MW11	CDDMTW*11	12/08/93
MW12SP	CDDMTW*12	12/08/93

COMMENTS:

51 26

Client ID

REFERENCE STANDARD

SP1

Lab Name: ESE

SDG No: G44757

Lab Sample ID: SP1*QC*1

Date Analyzed: 12/07/93

Standard Source:

Instrument ID:

Analyte	True	Found	C	%Recv	Limits
THIODIGLYCOL	115.	107.		93.0	37-119

Comments:

FORM V ESE

002836

51 27

Client ID

REFERENCE STANDARD

SP2

Lab Name: ESE

SDG No: G44757

Lab Sample ID: SP2*QC*1

Date Analyzed: 12/07/93

Standard Source:

Instrument ID:

Analyte	True	Found	C	%Recv	Limits
TDGCL	1640.	1580.		96.3	37-119

Comments:

FORM V ESE

002837

51 28 Client ID

REFERENCE STANDARD

SP3

Lab Name: ESE

SDG No: G44757

Lab Sample ID: SP3*QC*1

Date Analyzed: 12/07/93

Standard Source:

Instrument ID:

Analyte	True	Found	C	%Recv	Limits
TDGCL	1640.	1590.		97.0	37-119

Comments:

FORM V ESE

002838

51 29

Client ID

REFERENCE STANDARD

SP4

Lab Name: ESE

SDG No: G44757

Lab Sample ID: SP1*QC*2

Date Analyzed: 12/08/93

Standard Source:

Instrument ID:

Analyte	True	Found	C	%Recv	Limits
THIODIGLYCOL	115.	97.9		85.1	37-119

Comments:

FORM V ESE

002839

51

30

Client ID

REFERENCE STANDARD

SP5

Lab Name: ESE

SDG No: G44757

Lab Sample ID: SP2*QC*2

Date Analyzed: 12/08/93

Standard Source:

Instrument ID:

Analyte	True	Found	C	%Recv	Limits
TDGCL	1640.	1490.		90.9	37-119

Comments:

FORM V ESE

002840

51 31

Client ID

REFERENCE STANDARD

SP6

Lab Name: ESE

SDG No: G44757

Lab Sample ID: SP3*QC*2

Date Analyzed: 12/08/93

Standard Source:

Instrument ID:

Analyte	True	Found	C	%Recv	Limits
TDGCL	1640.	1580.		96.3	37-119

Comments:

FORM V ESE

002841

RAW DATA

002843

51 34

GC OR HPLC BATCH DOCUMENTATION CHECKLIST

Initial or NA	ESE Standard
✓	Batch printout (include % moisture <u>NA</u>)
✓	Method-reference & deviations
✓	Dilution factors checked
✓	Sample Arrival Notices
✓	Extraction logsheets - copies
NA	Chromatographic logsheets or copies
✓	Instrument logbook pages
✓	(include instrument ID # <u>52.00</u>) copies
✓	Extractor notebook pages - copies
✓	Analyst notebook pages - copies
NA	Correspondence and memos
✓	Chromatograms (labeled <u>✓</u>)
	unused chromatograms noted & explained <u>✓</u>
	column used <u>✓</u> , instrument conditions <u>✓</u>
	SW-846 Supplement
NA	Check sample results
NA	Surrogate results
NA	Evaluation standard results (pesticides only)
NA	Retention windows
	Navy Supplement
NA	Control Charts (each required analyte)
	Air Force Supplement
NA	Second column confirmation form
Notes:	
<u>MC</u> Analyst Initials	<u>12-8-93</u> Date
<u>R03</u> Checked by	<u>12/15/91</u> Date

002844

ESE BATCH : G44757

QC TYPE : ESE
 ANALYST : CURTIS CAMPBELL
 EXTRACTOR : CHRISTINE THOMPSON
 DATA ENTRY : CURTIS CAMPBELL

REPORT DATE/TIME : 12/08/93 15:04:52
 ANALYSIS DATE : 12/07/93
 EXTRACT DATE : 11/18/93

STATUS :

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CIDMTW	7934082G 0201	HUNTSVILLE COE - DDMT	PATRICK WILBER

Sample Specific Raw Data

SAMPLE CODE	EXTRACT DATE	ANALYSIS DATE	ANALYSIS TIME	SAMPLE VOLUME (ML)	EXTRACT VOLUME (ML)	INJECTION VOLUME (NA)	%MOISTURE
CCV*120293*1		12/02/93	11:07PM				
CCS*120793*1		12/07/93	06:31PM				
MS*QC*1	11/18/93	12/07/93	06:55PM	200	10		
SP1*QC*1	11/18/93	12/07/93	07:42PM	200	10		
SP2*QC*1	11/18/93	12/07/93	08:29PM	200	10		
SP3*QC*1	11/18/93	12/07/93	09:16PM	200	10		
DA*CDMTW*3	11/18/93	12/07/93	10:03PM	200	10		
DA*CDMTW*4	11/18/93	12/07/93	10:50PM	200	10		
DA*CDMTW*5	11/18/93	12/07/93	11:37PM	200	10		
DA*CDMTW*7	11/18/93	12/08/93	12:24AM	200	10		
DA*CDMTW*13	11/18/93	12/08/93	01:11AM	200	10		
DA*CDMTW*15	11/18/93	12/08/93	01:59AM	200	10		
DA*CDMTW*38	11/18/93	12/08/93	02:46AM	200	10		
DA*CDMTW*39	11/18/93	12/08/93	03:33AM	200	10		
DA*CDMTW*41	11/18/93	12/08/93	04:20AM	200	10		
DA*CDMTW*42	11/18/93	12/08/93	05:07AM	200	10		
DA*CDMTW*44	11/18/93	12/08/93	05:54AM	200	10		
CCS*120893*1		12/08/93	06:41AM				
MS*QC*2	11/18/93	12/08/93	07:28AM	200	10		
SP1*QC*2	11/18/93	12/08/93	08:15AM	200	10		
SP2*QC*2	11/18/93	12/08/93	09:02AM	200	10		
SP3*QC*2	11/18/93	12/08/93	09:49AM	200	10		
DA*CDMTW*9	11/18/93	12/08/93	10:36AM	200	10		
DA*CDMTW*10	11/18/93	12/08/93	11:24AM	200	10		
DA*CDMTW*11	11/18/93	12/08/93	12:11PM	200	10		
DA*CDMTW*12	11/18/93	12/08/93	12:58PM	200	10		
CCS*120893*2		12/08/93	01:45PM				

002845

Parameter Specific Raw Data

SAMPLE CODE	STORET NAME	STATUS	RESPONSE (AREA)	DIL	TYPE	CURVE	RET TIME	SPIKE SOL CONC (UG/ML)	SPIKE SAMP VOL (L)	SPIKE VOLUME (ML)	DIL CODE	CALC'D TARGET (UG/L)
CCV*120793*1	TDGCL	OK	3054509	1		1	11.43					
CCS*120793*1	TDGCL	OK	14961512	1	MANUAL	1	12.11					9532
MB*QC*1	TDGCL	OK	0		FINAL		0					14309406
SP1*QC*1	TDGCL	OK	664813	1		1	12.12	57.34	.2	0.4	N	114.68
SP2*QC*1	TDGCL	OK	10252890	1		1	12.15	819.2	.2	0.4	N	1638.4
SP3*QC*1	TDGCL	OK	10322544	1		1	12.21	819.2	.2	0.4	N	1638.4
DA*CDMTW*3	TDGCL	OK	0				0					
DA*CDMTW*4	TDGCL	OK	0				0					
DA*CDMTW*5	TDGCL	OK	0				0					
DA*CDMTW*7	TDGCL	OK	0				0					
DA*CDMTW*13	TDGCL	OK	0				0					
DA*CDMTW*35	TDGCL	OK	0				0					
DA*CDMTW*38	TDGCL	OK	0				0					
DA*CDMTW*39	TDGCL	OK	0				0					
DA*CDMTW*41	TDGCL	OK	0				0					
DA*CDMTW*42	TDGCL	OK	0				0					
DA*CDMTW*44	TDGCL	OK	0				0					
CCS*120893*1	TDGCL	OK	14399738	1	MANUAL	1	12.23					14309406
MB*QC*2	TDGCL	OK	0		FINAL		0					
SP1*QC*2	TDGCL	OK	607015	1		1	12.14	57.34	.2	0.4	N	114.68
SP2*QC*2	TDGCL	OK	9635650	1		1	12.06	819.2	.2	0.4	N	1638.4
SP3*QC*2	TDGCL	OK	10227927	1		1	12.44	819.2	.2	0.4	N	1638.4
DA*CDMTW*9	TDGCL	OK	0				0					
DA*CDMTW*10	TDGCL	OK	0				0					
DA*CDMTW*11	TDGCL	OK	0				0					
DA*CDMTW*12	TDGCL	OK	0				0					
CCS*120893*2	TDGCL	OK	15472435	1	MANUAL	1	12.28					14309406

002846

STORET: 99797 METHOD: UM22 THIODIGLYCOL, DG/L LINE

CALIBRATION CURVE # 1 (UG/L)

CURVE DETECTION LIMIT= 880.4 DATE: 02 DEC 1993 LARGEST RESPONSE=14309406 TRSD=2.5914

CONC :	0	880.4	4402	8804	17608	44020
RESP :	0	267276	1404762	2822469	5641882	14309406
CONC :	90.7	913	4410	8770	17400	44100
R.T. :		11.41	11.54	11.45	11.44	11.40

CONC = 9.0568E+01+ 3.0750E-03*RESP+ *RESP**2+ *RESP**3

95% C.I.= 1.0882E+02 1.6974E-05

CORRELATION COEFFICIENT = 1.0000

METHOD BLANK(S)

SAMPLE ID CONCENTRATION

QC*1 0.0

QC*2 0.0

CONTINUING CALIBRATION STANDARD(S) *** Optional Quality Control Check ***

STANDARD ID CALC. CONC KNOWN CONC DIFFERENCE%

120793*1 15000000 14300000 4.9

120893*1 14400000 14300000 0.7

120893*2 15500000 14300000 8.4

CONTINUING CALIBRATION VERIFICATION SAMPLE(S) *** Optional Quality Control Check ***

SAMPLE ID CALC. CONC KNOWN CONC DIFFERENCE%

120293*1 9490 9530 -.5

STANDARD MATRIX SPIKE(S)

SAMPLE ID UNSP CONC SPK CONC FOUND TARGET % RECV RELADIFF

SP1*QC*1 0.0 107 107 115 93.0

SP2*QC*1 0.0 1590 1580 1640 96.3 3.5

SP3*QC*1 0.0 1590 1590 1640 97.0 4.2

SP1*QC*2 0.0 97.9 97.9 115 85.1

SP2*QC*2 0.0 1490 1490 1640 90.9 6.6

SP3*QC*2 0.0 1580 1580 1640 96.3 12.3

SAMPLE RESULTS

51 38

99797-UM22
THIODIGLYC
OL
SAMPLE ID US/L
CODMTW*3 <44.0
CODMTW*4 <44.0
CODMTW*5 <44.0
CODMTW*7 <44.0
CODMTW*13 <44.0
CODMTW*35 <44.0
CODMTW*38 <44.0
CODMTW*39 <44.0
CODMTW*41 <44.0
CODMTW*42 <44.0
CODMTW*44 <44.0
CODMTW*9 <44.0
CODMTW*10 <44.0
CODMTW*11 <44.0
CODMTW*12 <44.0

002848

UNITS ENTERED
 FINAL CONCENTRATION UG/L
 INJECTION VOLUME NA
 SAMPLE VOLUME ML
 EXTRACT VOLUME ML
 CURVE CONCENTRATION UG/L
 SPIKE SOLN CONCENTRATION UG/ML
 SPIKE VOLUME ML
 SPIKE SAMPLE VOLUME L
 TARGET CONCENTRATION UG/L
 RESPONSE DESCRIPTION AREA
 CONVERSION FACTOR NA

$$\text{FINAL CONC} = \frac{\text{CURV CONC} \times \text{EXT VOL} \times \text{DIL}}{\text{INJ VOL} \times \text{SAMP VOL} \times [(100 - \% \text{MOISTURE}) / 100]}$$

$$\text{UG/L} = \frac{[\text{UG/L}] \times [\text{ML}]}{[\text{NA}] \times [\text{ML}]}$$

$$(\quad) = \frac{(\quad) \times (\quad)}{(\quad) \times (\quad) \times [(100 - (\quad))] / 100}$$

$$\text{TARGET CONC} = \frac{\text{SPIKE SOLN CONC} \times \text{SPIKE VOL}}{\text{SPIKE SAMP VOL} \times [(100 - \% \text{MOISTURE}) / 100]}$$

$$\text{UG/L} = \frac{[\text{UG/ML}] \times [\text{ML}]}{[\text{L}]}$$

Batch No.: G44757 Analysis Date: 12/07/93 Analyst: CURTIS CAMPBELL

	Yes	No	Exceptions
			Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Extract holding time within criteria?	X		
Curve correlation coefficient ≥ 0.995 ?	X		
Calibration curve y-intercept $\leq$ curve detection limit?	X		
Sample responses within highest standard response?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Standard matrix spike duplicate present?	X		
Standard matrix spike duplicate within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		

NOT REQUESTED ccc
12/8/93

Note: Any "NO" answer requires a comment.

Environmental Science and Engineering Analytical Services
Internal QA/QC Checklist For GC and HPLC Analysis

Batch No.: G44757 Analysis Date: 12/07/93 Analyst: CURTIS CAMPBELL

	N/A	Yes	No	"Exceptions"
				Comment / Corrective Action
Is the method blank free of contamination?		☒		
If not, has the data been blank corrected?	☒			
Are all analysis free of contamination from previous analysis?		☒		
If not, does the quality of the data remain unimpaired?	☒			
Are calibration curves entered correctly?		☒		
Are reported values consistent with the required units?		☒		
Are detection limits reported correctly?		☒		
Are dilution factors entered correctly?		☒		
Is the batch checked for data entry error(s)?		☒		
Have sufficient continuing calibration standards (CCS) been analyzed?		☒		
If not, is an appropriate explanation provided?	☒			
Are the CCS within criteria?		☒		
If not, is an appropriate explanation provided?	☒			
Has second column confirmation been performed for all positive identifications made in the primary analysis?	☒			
Have they been performed within analysis holding time?	☒			
Is an example calculation provided?		☒		
Has the batch documentation checklist been completed?		☒		

Note: Any "NO" answer requires a comment.
Additional Comments:

Completed By: [Signature]
Date: 12-8-93

Reviewed By: [Signature]
Date: 12/15/93

Notification of appropriate Laboratory Coordinators required for "Exceptions":

Signature	Date	Comments
<u>[Signature]</u>	<u>12/16/93</u>	<u>[Signature]</u>

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

002851

=====

ANALYSIS DATE: 12-03-93 ANALYST: CRC 3254 BATCH: G43728 PROJECT: UW22 CAL

=====

Sample Name	File Name	Date Of Injection	Time Of Injection	THIODIGLYCOL Ret. Time [Min]	Area
899901-F5	UW22003.rst	12/2/93	08:45 PM	11.43	144162
899901-E	UW22004.rst	12/2/93	09:17 PM	11.41	267276
899901-E5	UW22005.rst	12/2/93	09:39 PM	11.54	1404762
899901-D	UW22006.rst	12/2/93	10:01 PM	11.46	2822469
899901-D2	UW22007.rst	12/2/93	10:23 PM	11.44	5641882
899901-D5	UW22008.rst	12/2/93	10:45 PM	11.40	14309406
CCV-120293*1	UW22009.rst	12/2/93	11:07 PM	11.43	3054509
Averages				11.44	3949209
SRSD				0.39	125.24

NOTE: LEVEL 899901-F5
Data not used - below
C.R.L. for UW22 method.
CRC
12/3/93

ASCII File Created Successfully - Stored in: C:\UW22.prn

002852

=====

Software Version: 3.3 <4B11>

Sample Name : MOBILE PHASE BLK

Time : 12/2/93 08:21 PM

Sample Number: 1

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 08:01 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA\UW22001.RAW

Result File : C:\2700\DATA\UW22001.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\UW22CAL.SEQ

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 0

=====

THIODIGLYCOL IN WATER BY UW22

No Peaks Available To Report

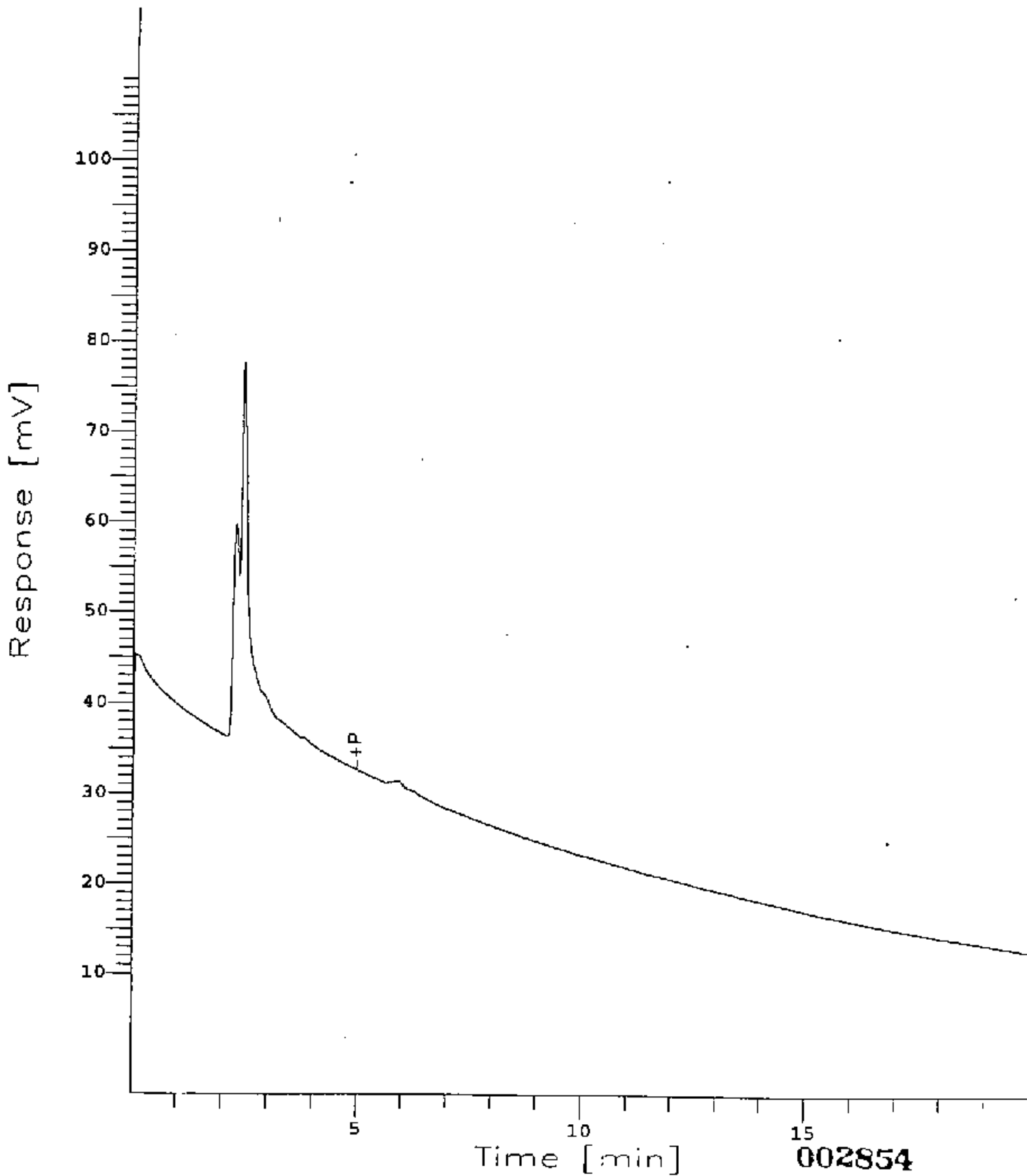
002853

Chromatogram

Sample Name : MOBILE PHASE BLK
Filename : C:\2700\DATA\LM22001.raw
Method : tdg.ins
Start Time : 0.02 min
Scale Factor: 0.0

End Time : 19.98 min
Plot Offset: 10 mV

Sample #: 1
Date : 12/2/93 08:25 PM
Time of Injection: 12/2/93 08:01 PM
Low Point : 10.00 mV
Plot Scale: 100.0 mV
Page 1 of 1
High Point : 110.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : 899901-D5

Time : 12/2/93 08:43 PM

Sample Number: 2

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 08:23 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA\UW22002.RAW

Result File : C:\2700\DATA\UW22002.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\UW22CAL.SEQ

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 1

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area (uV*sec)	Height [uV]	BL
1	THIODIGLYCOL	11.370	14256310.50	759793.96	B
			14256310.50	759793.96	

=====

*Data not used.
Duplicate sp.
CRC
12/3/93*

002855

Sample Name : 899901-05

FileName : c:\2700\data\UW22002.raw

Method : edg.ins

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 19.98 min

Plot Offset : 40 mV

Sample #: 2

Date : 12/2/93 08:43 PM

Time of Injection: 12/2/93 08:23 PM

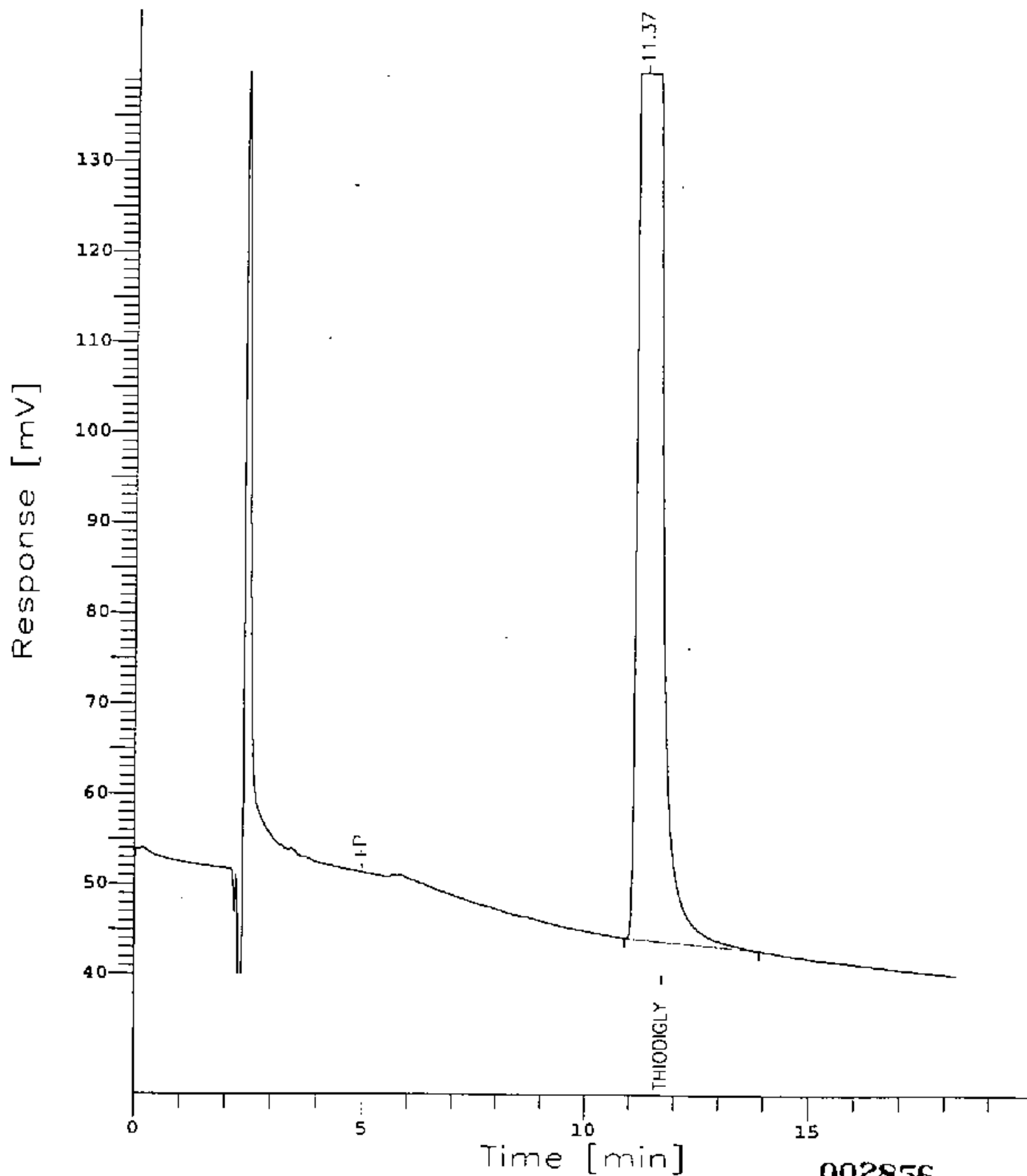
Low Point : 40.00 mV

Plot Scale: 100.0 mV

Page 1 of 1

08:23 PM

High Point : 140.00 mV



002856

=====

Software Version: 3.3 <4B11>

Sample Name : 899901-F5

Time : 12/3/93 10:43 AM

Sample Number: 3

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 08:45 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22003.RAW

Result File : C:\2700\DATA3\UW22003.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 1

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1	THIODIGLYCOL	11.434	144161.50	7835.51	B
			144161.50	7835.51	

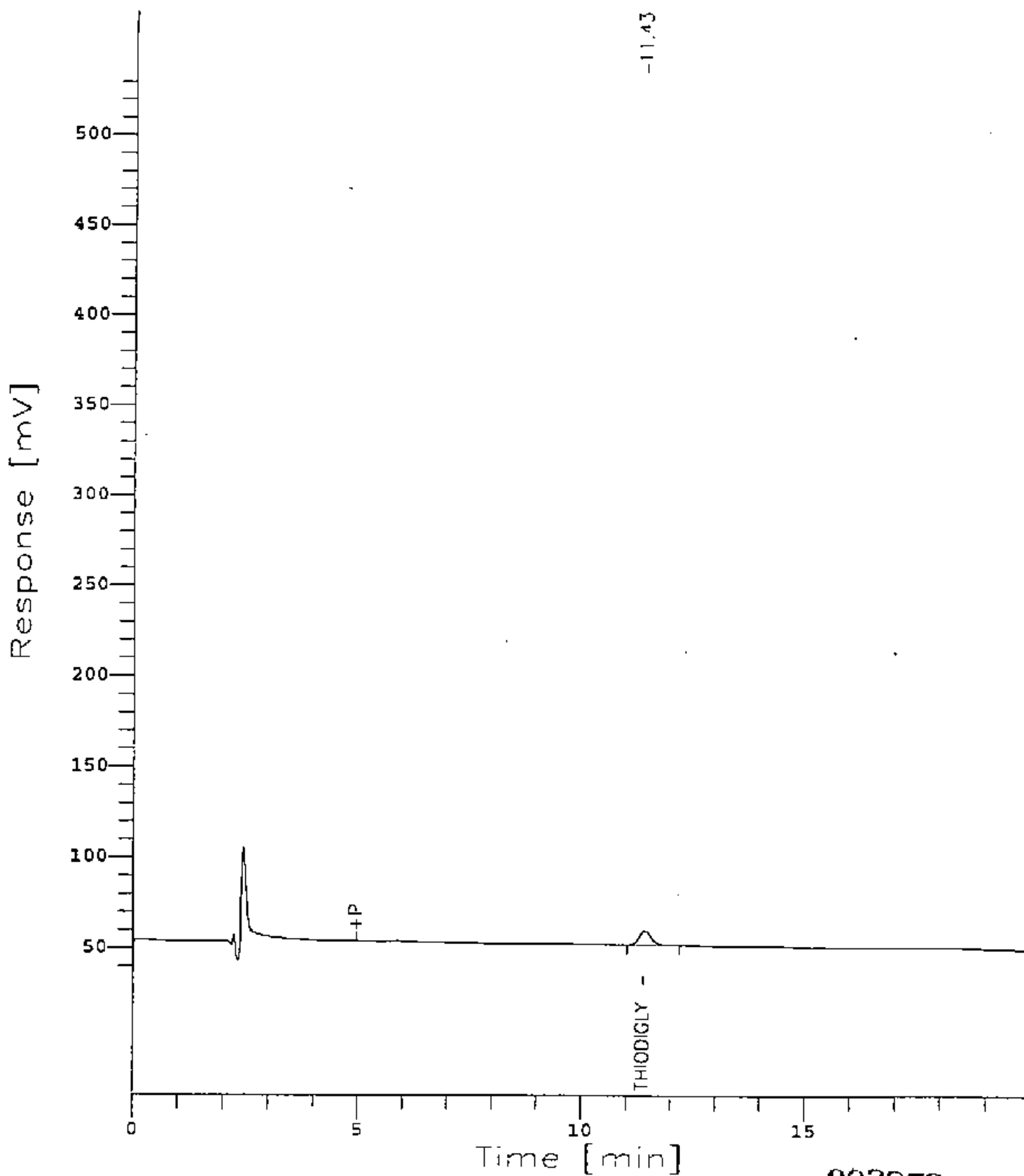
=====

Data not used
Below CRC
12/3/93

Sample Name : 899901-F5
FileName : c:\2700\data3\0022003.raw
Method : tdg
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 19.98 min
Plot Offset : 35 mV

Sample #: 3
Date : 12/3/93 10:43 AM
Time of Injection: 12/2/93 08:45 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV



002858

=====

Software Version: 3.3 <4B11>

Sample Name : 899901-E

Time : 12/3/93 10:43 AM

Sample Number: 4

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 09:17 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22004.RAW

Result File : C:\2700\DATA3\UW22004.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.726	9990.00	524.96	B
2	THIODIGLYCOL	11.410	267276.00	14529.69	B
			277266.00	15054.65	

=====

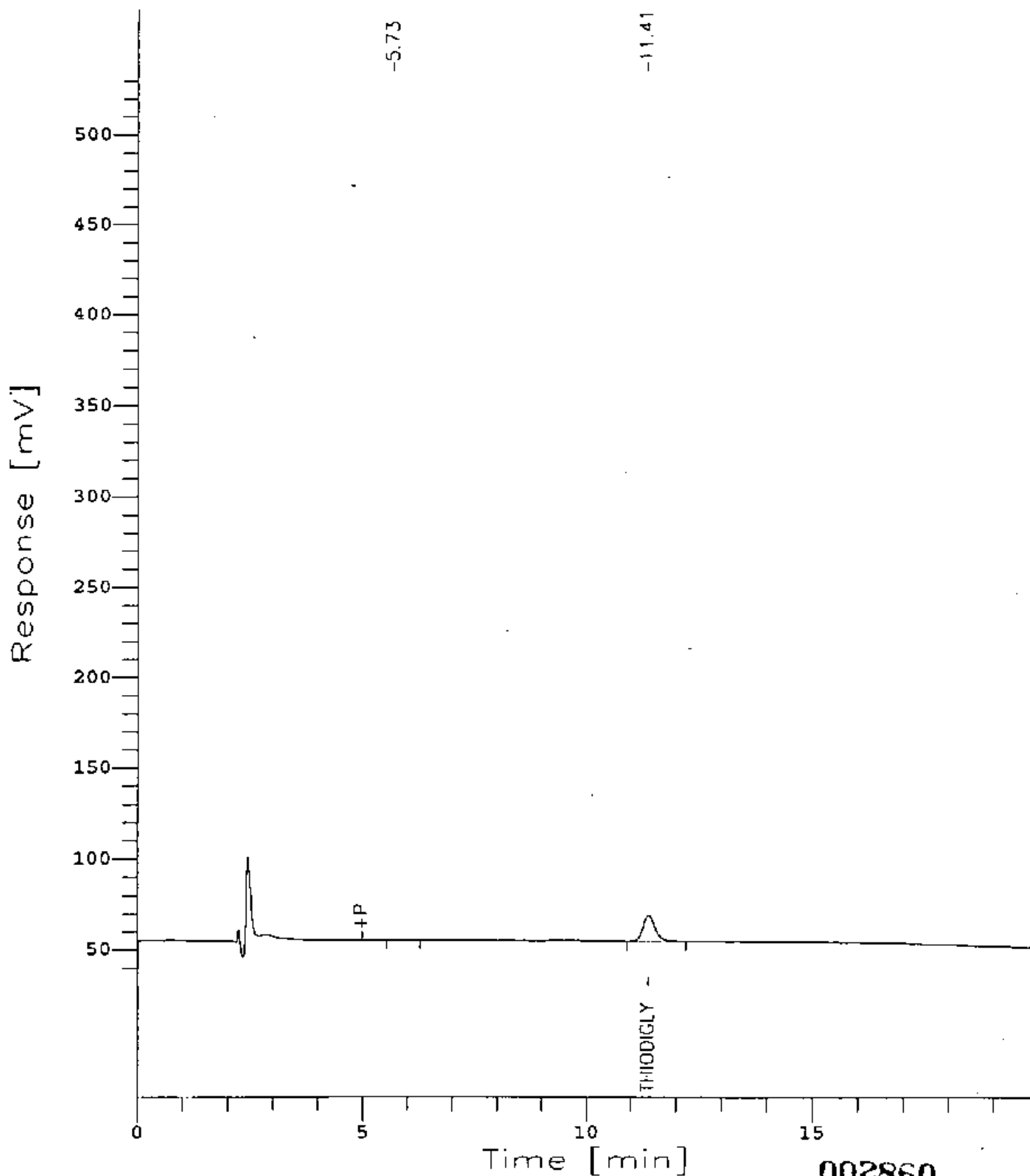
Chromatogram

51 50

Sample Name : 899901-E
FileName : c:\2700\data3\UV22004.raw
Method : tda
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 19.98 min
Plot Offset : 35 mV

Sample #: 4
Date : 12/3/93 10:43 AM
Time of Injection: 12/2/93 09:17 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : 899901-E5

Time : 12/3/93 10:43 AM

Sample Number: 5

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 09:39 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22005.RAW

Result File : C:\2700\DATA3\UW22005.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 1

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1	THIODIGLYCOL	11.535	1404762.00	74792.38	B
			1404762.00	74792.38	

=====

Chromatogram

Sample Name : 899901-E5

FileName : c:\2700\data3\UW22005.raw

Method : tdc

Start Time : 0.00 min

Scale Factor: 0.0

End Time : 19.98 min

Plot Offset: 35 mV

Sample #: 5

Date : 12/3/93 10:43 AM

Time of Injection: 12/2/93

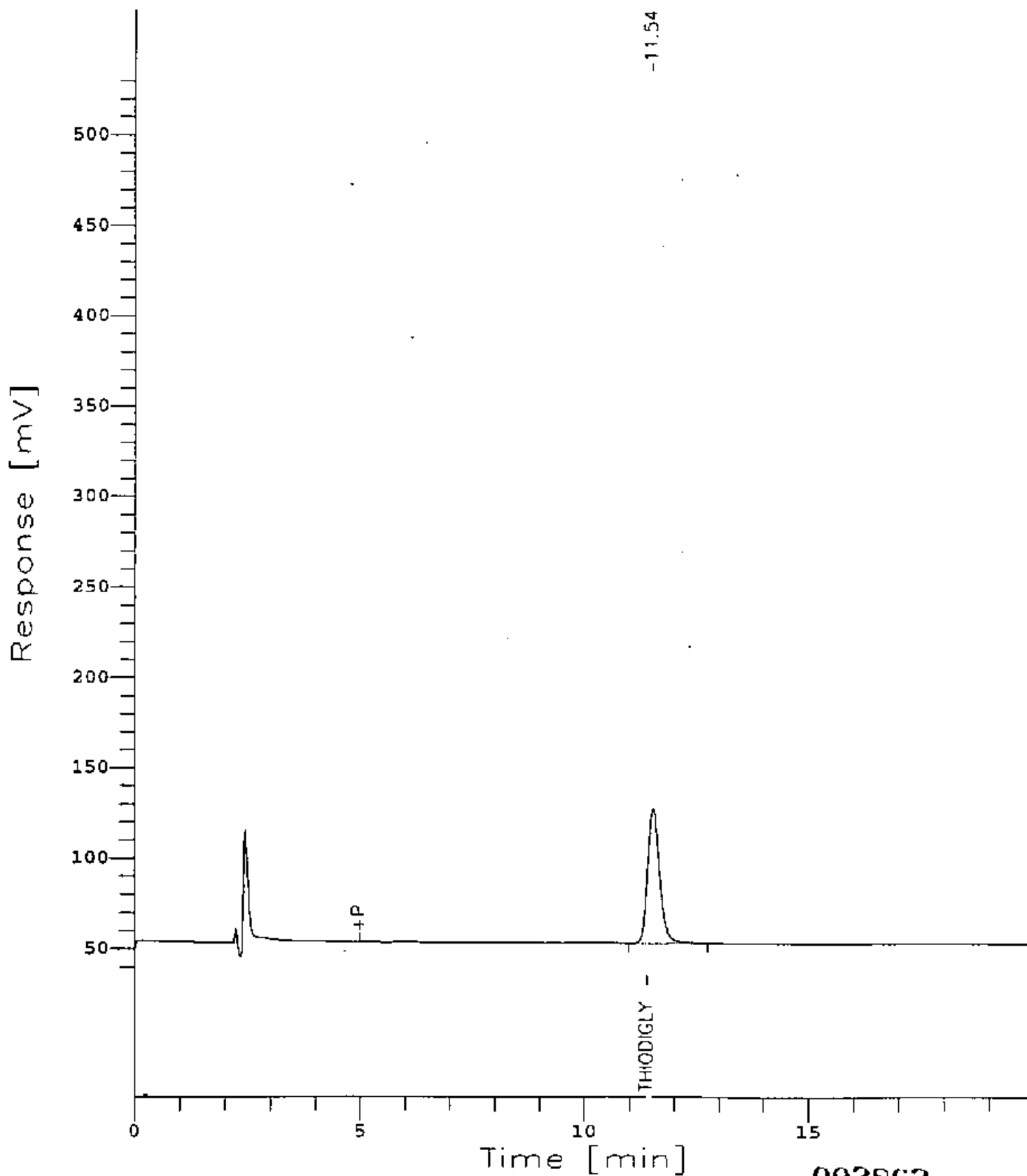
Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

09:39 PM

High Point : 535.00 mV



002862

=====

Software Version: 3.3 <4B11>

Sample Name : 899901-D

Time : 12/3/93 10:43 AM

Sample Number: 6

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 10:01 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22006.RAW

Result File : C:\2700\DATA3\UW22006.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

THIODIGLYCOL IN WATER BY UW22

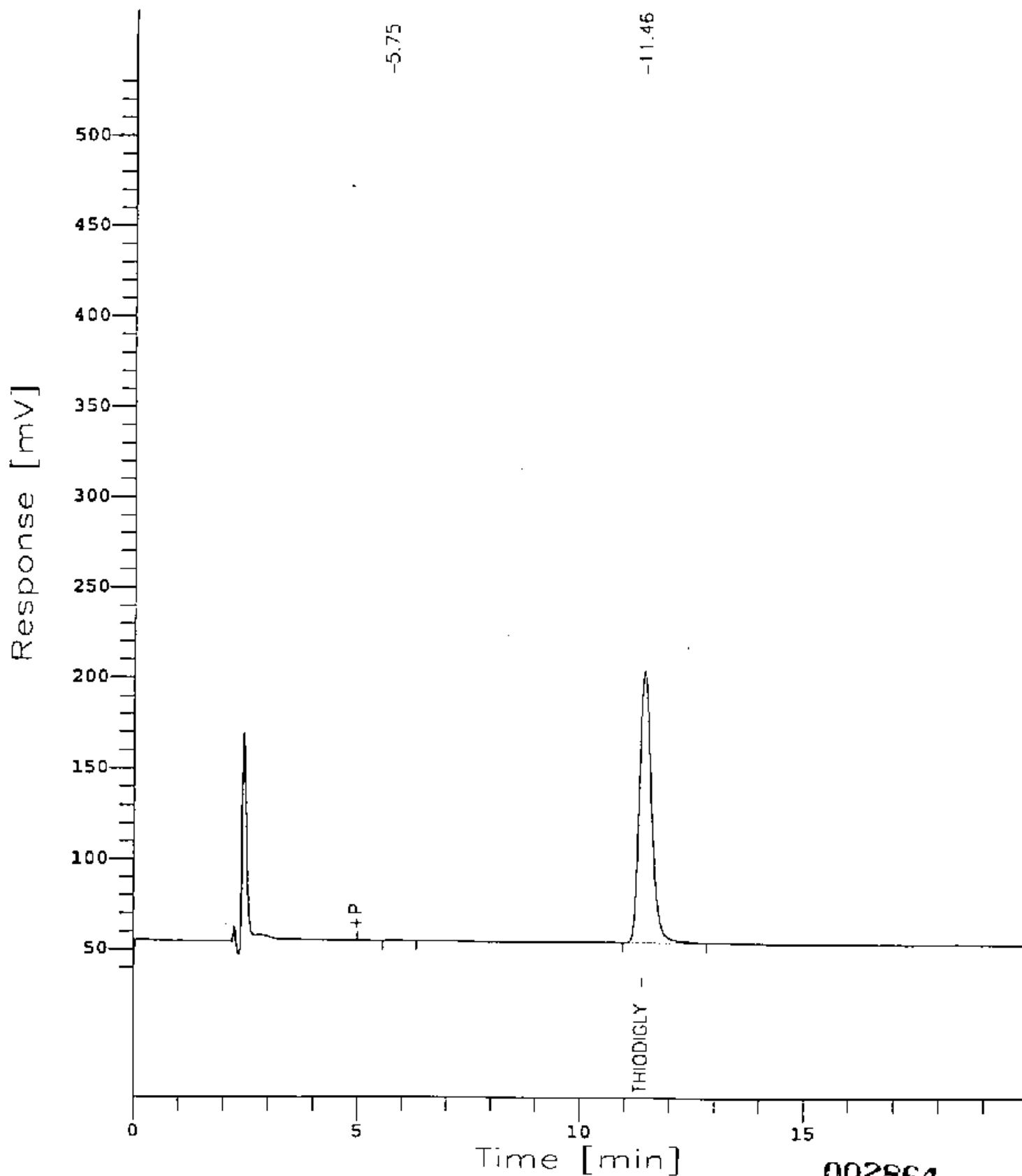
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.749	11131.00	571.24	B
2	THIODIGLYCOL	11.455	2822469.00	150578.93	B
			2833600.00	151150.17	

Sample Name : 899901-D
FileName : c:\2700\data3\UW22006.raw
Method : tdg
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 19.98 min
Plot Offset: 35 mV

Sample #: 6
Date : 12/3/93 10:43 AM
Time of Injection: 12/2/93 10:01 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV

Page 1 of 1



002864

=====

Software Version: 3.3 <4B11>

Sample Name : 899901-D2

Time : 12/3/93 10:44 AM

Sample Number: 7

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 10:23 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22007.RAW

Result File : C:\2700\DATA3\UW22007.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 1

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1	THIODIGLYCOL	11.441	5641882.00	301412.32	B
			5641882.00	301412.32	

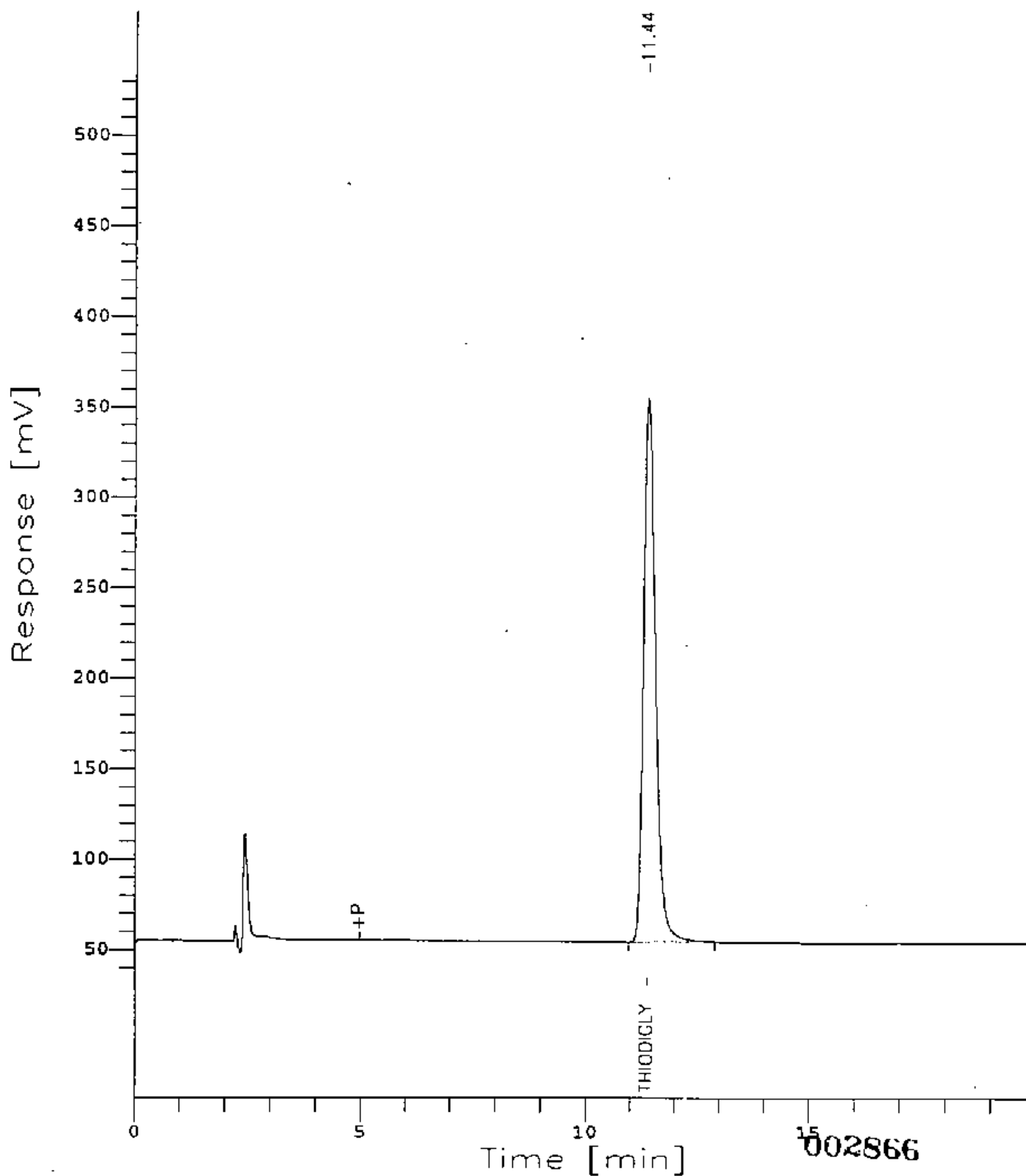
=====

Chromatogram

Sample Name : 899901-02
FileName : c:\2700\data3\UW22007.raw
Method : tdg
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 19.98 min
Plot Offset: 35 mV

Sample #: 7
Date : 12/3/93 10:44 AM
Time of Injection: 12/2/93 10:23 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV



 Software Version: 3.3 <4B11>

Sample Name : 899901-D5

Time : 12/3/93 10:44 AM

Sample Number: 8

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 10:45 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22008.RAW

Result File : C:\2700\DATA3\UW22008.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

 THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.749	11949.00	711.60	B
2	THIODIGLYCOL	11.400	14309406.00	760443.53	B
			14321355.00	761155.13	

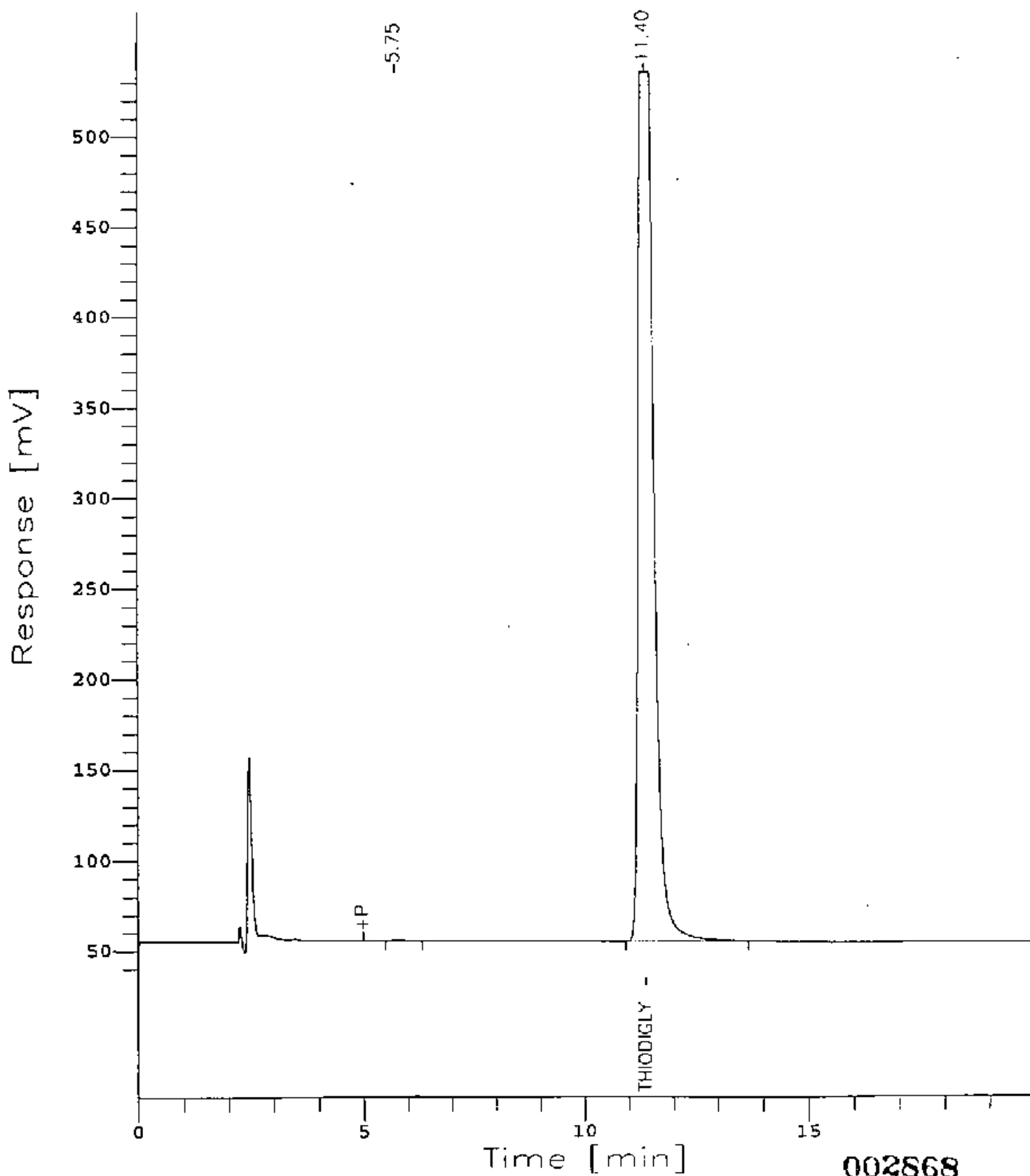
Chromatogram

Sample Name : 899901-05
FileName : c:\2700\data3\UW22008.raw
Method : rdg
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 19.98 min
Plot Offset: 35 mV

Sample #: 8
Date : 12/3/93 10:44 AM
Time of Injection: 12/2/93 10:45 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV

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002868

=====

Software Version: 3.3 <4B11>

Sample Name : CCV*120293*1

Time : 12/3/93 10:44 AM

Sample Number: 9

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 11:07 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22009.RAW

Result File : C:\2700\DATA3\UW22009.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 1

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1	THIODIGLYCOL	11.431	3054509.00	163697.20	B
			3054509.00	163697.20	

=====

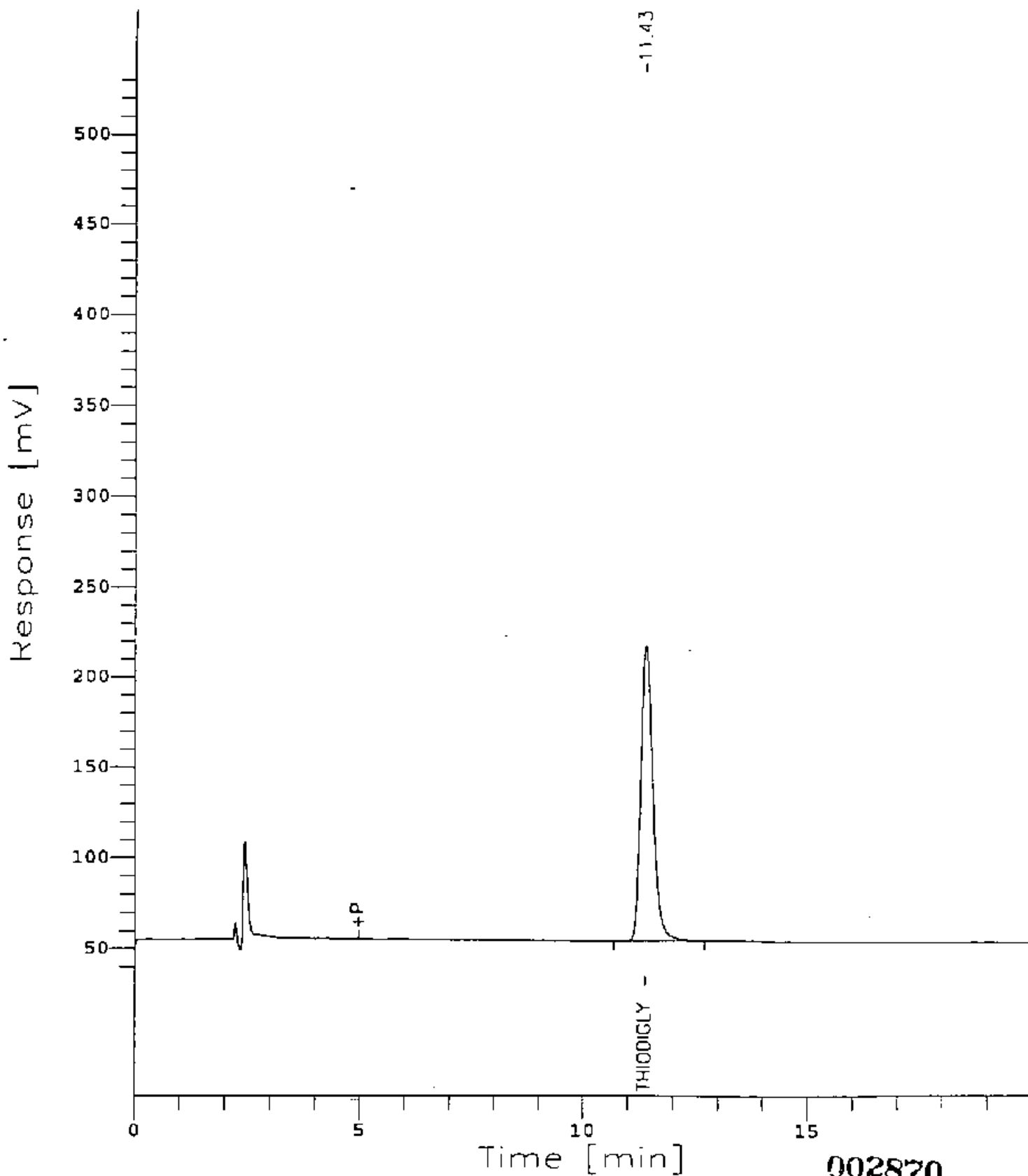
Chromatogram 51 60

Sample Name : CCV*120293*1
 FileName : c:\2700\data3\UM22009.raw
 Method : tdg
 Start Time : 0.00 min
 Scale Factor : 0.0

End Time : 19.98 min
 Plot Offset : 35 mV

Sample #: 9
 Date : 12/3/93 10:44 AM
 Time of Injection: 12/2/93 11:07 PM
 Low Point : 35.00 mV
 Plot Scale: 500.0 mV
 High Point : 535.00 mV

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ANALYSIS DATE: 12-07-93 ANALYST: CRC 3254 BATCH: G44757 PROJECT: COE HUNTSVILLE

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Sample Name	File Name	Date Of Injection	Time Of Injection	THIODIGLYCOL Ret. Time [Min]	Area
CCS*120793*1	COE-002.rst	12/7/93	06:31 PM	12.11	14961512
MB*QC*1	COE-003.rst	12/7/93	06:55 PM	-----	-----
SP1*QC*1	COE-004.rst	12/7/93	07:42 PM	12.12	664813
SP2*QC*1	COE-005.rst	12/7/93	08:29 PM	12.15	10252890
SP3*QC*1	COE-006.rst	12/7/93	09:16 PM	12.21	10322544
COOHTW*3	COE-007.rst	12/7/93	10:03 PM	-----	-----
COOHTW*4	COE-008.rst	12/7/93	10:50 PM	-----	-----
COOHTW*5	COE-009.rst	12/7/93	11:37 PM	-----	-----
COOHTW*7	COE-010.rst	12/8/93	12:24 AM	-----	-----
COOHTW*13	COE-011.rst	12/8/93	01:11 AM	-----	-----
COOHTW*35	COE-012.rst	12/8/93	01:59 AM	-----	-----
COOHTW*38	COE-013.rst	12/8/93	02:46 AM	-----	-----
COOHTW*39	COE-014.rst	12/8/93	03:33 AM	-----	-----
COOHTW*41	COE-015.rst	12/8/93	04:20 AM	-----	-----
COOHTW*42	COE-016.rst	12/8/93	05:07 AM	-----	-----
COOHTW*44	COE-017.rst	12/8/93	05:54 AM	-----	-----
CCS*120893*1	COE-018.rst	12/8/93	06:41 AM	12.23	14399738
MB*QC*2	COE-019.rst	12/8/93	07:28 AM	-----	-----
SP1*QC*2	COE-020.rst	12/8/93	08:15 AM	12.14	607015
SP2*QC*2	COE-021.rst	12/8/93	09:02 AM	12.06	9635650
SP3*QC*2	COE-022.rst	12/8/93	09:49 AM	12.44	10227927
COOHTW*9	COE-023.rst	12/8/93	10:36 AM	-----	-----
COOHTW*10	COE-024.rst	12/8/93	11:24 AM	-----	-----
COOHTW*11	COE-025.rst	12/8/93	12:11 PM	-----	-----
COOHTW*12	COE-026.rst	12/8/93	12:58 PM	-----	-----
CCS*120893*2	COE-027.rst	12/8/93	01:45 PM	12.28	15472435
Averages				12.19	9616058
%RSD				0.93	57.94

ASCII File Created Successfully - Stored in: C:\HUNT1.prn

002871

Sequence File : C:\2700\DATA3\COEHUNT.seq
 Created by : CRC on : 12/7/93 01:29 PM
 Edited by : on : 12/8/93 09:49 AM
 Number Of Times Edited : 5

Sequence File Header Information:

Study Name : COE HUNTSVILLE
 Segment Interface : YES
 Number of Cycles : 51
 Instrument Type : 760 / 900 Series Intelligent Interface
 Injection Type : SINGLE

Cycle	Sample Name	Sample Number	Site	Rack	Vial	Sequence Sample Descriptions		Inj. Volume	Dil. Factor	Mult	Divisor	Addend	Inst File	Output Device
						Sample Amount	ISTD Amount							
1	MOBILE PHASE BLK	1	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
2	CCS*120793*1	2	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
3	MB*QC*1	3	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
4	SP1*QC*1	4	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
5	SP2*QC*1	5	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
6	SP3*QC*1	6	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
7	CDDMTW*3	7	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
8	CDDMTW*4	8	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
9	CDDMTW*5	9	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
10	CDDMTW*7	10	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
11	CDDMTW*13	11	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
12	CDDMTW*35	12	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
13	CDDMTW*38	13	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
14	CDDMTW*39	14	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
15	CDDMTW*41	15	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
16	CDDMTW*42	16	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
17	CDDMTW*44	17	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
18	CCS*120893*1	18	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
19	MB*QC*2	19	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
20	SP1*QC*2	20	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
21	SP2*QC*2	21	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
22	SP3*QC*2	22	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
23	CDDMTW*9	23	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
24	CDDMTW*10	24	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
25	CDDMTW*11	25	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
26	CDDMTW*12	26	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
27	CCS*120893*2	27	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
28	MB*QC*3	28	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
29	SP1*QC*3	29	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
30	SP2*QC*3	30	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
31	SP3*QC*3	31	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
32	CDDMTW*48	32	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
33	CDDMTW*49	33	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
34	CDDMTW*50	34	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
35	CDDMTW*51	35	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
36	CCS*120893*3	36	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
37	MB*QC*4	37	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
38	SP1*QC*4	38	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
39	SP2*QC*4	39	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
40	SP3*QC*4	40	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
41	CDDMTW*8	41	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
42	CDDMTW*14	42	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
43	CDDMTW*15	43	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
44	CDDMTW*29	44	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
45	CDDMTW*32	45	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
46	CDDMTW*37	46	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
47	CDDMTW*45	47	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
48	CDDMTW*46	48	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
49	CDDMTW*47	49	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
50	CCS*120893*4	50	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
51	CCS*120893*5	51	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:

=====

Software Version: 3.3 <4B11>

Sample Name : MOBILE PHASE BLK

Sample Number: 1

Operator : CRC

Time : 12/7/93 06:31 PM

Study : COE HUNTSVILLE

Instrument : SYSTEM_0

AutoSampler : NONE

Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 3105270506 Data Acquisition Time: 12/7/93 06:09 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-001.RAW

Result File : C:\2700\DATA3\COE-001.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\coehunt.seq

Inj. Volume : 1 ul

Sample Amount : 1.0000

Area Reject : 125000.000000

Dilution Factor : 1.00

Noise Threshold: 75

Multiplier : 1.0000

Area Threshold : 300

Divisor : 1.0000

Bunch Factor: 5

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 0

=====

THIODIGLYCOL IN WATER BY UW22

No Peaks Available To Report

002873

Chromatogram

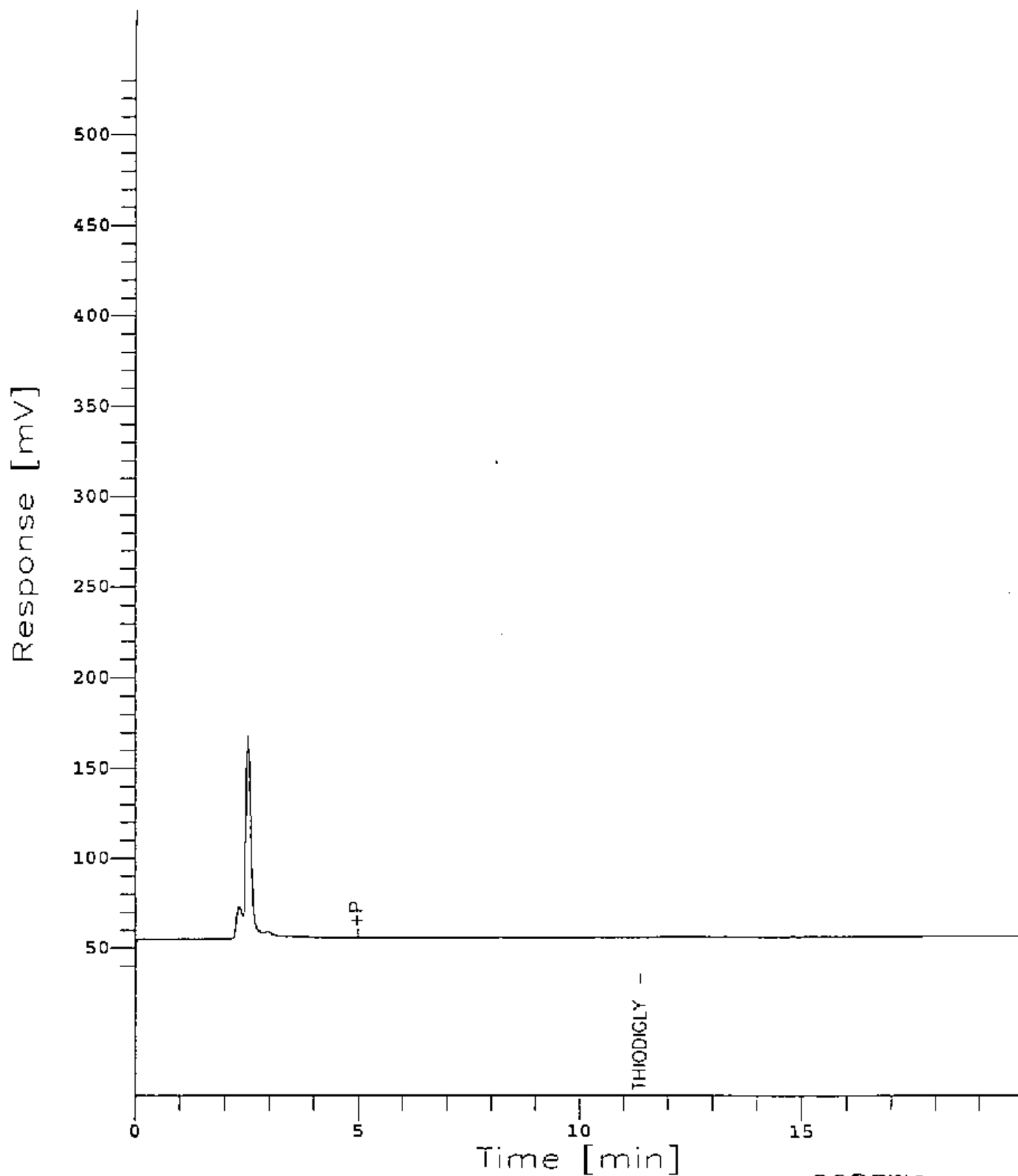
51 64

Sample Name : MOBILE PHASE BLK
FileName : c:\2700\data3\COE-001.raw
Method : tdg
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 20.00 min
Plot Offset : 35 mV

Sample #: 1
Date : 12/7/93 06:31 PM
Time of Injection: 12/7/93 06:09 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV

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=====

Software Version: 3.3 <4B11>

Sample Name : CCS*120793*1

Time : 12/7/93 06:51 PM

Sample Number: 2

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/7/93 06:31 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-002.RAW

Result File : C:\2700\DATA3\COE-002.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
3	THIODIGLYCOL	12.110	14961511.50	737047.93	B
			14961511.50	737047.93	

=====

Sample Name : CCS*120793*1

FileName : c:\2700\data3\COE-002.raw

Method : tdg.ins

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset: 35 mV

Sample #: 2

Date : 12/7/93 06:51 PM

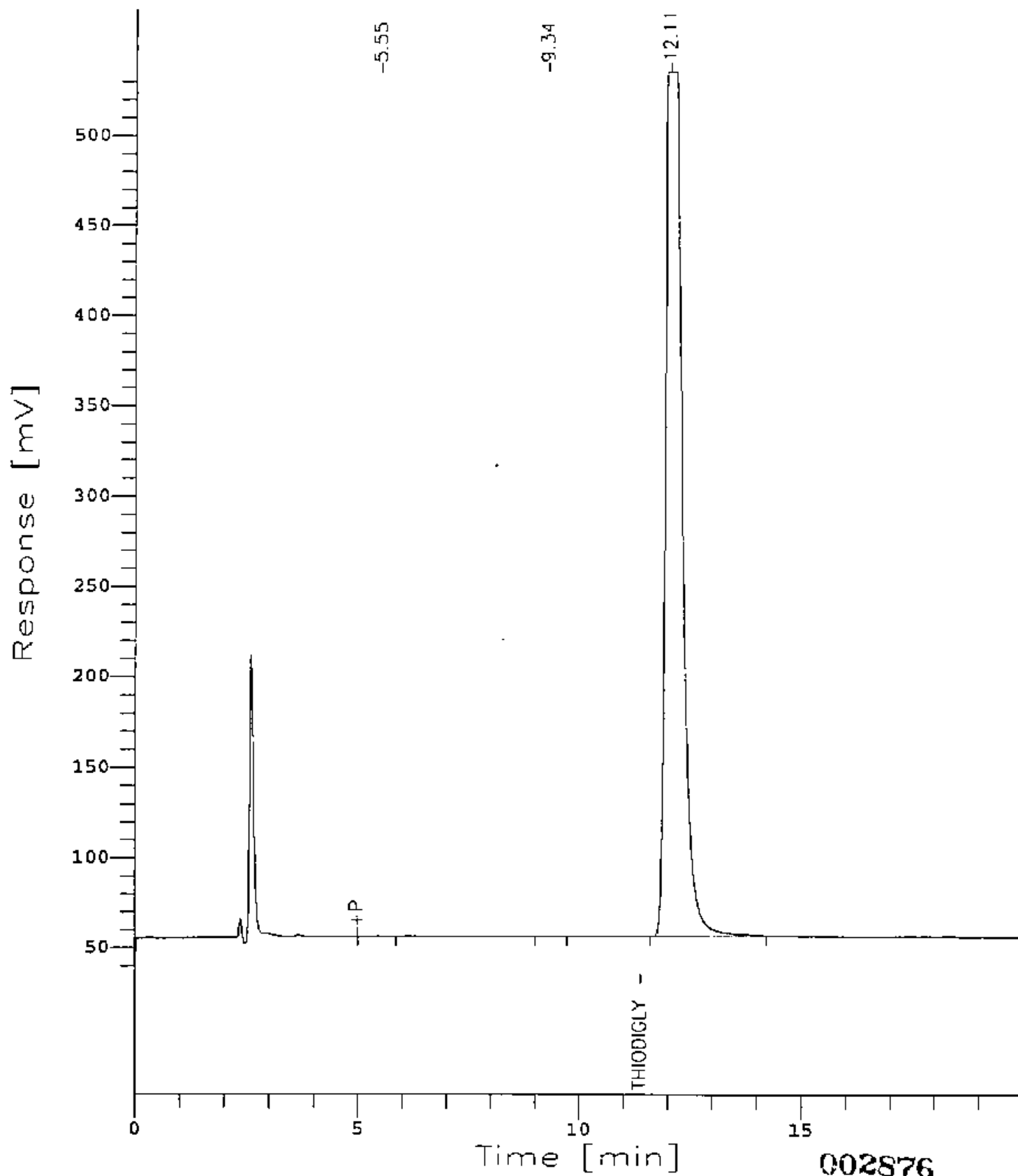
Time of Injection: 12/7/93 06:31 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

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High Point : 535.00 mV



002876

=====

Software Version: 3.3 <4B11>

Sample Name : MB*QC*1

Time : 12/7/93 07:15 PM

Sample Number: 3

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/7/93 06:55 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-003.RAW

Result File : C:\2700\DATA3\COE-003.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

No Peaks Available To Report

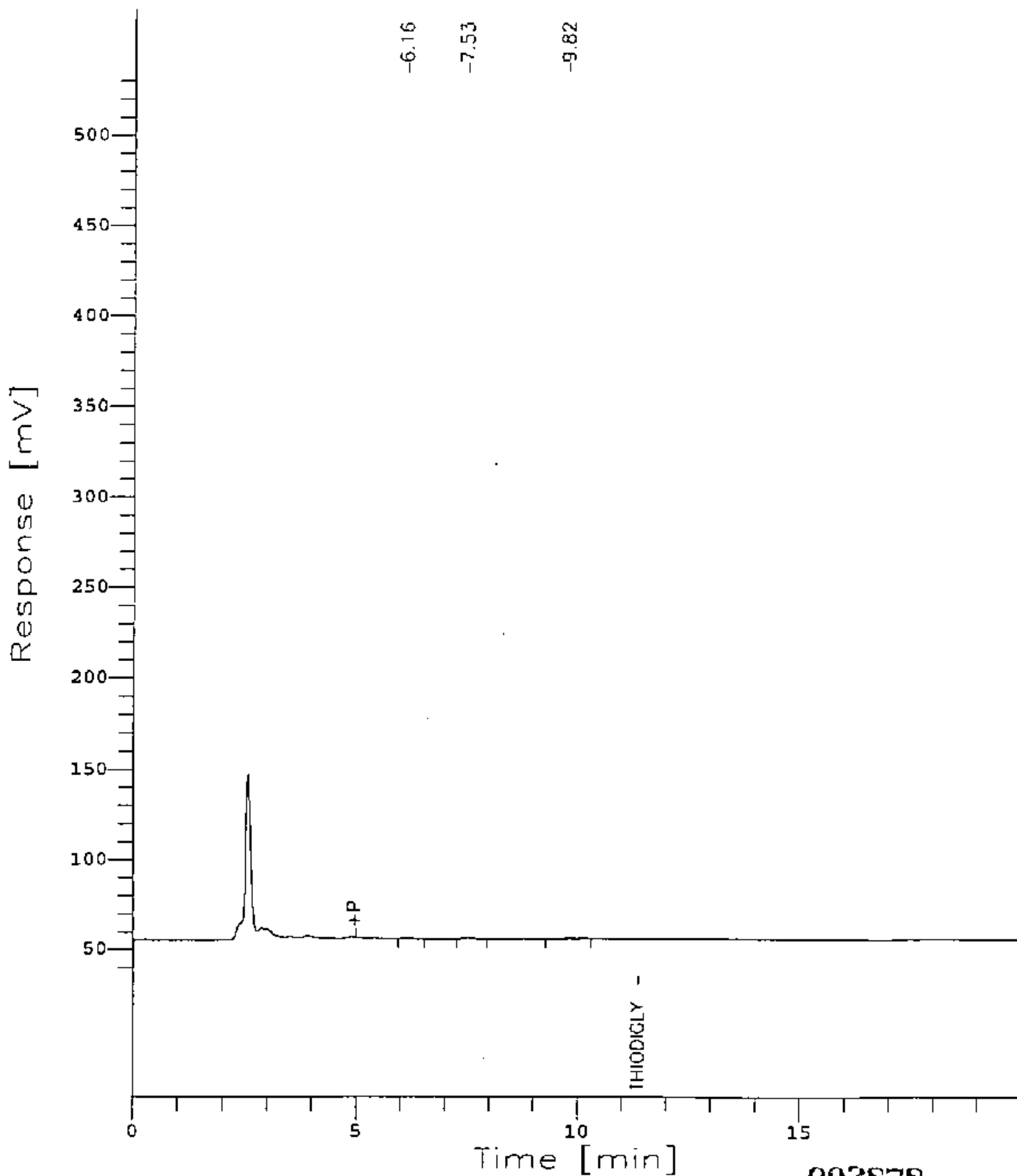
002877

Sample Name : NB*QC*1
 FileName : c:\2700\data3\COE-003.raw
 Method : tdg.ins
 Start Time : 0.00 min
 Scale Factor: 0.0

End Time : 20.00 min
 Plot Offset: 35 mV

Sample #: 3
 Date : 12/7/93 07:15 PM
 Time of Injection: 12/7/93 06:55 PM
 Low Point : 35.00 mV
 Plot Scale: 500.0 mV

Page 1 of 1
 High Point : 535.00 mV



002878

=====

Software Version: 3.3 <4B11>

Sample Name : SP1*QC*1

Time : 12/7/93 08:02 PM

Sample Number: 4

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/7/93 07:42 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-004.RAW

Result File : C:\2700\DATA3\COE-004.RST

Instrument File: c:\2700\data3\tdg.ina

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEO

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
3	THIODIGLYCOL	12.122	664813.00	32680.80	B
			664813.00	32680.80	

=====

Sample Name : SP1*0C*1

FileName : c:\2700\data3\CDE-004.raw

Method : tdg.ins

Start Time : 0.00 min

Scale Factor: 0.0

End Time : 20.00 min

Plot Offset: 35 mV

Sample #: 4

Date : 12/7/93 08:02 PM

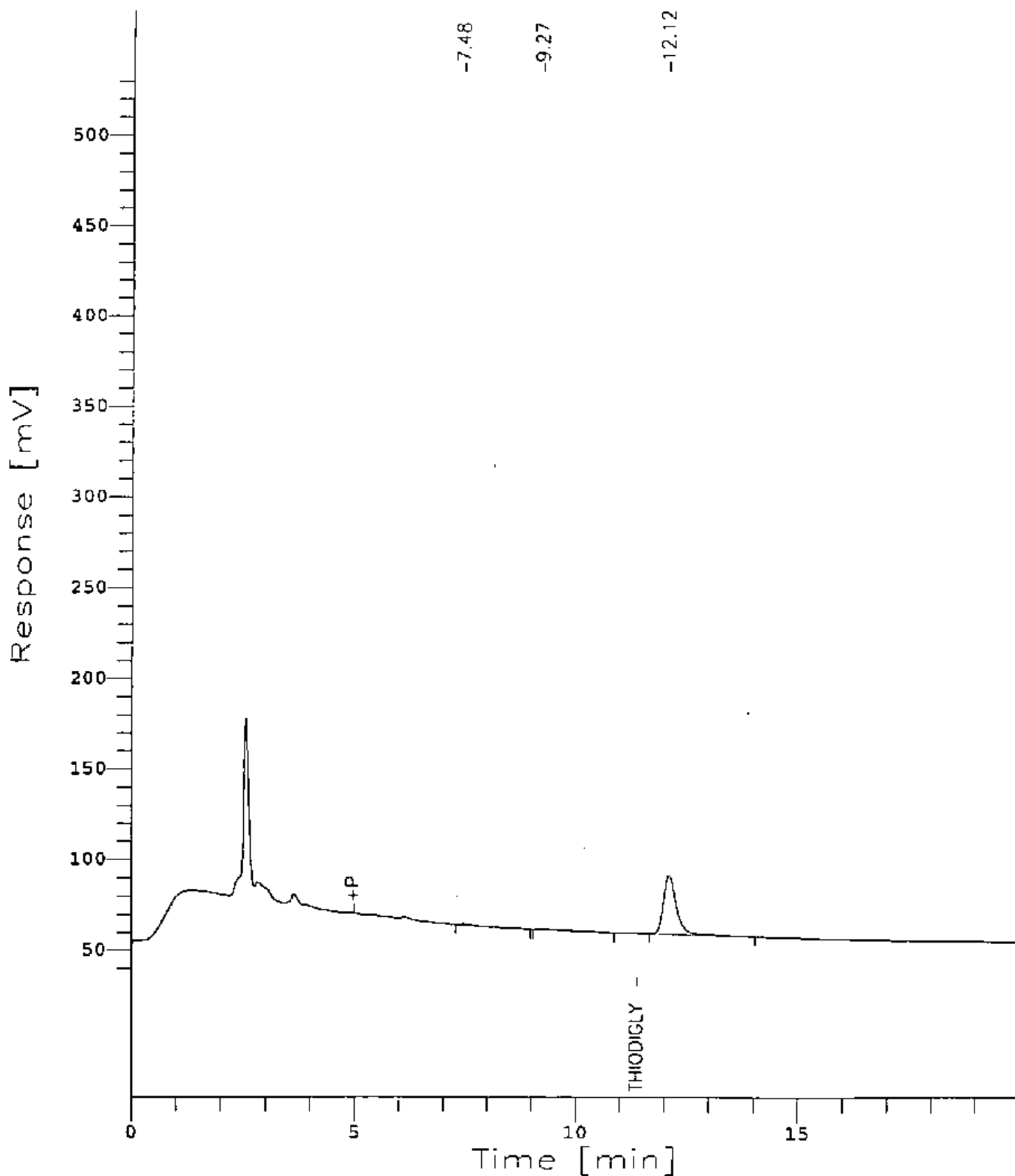
Time of Injection: 12/7/93 07:42 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002880

=====

Software Version: 3.3 <4B11>

Sample Name : SP2+QC*1

Time : 12/8/93 02:44 PM

Sample Number: 5

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/7/93 08:29 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-005.RAW

Result File : C:\2700\DATA3\COE-005.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
3	THIODIGLYCOL	12.153	10252890.00	507931.09	B
			10252890.00	507931.09	

=====

Sample Name : SP2*QC*1

FileName : c:\2700\data3\COE-005.raw

Method : tdg.lna

Start Time : 0.00 min

Scale Factor: 0.0

End Time : 20.00 min

Plot Offset: 35 mV

Sample #: 5

Date : 12/7/93 08:49 PM

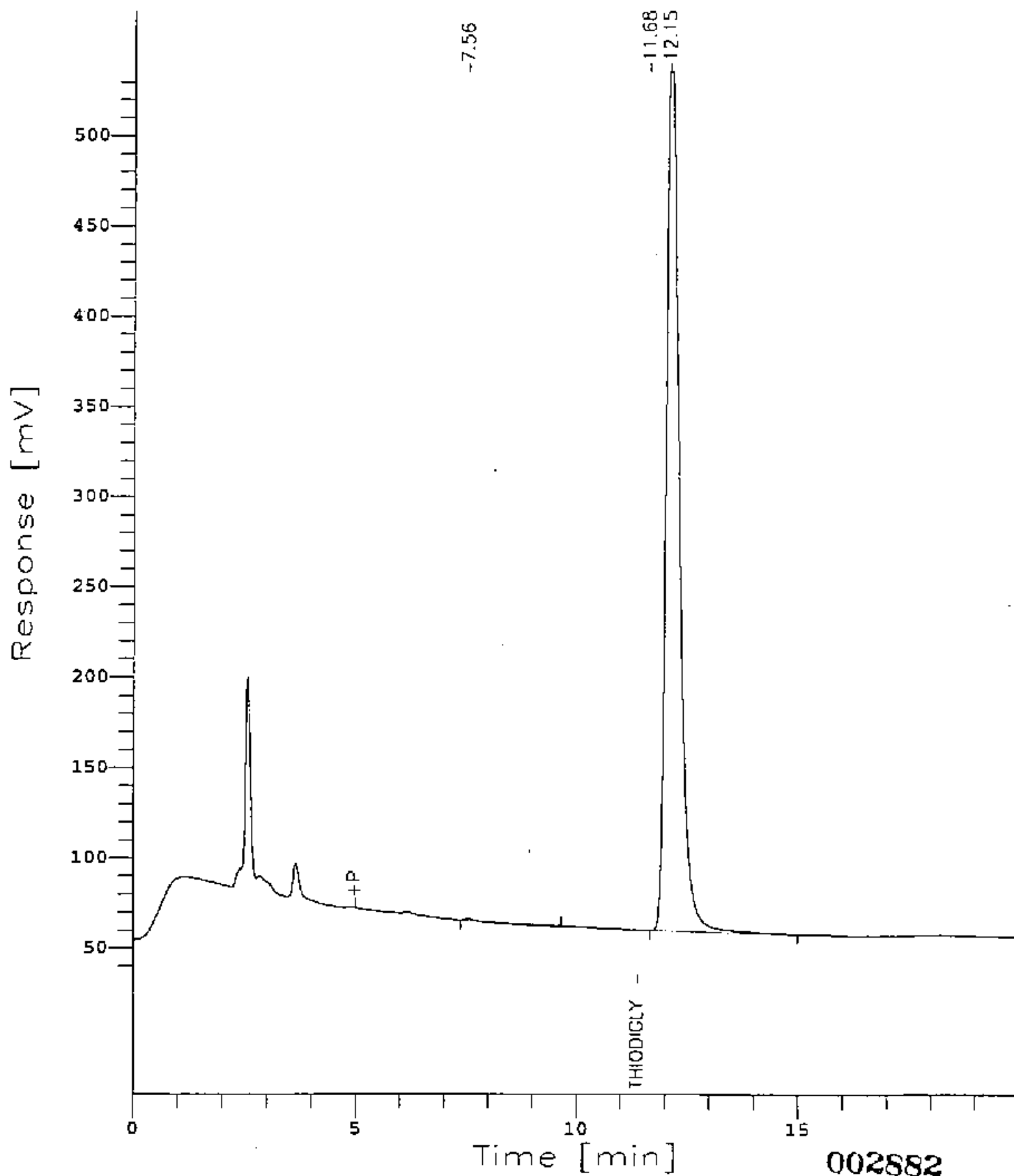
Time of Injection: 12/7/93 08:29 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : SP3*QC*1

Time : 12/7/93 09:36 PM

Sample Number: 6

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/7/93 09:16 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-006.RAW

Result File : C:\2700\DATA3\COE-006.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 6

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
6	THIODIGLYCOL	12.208	10322544.00	503907.71	B
			10322544.00	503907.71	

=====

Sample Name : SP3*QC*1

FileName : c:\2700\data3\COE-006.raw

Method : tdg.ins

Start Time : 0.00 min

Scale factor: 0.0

End Time : 20.00 min

Plot Offset: 35 mV

Sample #: 6

Date : 12/7/93 09:36 PM

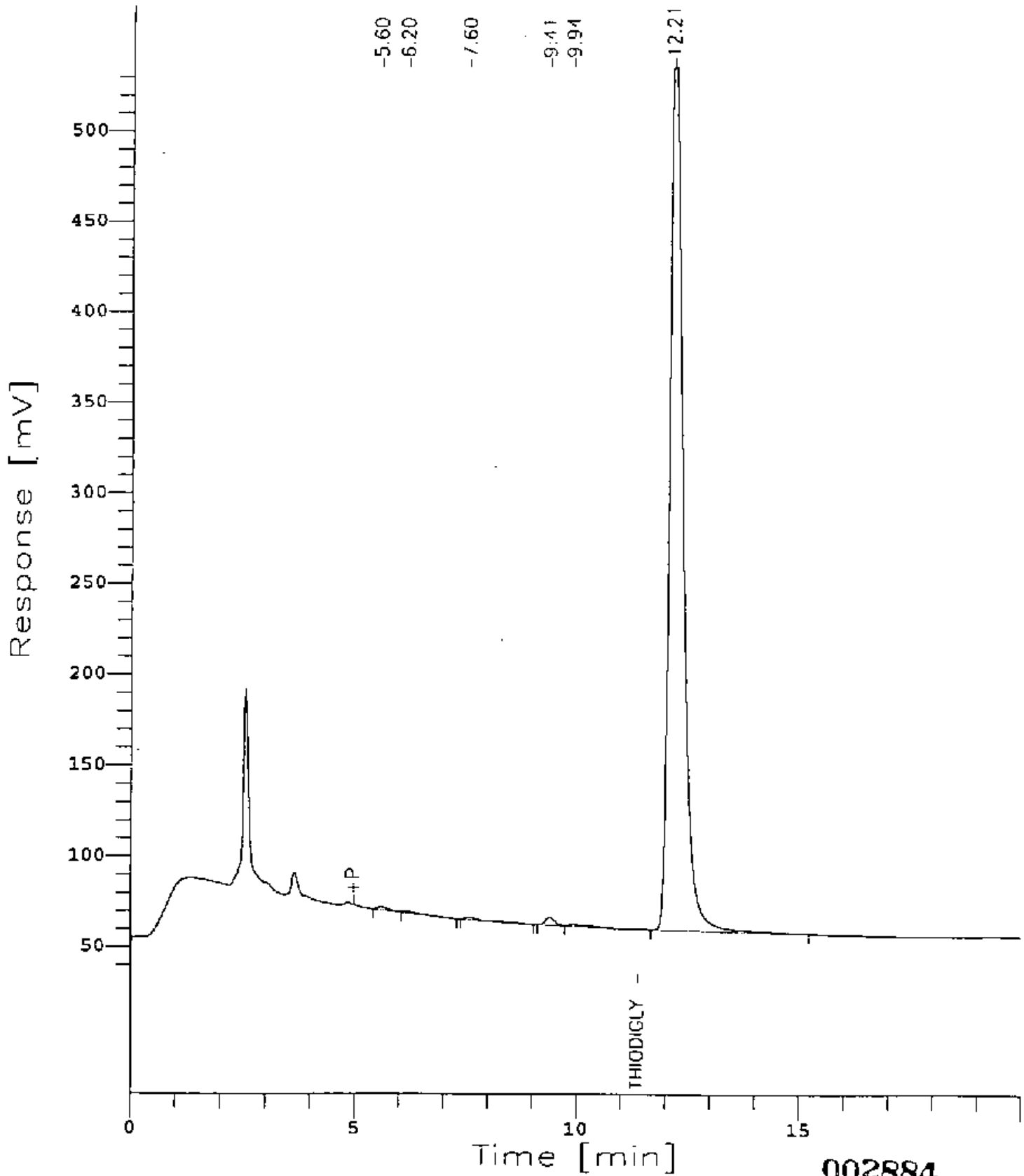
Time of Injection: 12/7/93 09:16 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002884

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*3

Time : 12/7/93 10:23 PM

Sample Number: 7

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/7/93 10:03 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-007.RAW

Result File : C:\2700\DATA3\COE-007.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.661	4539839.47	400636.94	B
2		12.400	315137.47	-1.36e-12	V
			4854976.93	400636.94	

=====

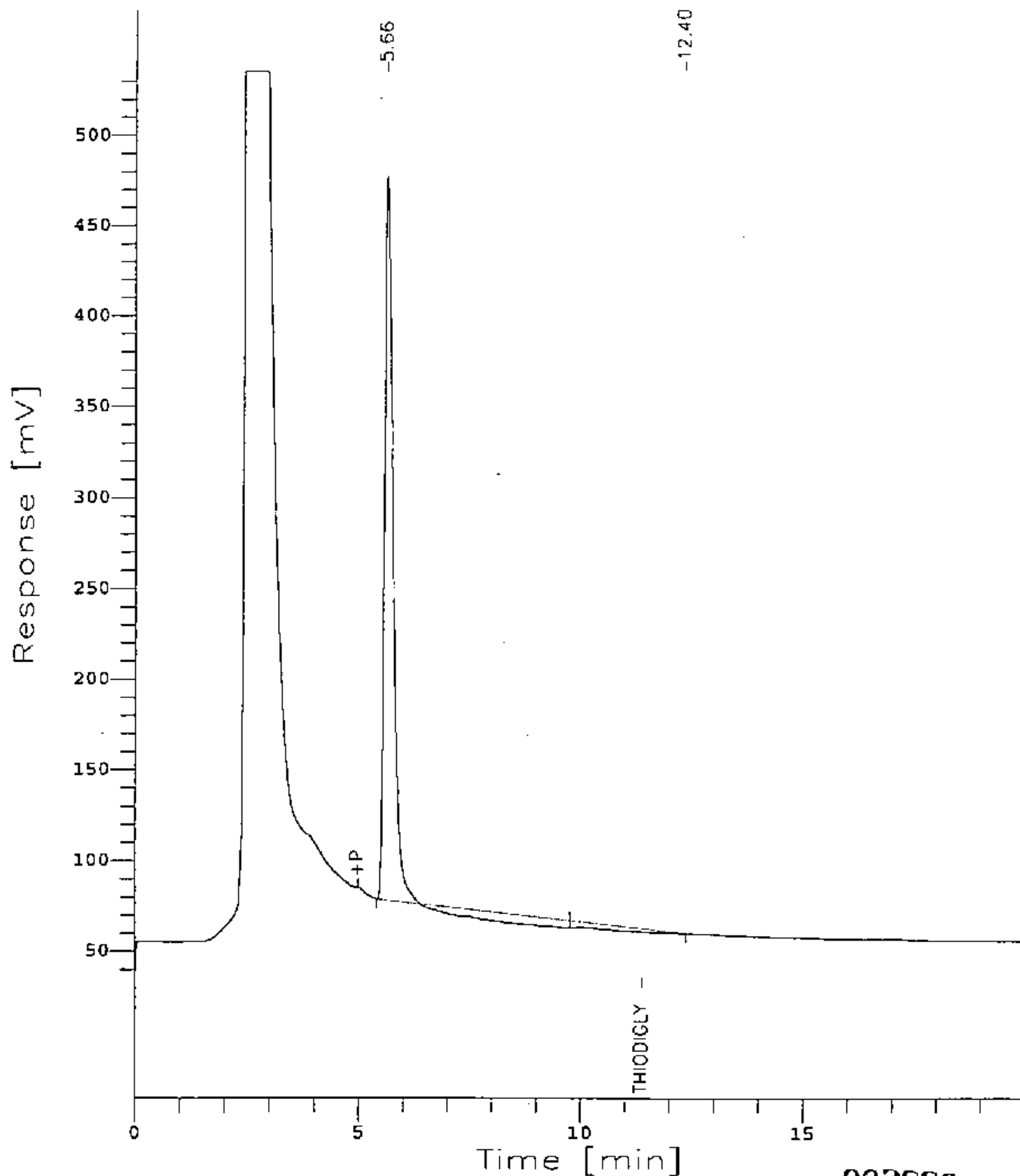
Sample Name : CDDMTW*3
FileName : c:\2700\data3\COE-007.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 20.00 min
Plot Offset: 35 mV

Sample #: 7
Date : 12/7/93 10:23 PM
Time of Injection: 12/7/93 10:03 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002886

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*4

Time : 12/7/93 11:10 PM

Sample Number: 8

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/7/93 10:50 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-008.RAW

Result File : C:\2700\DATA3\COE-008.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

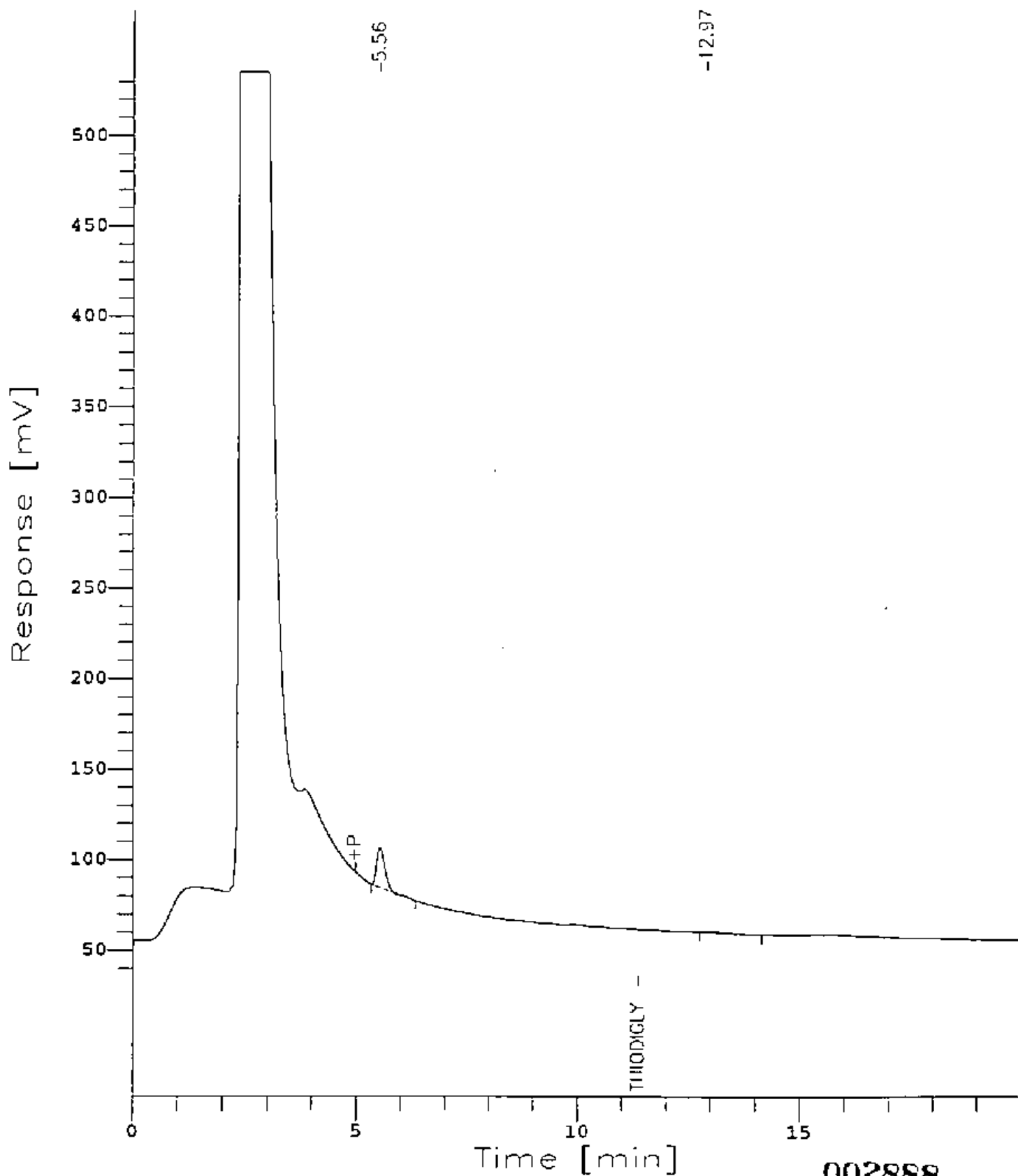
THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.556	276232.50	22218.18	B
			276232.50	22218.18	

=====

Sample Name : CDDHTW*4
FileName : c:\2700\data3\COE-008.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor: 0.0
End Time : 20.00 min
Plot Offset: 35 mV

Sample #: 8
Date : 12/7/93 11:10 PM
Time of Injection: 12/7/93 10:50 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV



002888

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*5

Time : 12/7/93 11:57 PM

Sample Number: 9

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/7/93 11:37 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-009.RAW

Result File : C:\2700\DATA3\COE-009.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.577	541445.00	39992.68	B
			541445.00	39992.68	

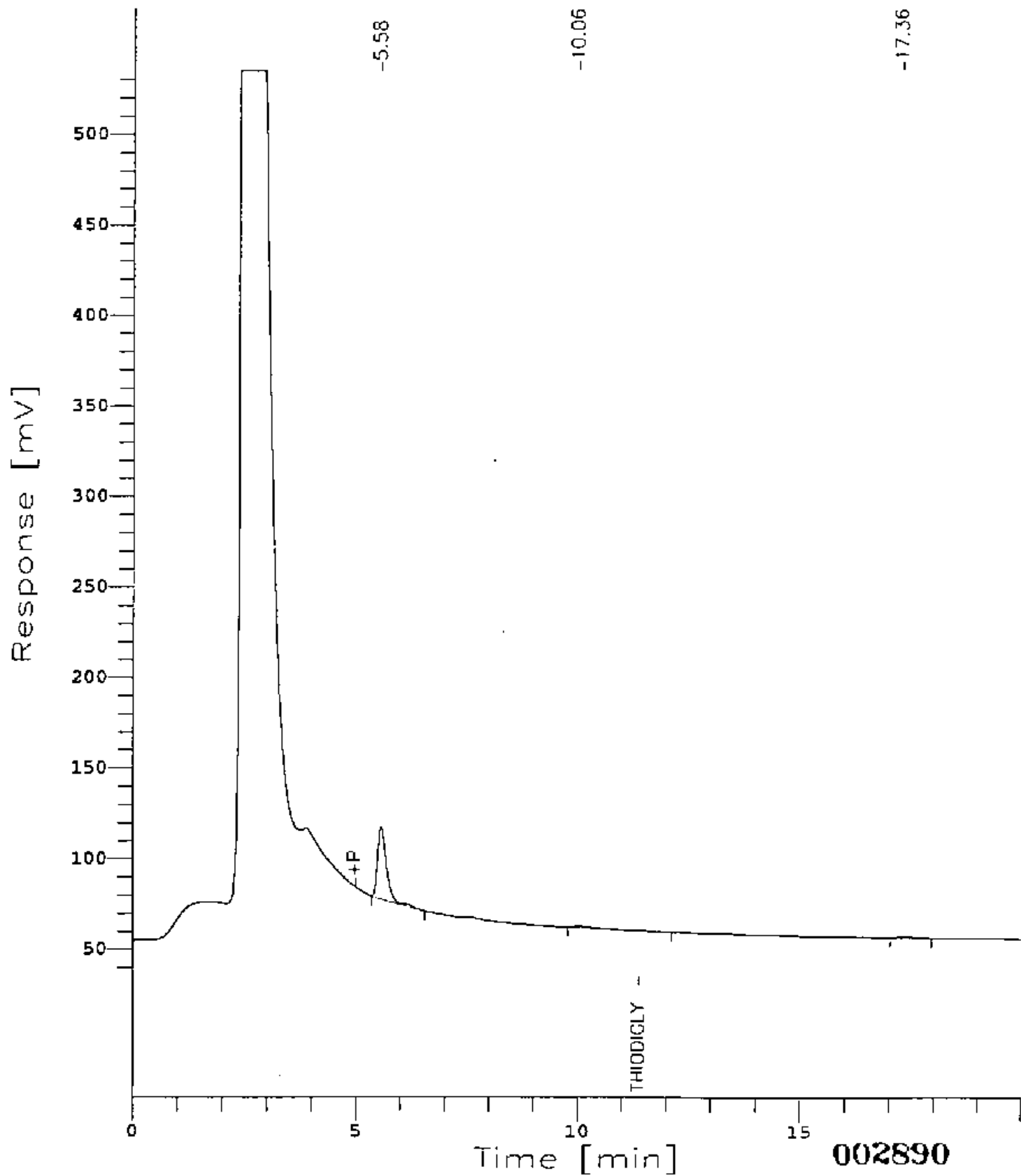
=====

Chromatogram

Sample Name : CDBMTw*5
FileName : c:\2700\data3\COE-009.raw
Method : tdp.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 20.00 min
Plot Offset: 35 mV

Sample #: 9
Date : 12/7/93 11:57 PM
Time of Injection: 12/7/93 11:37 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
Page 1 of 1
High Point : 535.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*7

Sample Number: 10

Operator : CRC

Time : 12/8/93 12:44 AM

Study : COE HUNTSVILLE

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 12:24 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-010.RAW

Result File : C:\2700\DATA3\COE-010.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800 .

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.578	2314224.00	165899.56	B
			2314224.00	165899.56	

=====

Chromatogram

51 82

Sample Name : CDDX1W7

FileName : c:\2700\data3\CDE-D10.raw

Method : tdg.ins

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset : 35 mV

Sample #: 10

Date : 12/8/93 12:44 AM

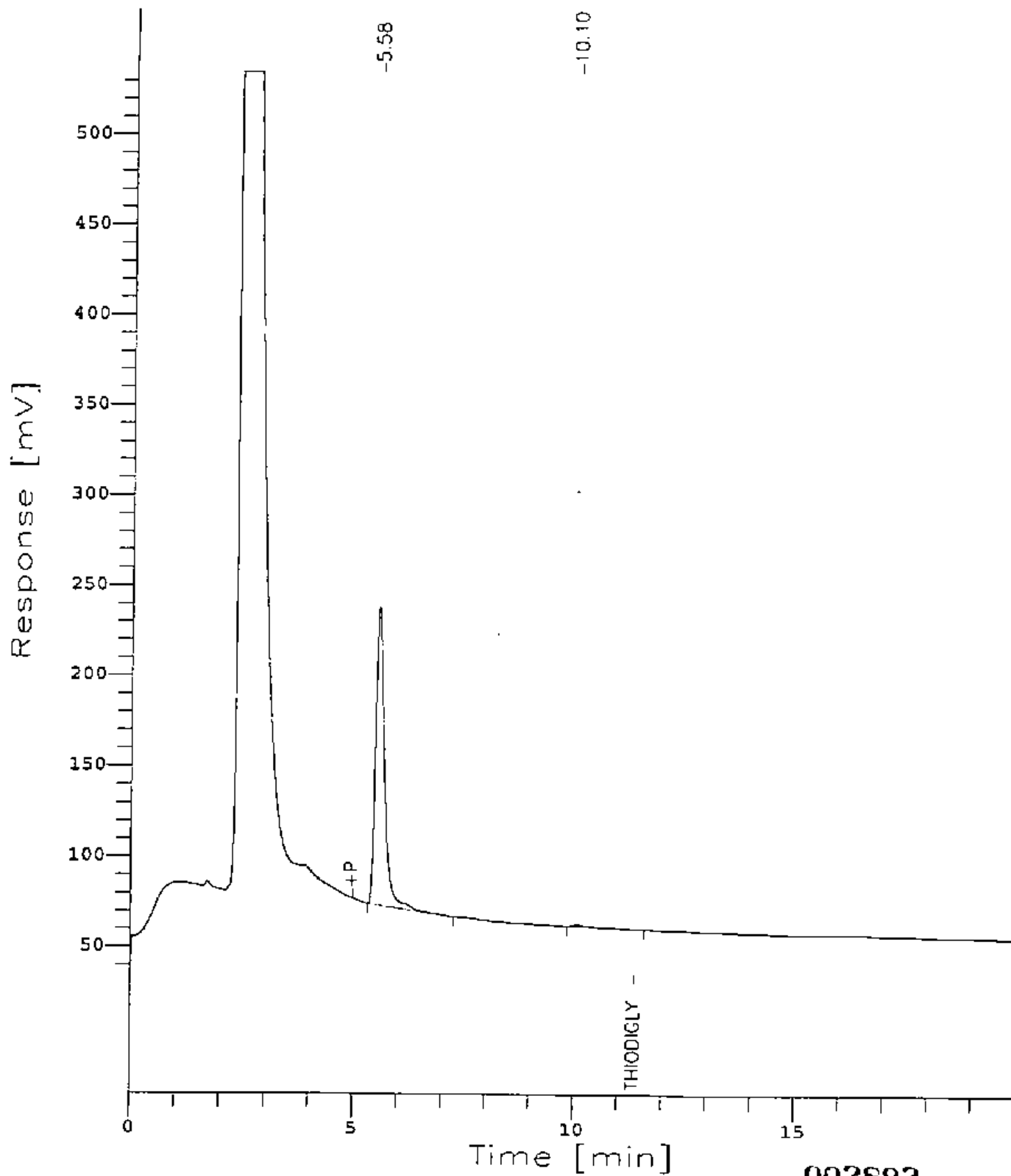
Time of Injection: 12/8/93 12:24 AM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002892

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*13

Time : 12/8/93 02:49 PM

Sample Number: 11

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 01:11 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-011.RAW

Result File : C:\2700\DATA3\COE-011.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\coehunt.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

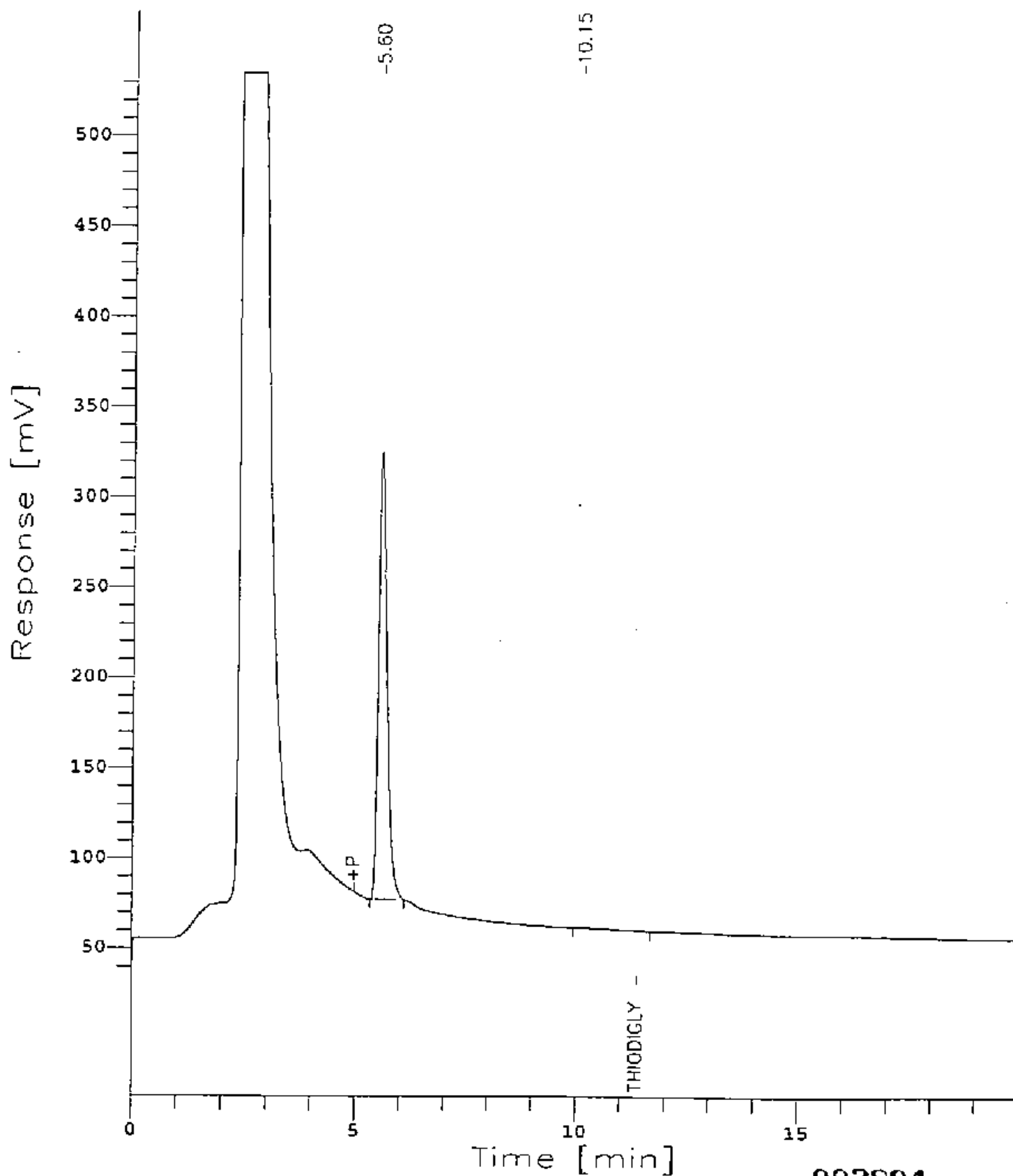
THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.600	3301824.00	248378.16	*B
			3301824.00	248378.16	

=====

Sample Name : CD0MTW*13
FileName : C:\2700\DATA3\CDE-011.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor : 0.0
End Time : 20.00 min
Plot Offset : 35 mV

Sample #: 11
Date : 12/8/93 02:49 PM
Time of Injection: 12/8/93 01:11 AM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV



002894

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*35

Time : 12/8/93 02:19 AM

Sample Number: 12

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 01:59 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-012.RAW

Result File : C:\2700\DATA3\COE-012.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800 .

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

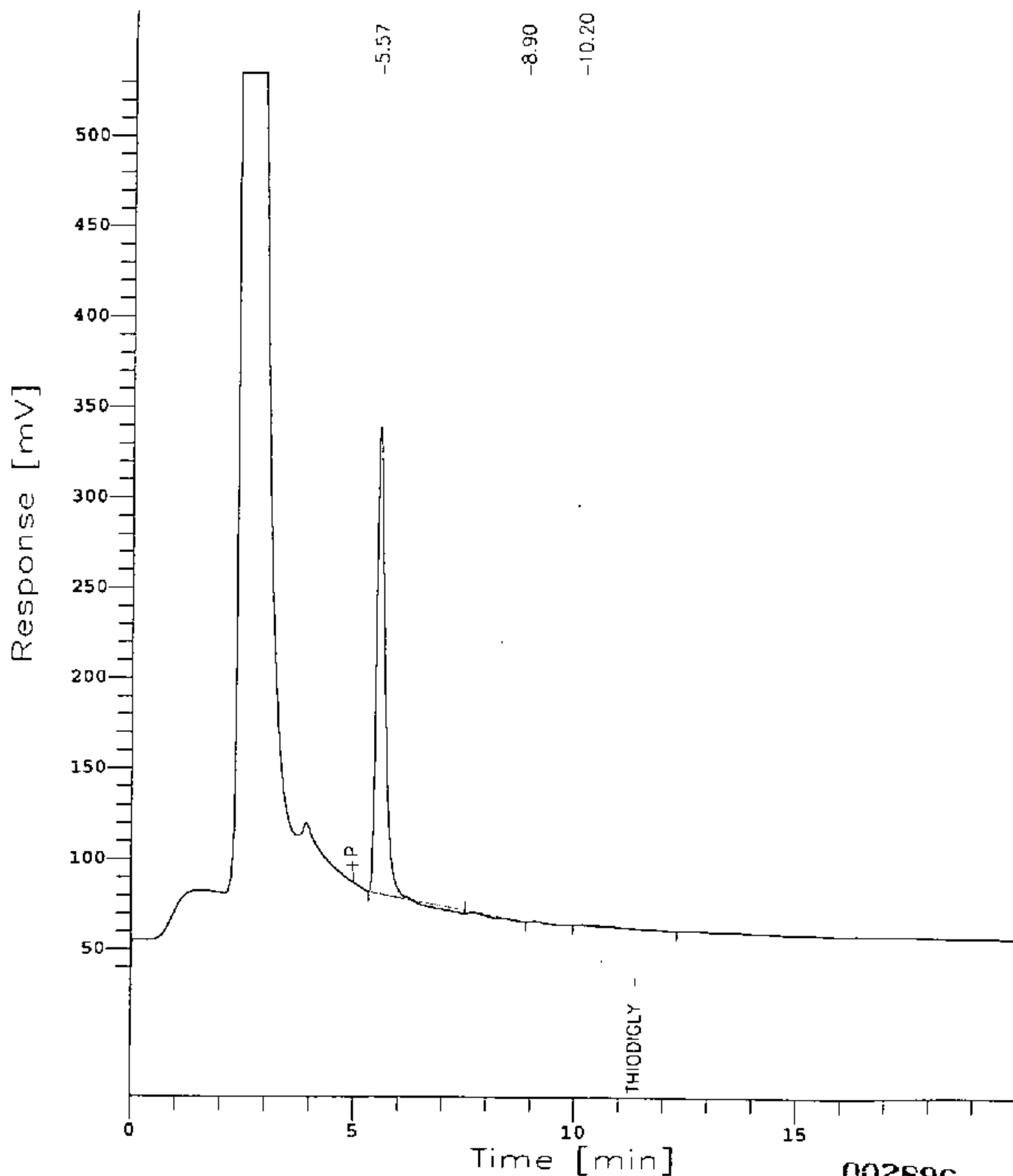
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.573	3359885.54	259480.14	B
			3359885.54	259480.14	

=====

Sample Name : CDDMTW*35
FileName : c:\2700\data3\CDE-012.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 20.00 min
Plot Offset : 35 mV

Sample #: 12
Date : 12/8/93 02:19 AM
Time of Injection: 12/8/93 01:59 AM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV



002896

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*38

Time : 12/8/93 03:06 AM

Sample Number: 13

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 02:46 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-013.RAW

Result File : C:\2700\DATA3\COE-013.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

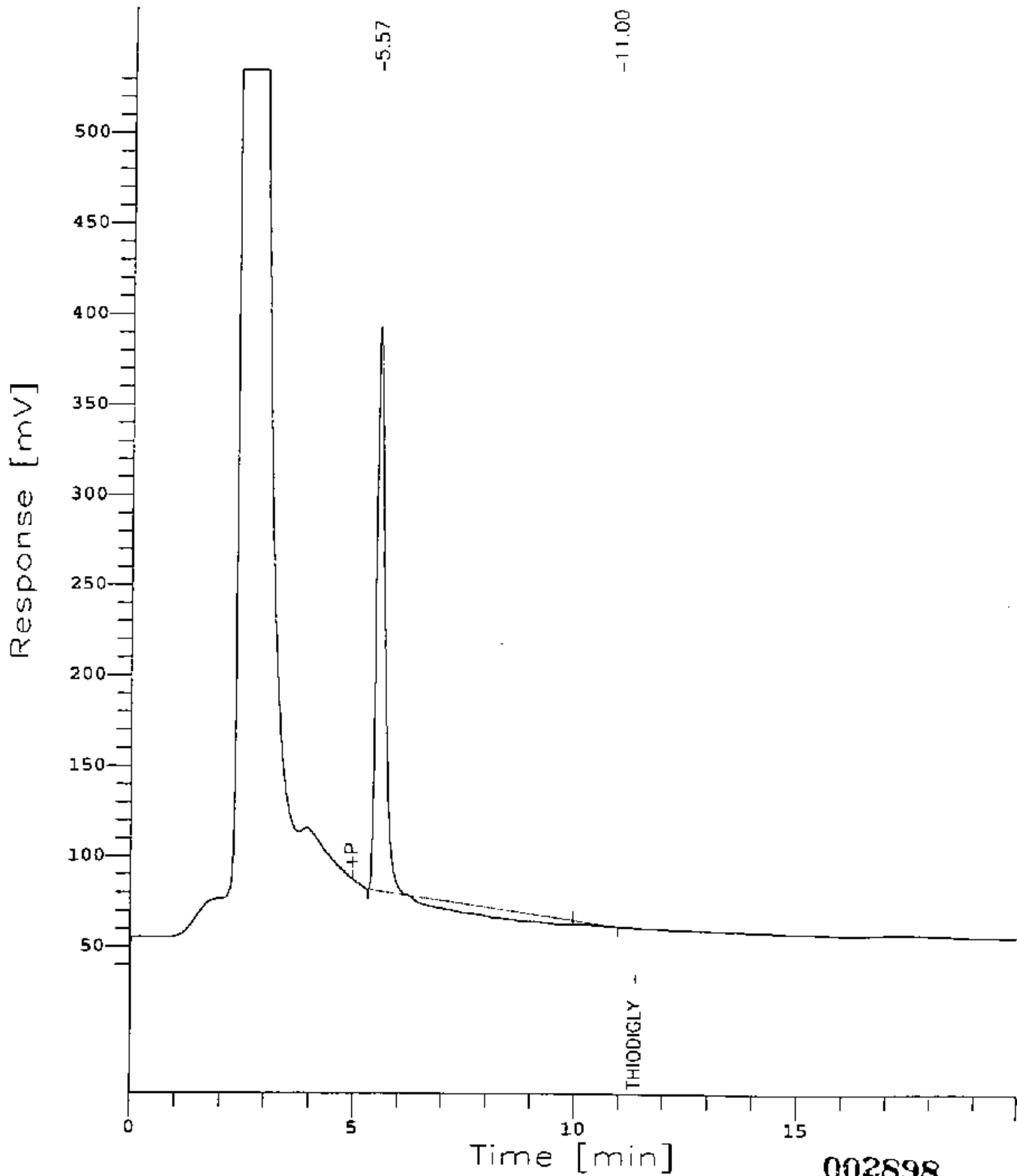
=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.574	3237000.95	314183.69	B
			3237000.95	314183.69	

Sample Name : CDDMTM*38
FileName : c:\2700\data3\COE-013.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor: 0.0
End Time : 20.00 min
Plot Offset: 35 mV

Sample #: 13
Date : 12/8/93 03:06 AM
Time of Injection: 12/8/93 02:46 AM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV



002898

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*39

Time : 12/8/93 03:53 AM

Sample Number: 14

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 03:33 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-014.RAW

Result File : C:\2700\DATA3\COE-014.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.590	506327.00	39529.71	B
			506327.00	39529.71	

=====

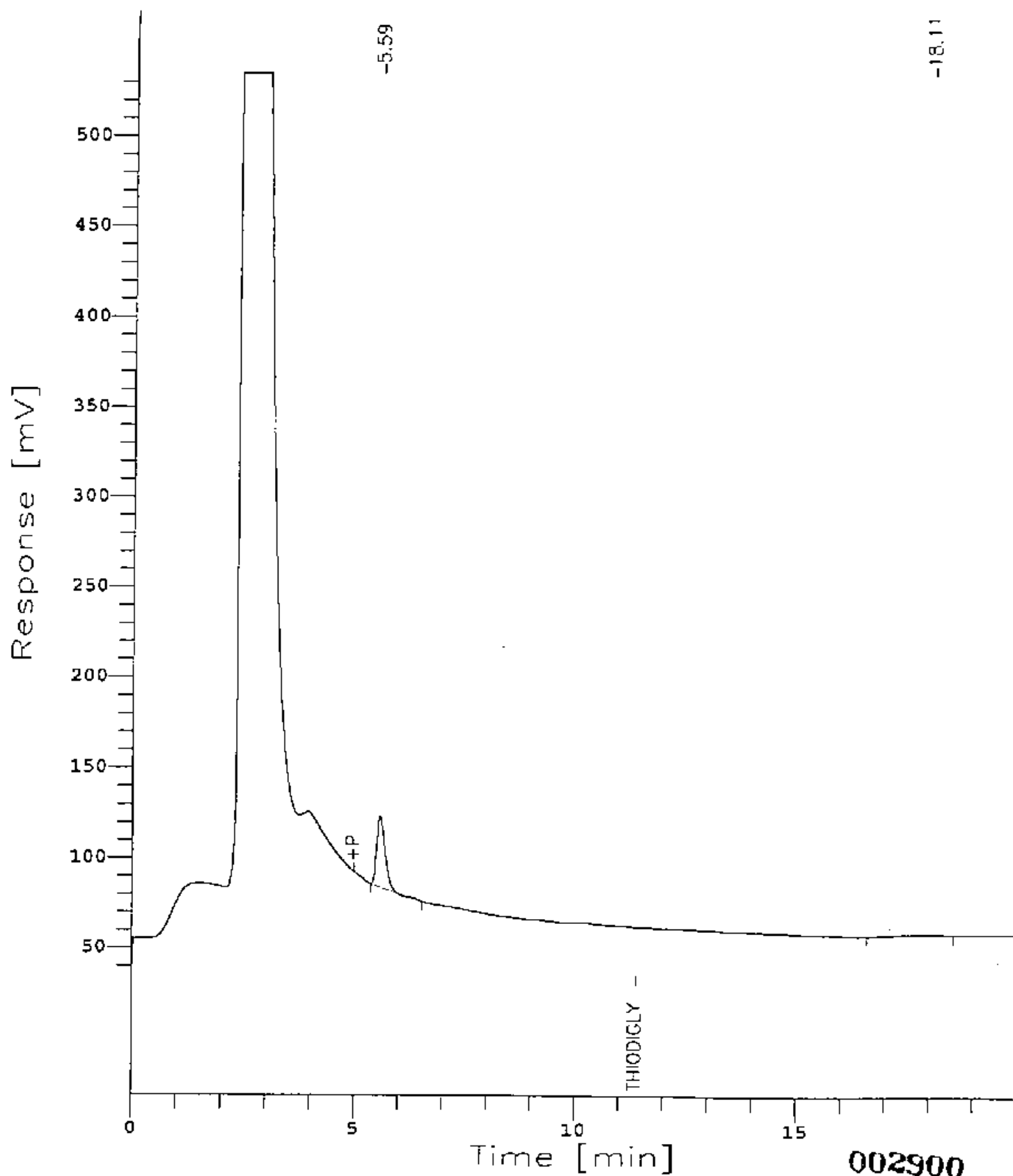
Sample Name : CDDMTW39
FileName : c:\2700\data3\CDE-014.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 20.00 min
Plot Offset: 35 mV

Sample #: 14
Date : 12/8/93 03:53 AM
Time of Injection: 12/8/93 03:33 AM
Low Point : 35.00 mV
Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*41

Time : 12/8/93 04:40 AM

Sample Number: 15

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 04:20 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-015.RAW

Result File : C:\2700\DATA3\COE-015.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.713	2978213.00	234797.48	B
			2978213.00	234797.48	

=====

Sample Name : CDDMTM41

FileName : c:\2700\data3\CDE-015.raw

Method : rdg.ins

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset: 35 mV

Sample #: 15

Date : 12/8/93 04:40 AM

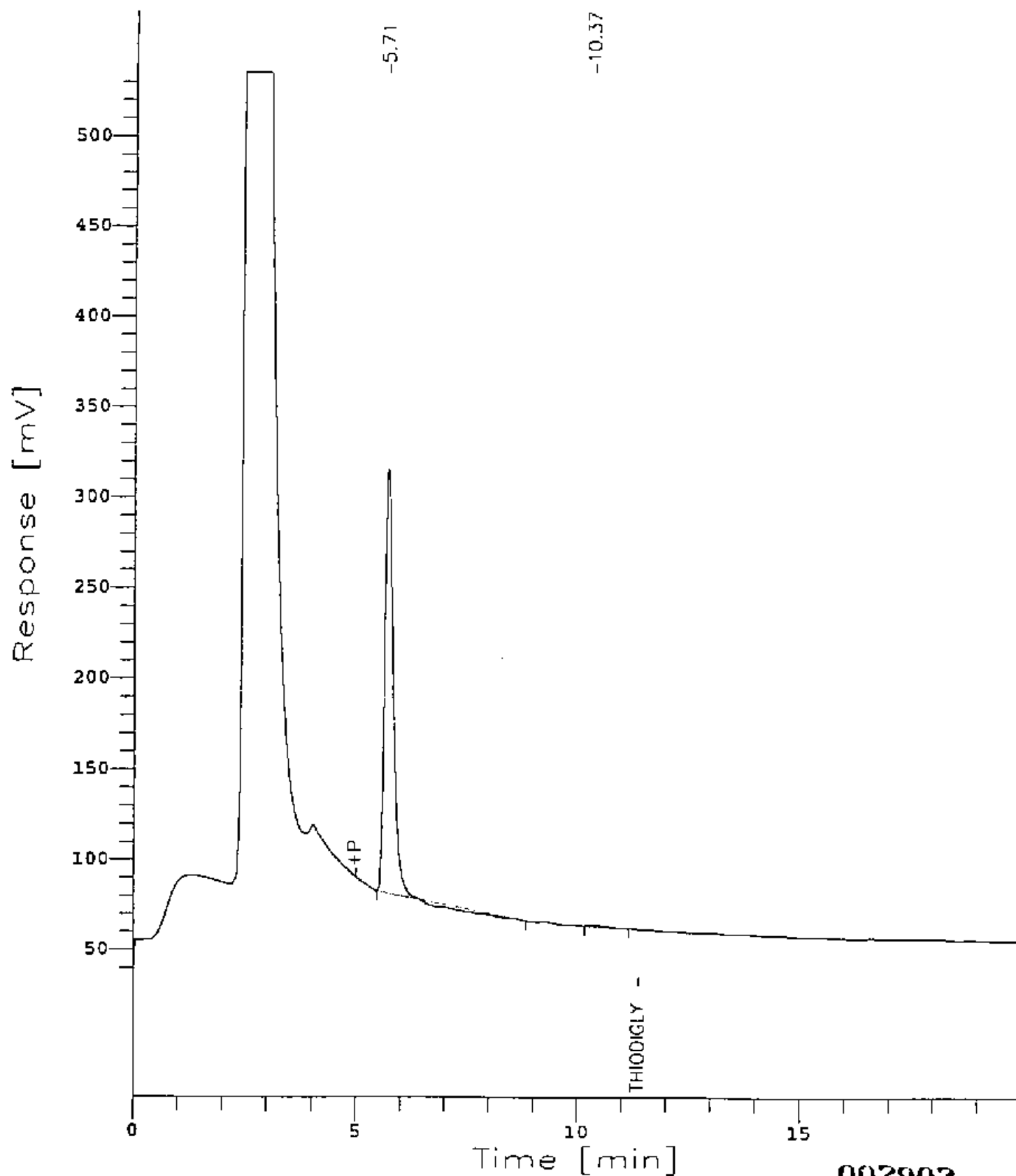
Time of Injection: 12/8/93 04:20 AM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002902

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*42

Time : 12/8/93 05:27 AM

Sample Number: 16

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 05:07 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-016.RAW

Result File : C:\2700\DATA3\COE-016.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.598	553324.00	42197.00	B
			553324.00	42197.00	

=====

Sample Name : CDOMTW42

FileName : c:\2700\data3\COE-016.raw

Method : kdq.ins

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset : 35 mV

Sample #: 16

Date : 12/8/93 05:27 AM

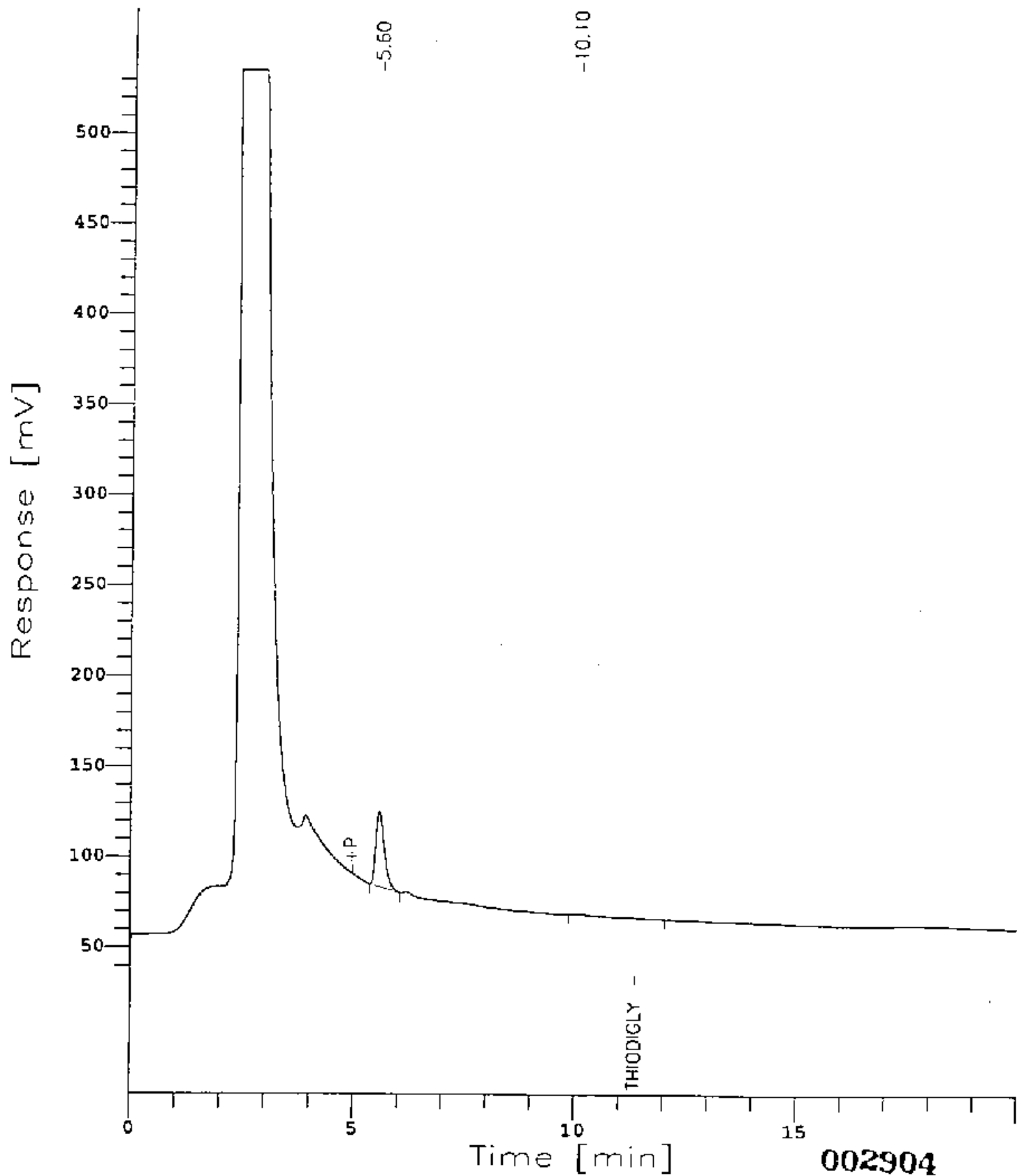
Time of Injection: 12/8/93 05:07 AM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



Software Version: 3.3 <4B11>

Sample Name : CDDMTW*44

Time : 12/8/93 06:14 AM

Sample Number: 17

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 05:54 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-017.RAW

Result File : C:\2700\DATA3\COE-017.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2
=====

THIODIGLYCOL IN WATER BY UW22

No Peaks Available To Report

Sample Name : CDDMTW44

FileName : c:\2700\data3\COE-017.raw

Method : tdg.ins

Start Time : 0.00 min

Scale Factor: 0.0

End Time : 20.00 min

Plot Offset: 35 mV

Sample #: 17

Date : 12/8/93 06:14 AM

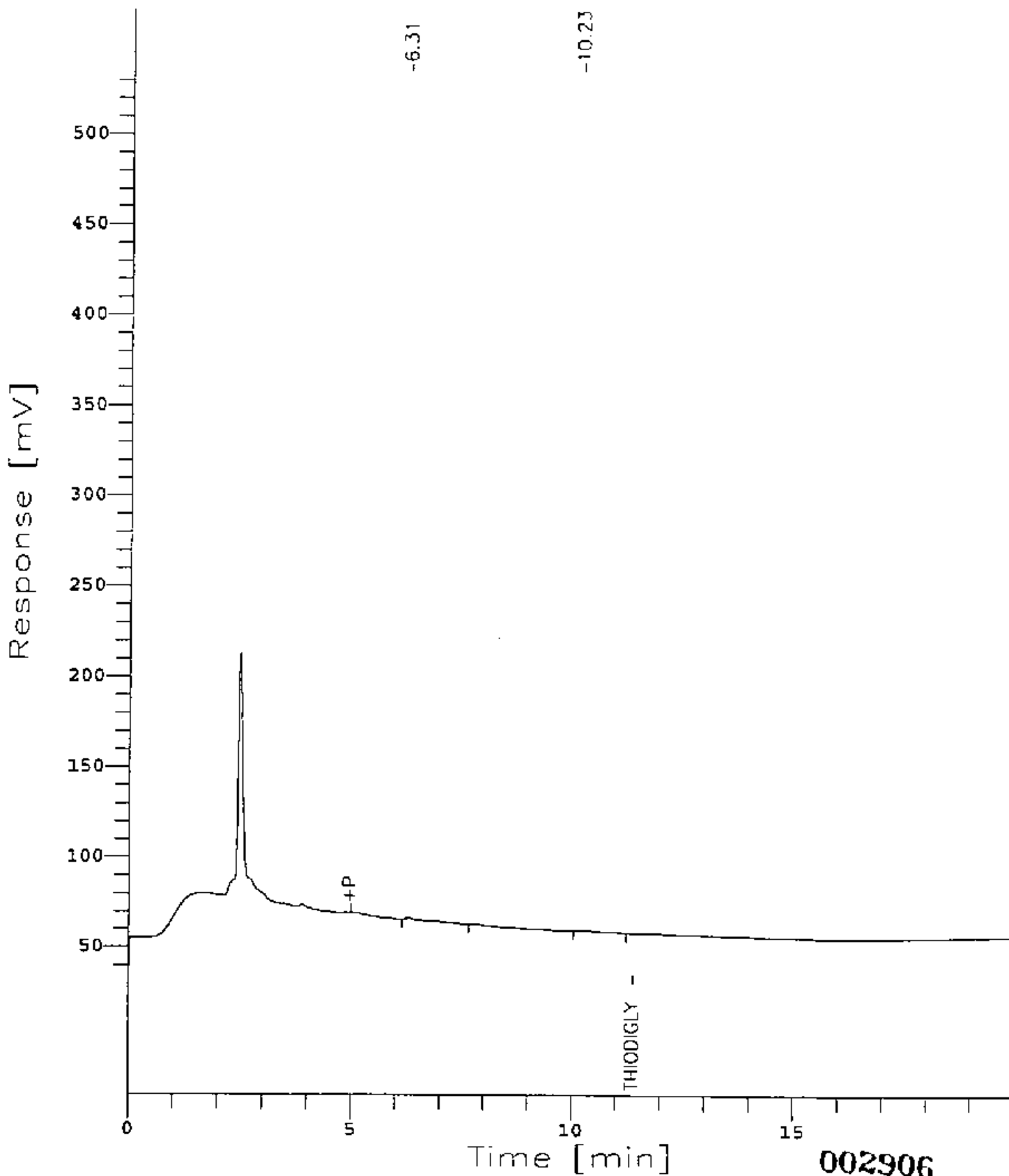
Time of Injection: 12/8/93 05:54 AM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002906

=====

Software Version: 3.3 <4B11>

Sample Name : CCS*120893*1

Time : 12/8/93 02:50 PM

Sample Number: 18

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 06:41 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-018.RAW

Result File : C:\2700\DATA3\COE-018.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\coehunt.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
2	THIODIGLYCOL	12.232	14399738.00	690654.82	*B
			14399738.00	690654.82	

=====

Chromatogram

Sample Name : CCS*120893*1

FileName : C:\2700\DATA3\COE-018.raw

Method : tdg

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset: 35 mV

Sample #: 18

Date : 12/8/93 02:50 PM

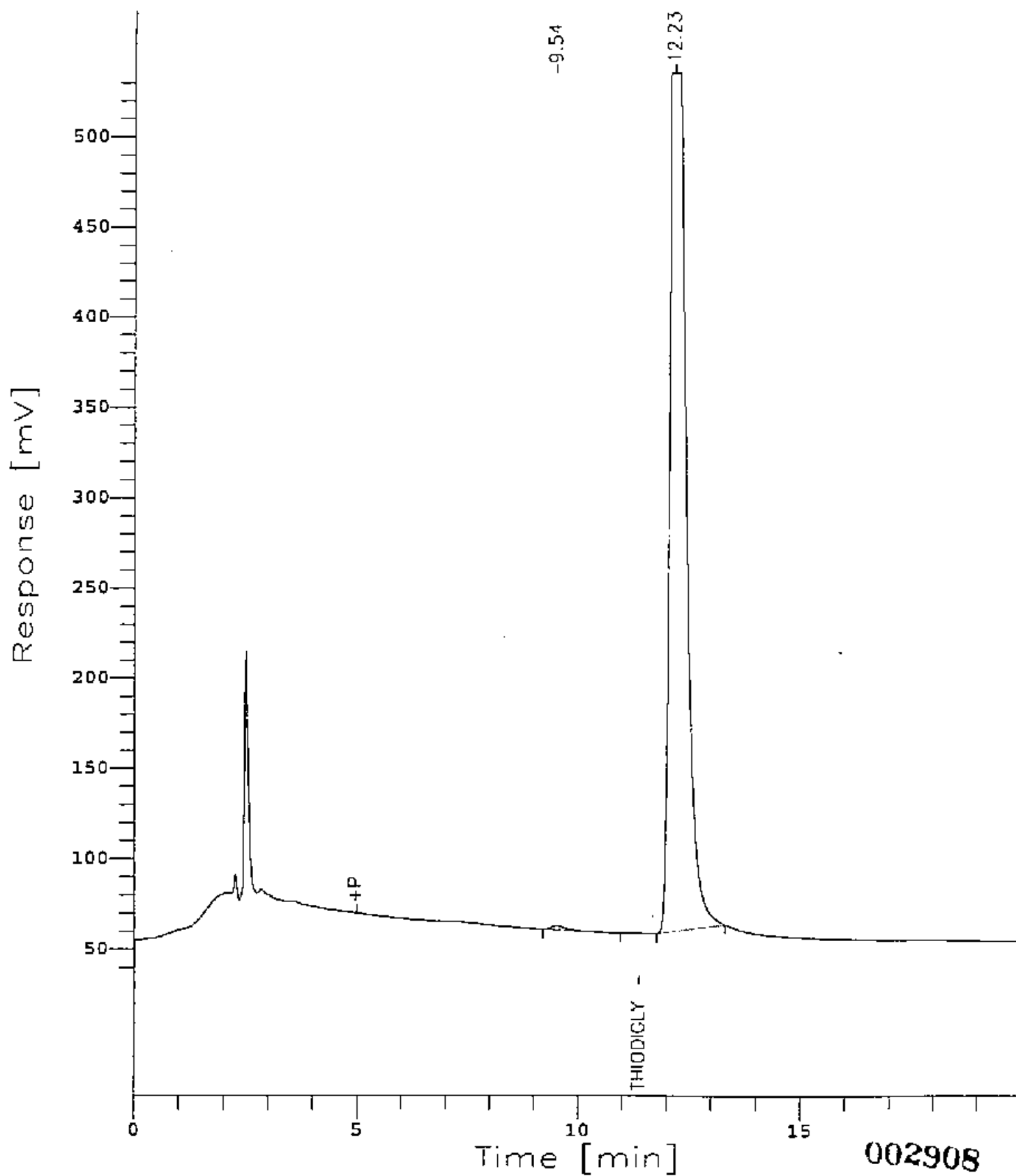
Time of Injection: 12/8/93 06:41 AM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : MB*QC*2

Time : 12/8/93 07:48 AM

Sample Number: 19

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 07:28 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-019.RAW

Result File : C:\2700\DATA3\COE-019.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 4

=====

THIODIGLYCOL IN WATER BY UW22

No Peaks Available To Report

002909

Chromatogram

51 100

Sample Name : MS*QC*2

FileName : c:\2700\data3\COE-019.raw

Method : tdg.ins

Start Time : 0.00 min

Scale Factor: 0.0

End Time : 20.00 min

Plot Offset: 35 mV

Sample #: 19

Date : 12/8/93 07:48 AM

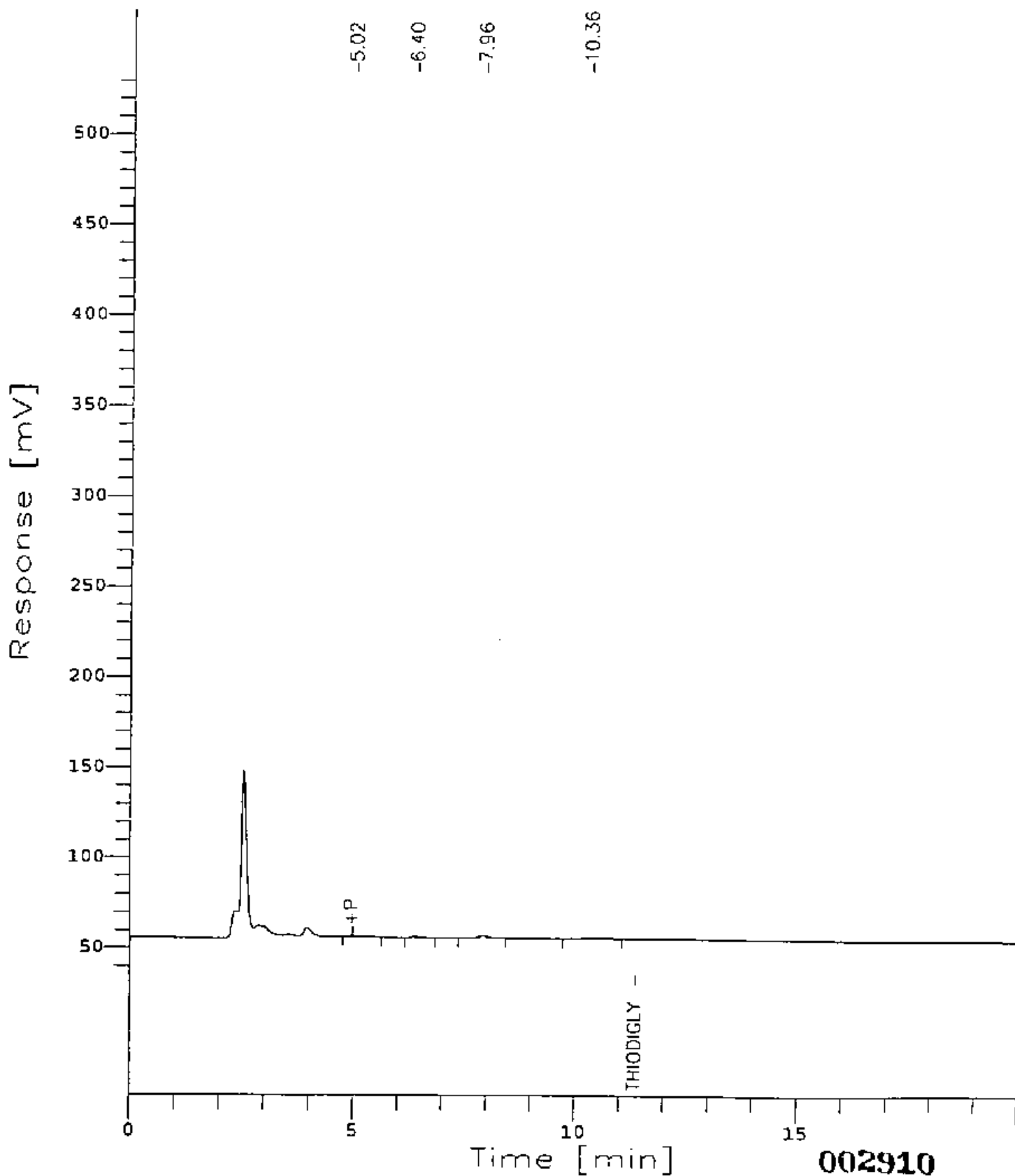
Time of Injection: 12/8/93 07:28 AM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : SP1*QC*2

Time : 12/8/93 08:35 AM

Sample Number: 20

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 08:15 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-020.RAW

Result File : C:\2700\DATA3\COE-020.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
2	THIODIGLYCOL	12.139	607015.00	30315.49	B
			607015.00	30315.49	

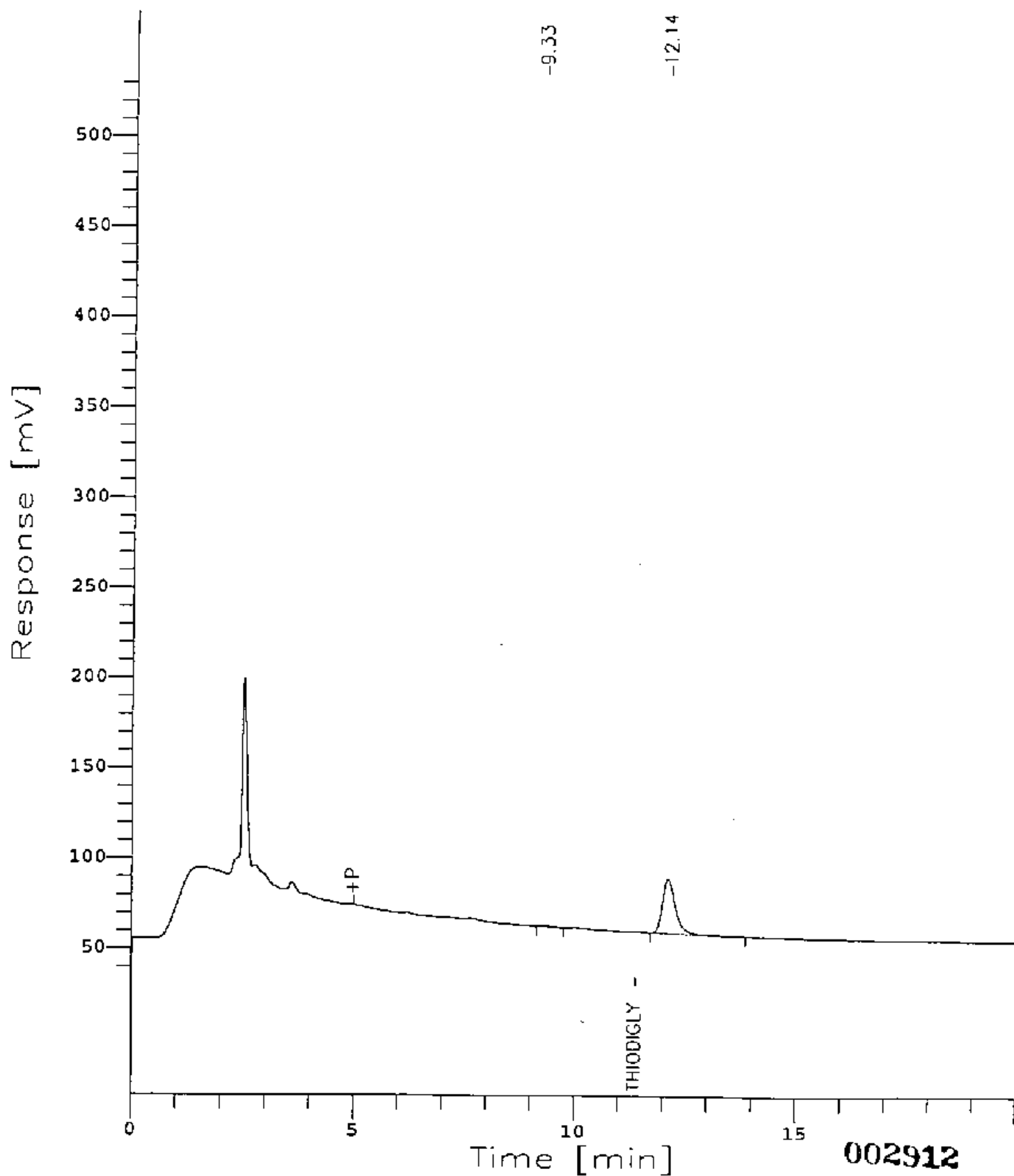
=====

Sample Name : SP1*OC*2
FileName : c:\2700\data3\CDE-020.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 20.00 min
Plot Offset: 35 mV

Sample #: 20
Date : 12/8/93 08:35 AM
Time of Injection: 12/8/93 08:15 AM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV

Page 1 of 1



=====

Software Version: 3.3 <4B11>

Sample Name : SP2*QC*2

Time : 12/8/93 09:22 AM

Sample Number: 21

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 09:02 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-021.RAW

Result File : C:\2700\DATA3\COE-021.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.SEQ

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
3	THIODIGLYCOL	12.059	9635650.00	475666.22	B
			9635650.00	475666.22	

=====

Sample Name : SP2*QC*2

FileName : c:\2700\data3\DOE-021.raw

Method : tds.ins

Start Time : 0.00 min

Scale Factor: 0.0

End Time : 20.00 min

Plot Offset: 35 mV

Sample #: 21

Date : 12/8/93 09:22 AM

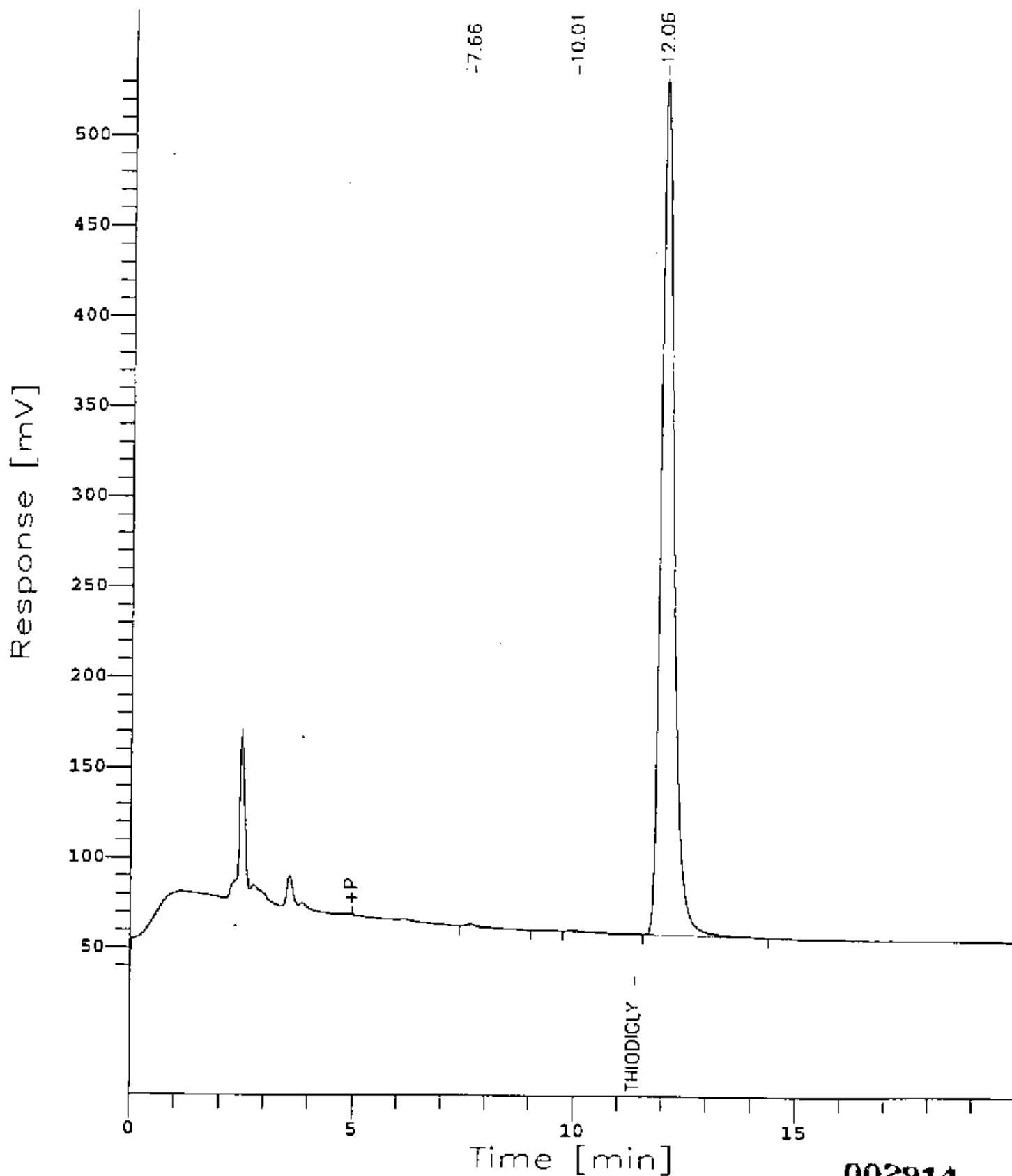
Time of Injection: 12/8/93 09:02 AM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002914

=====

Software Version: 3.3 <4B11>

Sample Name : SP3*QC*2

Time : 12/8/93 02:47 PM

Sample Number: 22

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 09:49 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-022.RAW

Result File : C:\2700\DATA3\COE-022.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
3	THIODIGLYCOL	12.439	10227927.00	478569.58	B
			10227927.00	478569.58	

=====

Sample Name : SP3*QC*2

FileName : c:\2700\data3\COE-022.raw

Method : tkg.ins

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset : 35 mV

Sample #: 22

Date : 12/8/93 10:10 AM

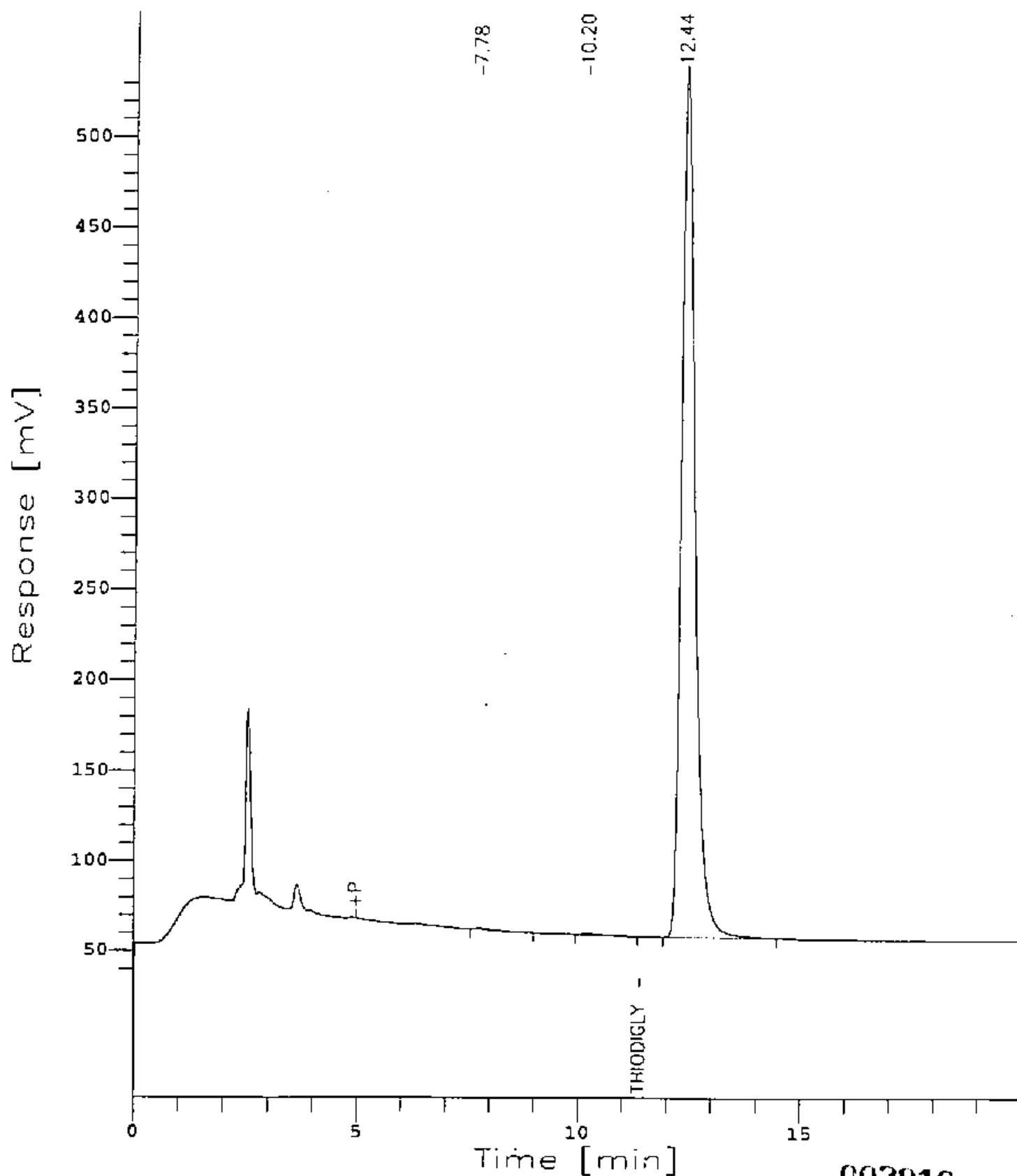
Time of Injection: 12/8/93 09:49 AM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002916

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*9

Time : 12/8/93 10:57 AM

Sample Number: 23

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 10:36 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-023.RAW

Result File : C:\2700\DATA3\COE-023.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 1

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.838	3780644.00	270494.59	B
			3780644.00	270494.59	

=====

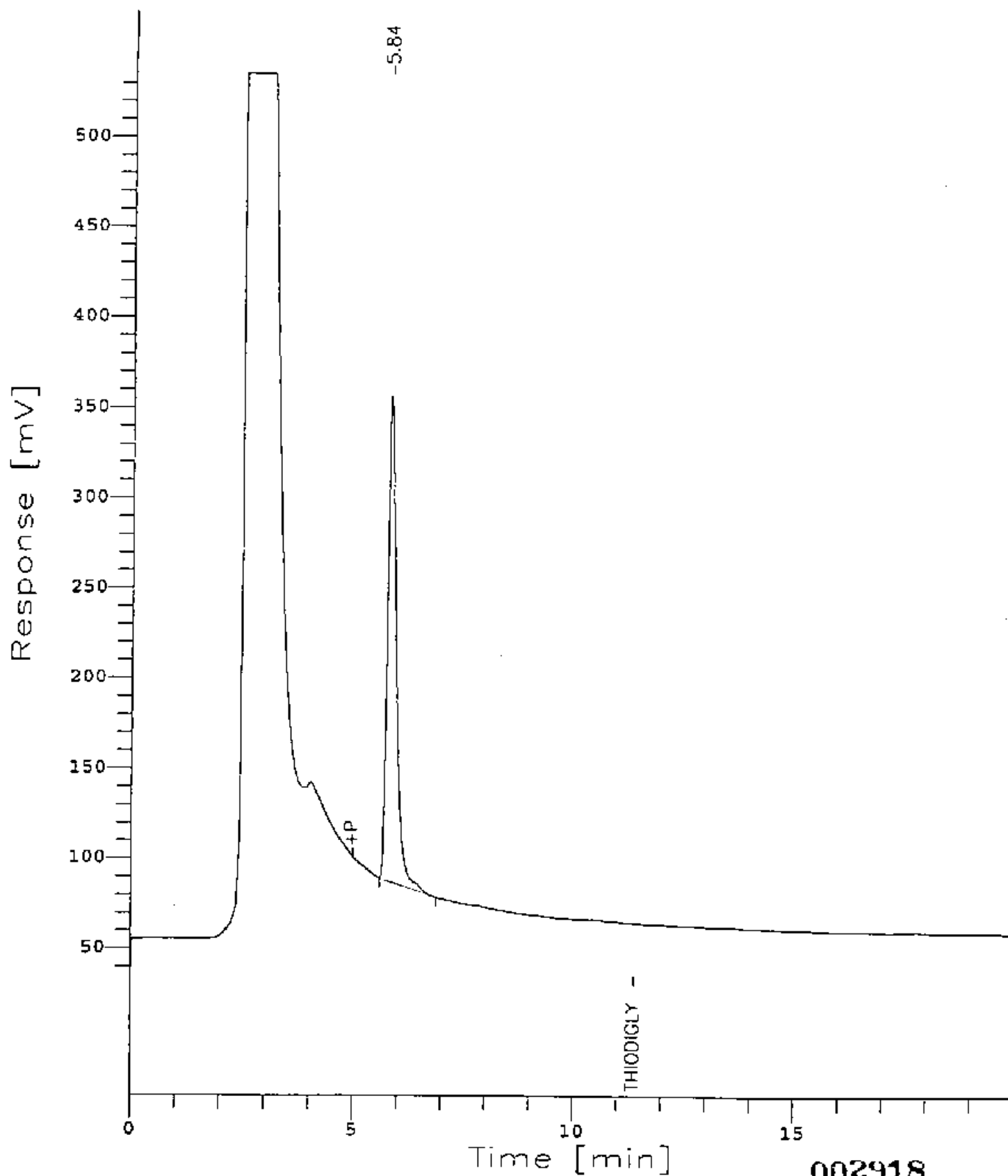
Sample Name : CDDMTW*9
Filename : c:\2700\data3\COE-023.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 20.00 min
Plot Offset : 35 mV

Sample #: 23
Date : 12/8/93 10:57 AM
Time of Injection: 12/8/93 10:36 AM
Low Point : 35.00 mV
Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002918

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*10

Time : 12/8/93 11:44 AM

Sample Number: 24

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 11:24 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-024.RAW

Result File : C:\2700\DATA3\COE-024.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

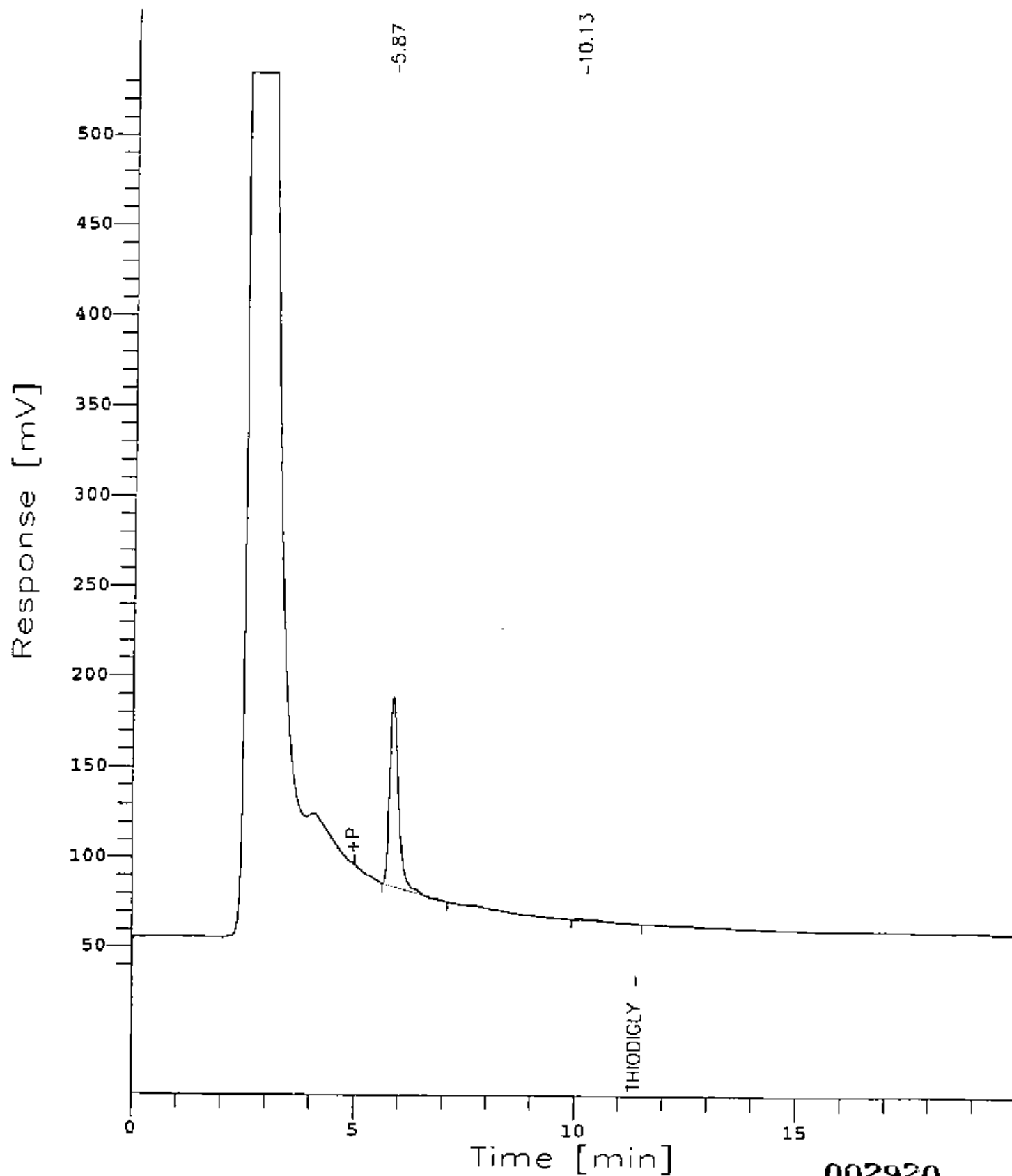
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.870	1438740.00	104988.86	B
			1438740.00	104988.86	

=====

Chromatogram

Sample Name : CDDMTW*10
FileName : c:\2700\data3\COE-024.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor: 0.0
End Time : 20.00 min
Plot Offset: 35 mV

Sample #: 24
Date : 12/8/93 11:44 AM
Time of Injection: 12/8/93 11:24 AM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV



002920

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*11

Time : 12/8/93 12:31 PM

Sample Number: 25

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 12:11 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-025.RAW

Result File : C:\2700\DATA3\COE-025.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 1

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.830	8466354.00	627071.99	B
			8466354.00	627071.99	

=====

Chromatogram

Sample Name : CDDMTW*11

FileName : c:\2700\data3\COE-025.raw

Method : tkg.ins

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset : 35 mV

Sample #: 25

Date : 12/8/93 12:31 PM

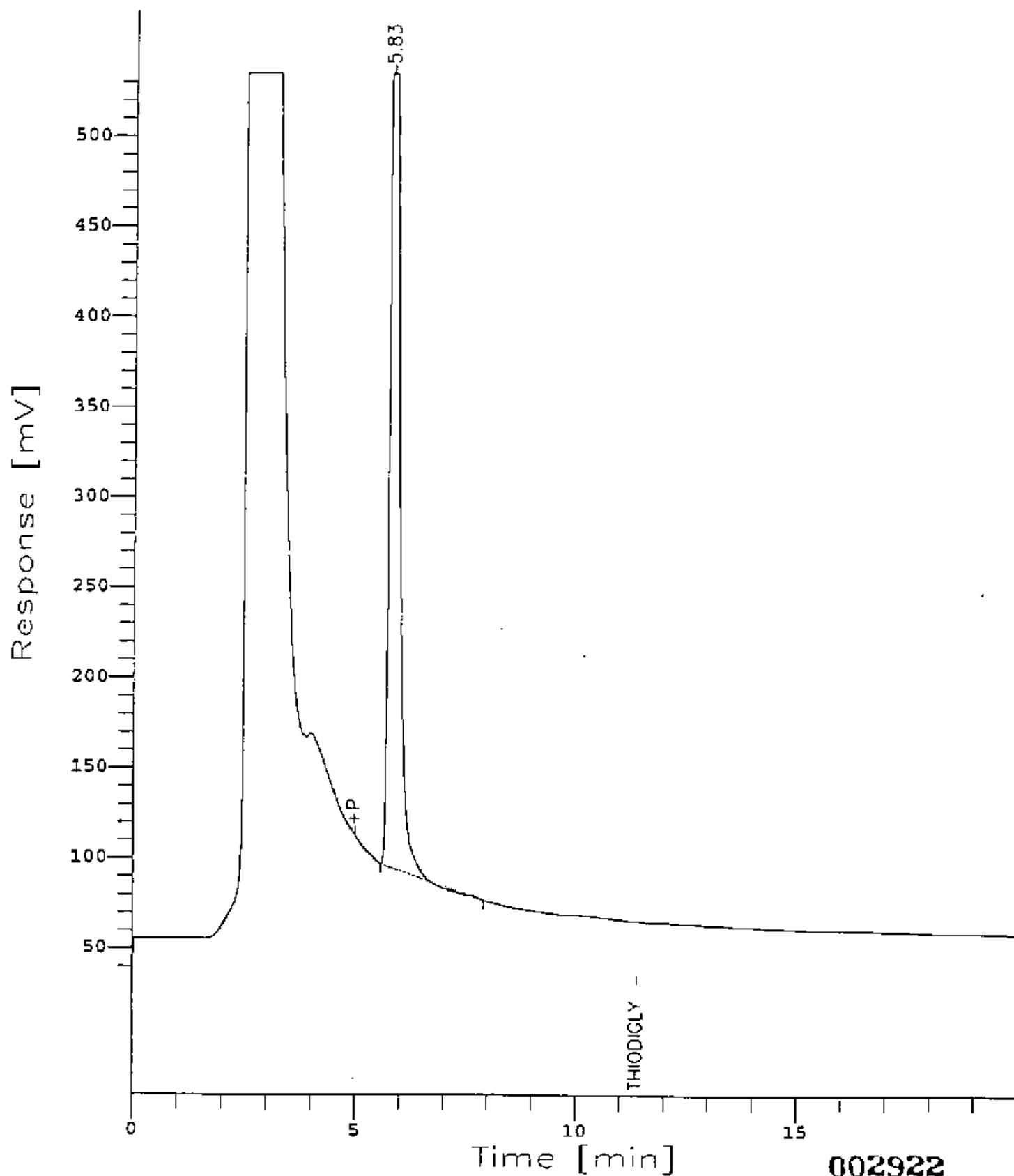
Time of Injection: 12/8/93 12:11 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*12

Time : 12/8/93 01:44 PM

Sample Number: 26

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 12:58 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-026.RAW

Result File : C:\2700\DATA3\COE-026.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.905	248964.98	62239.79	B
			248964.98	62239.79	

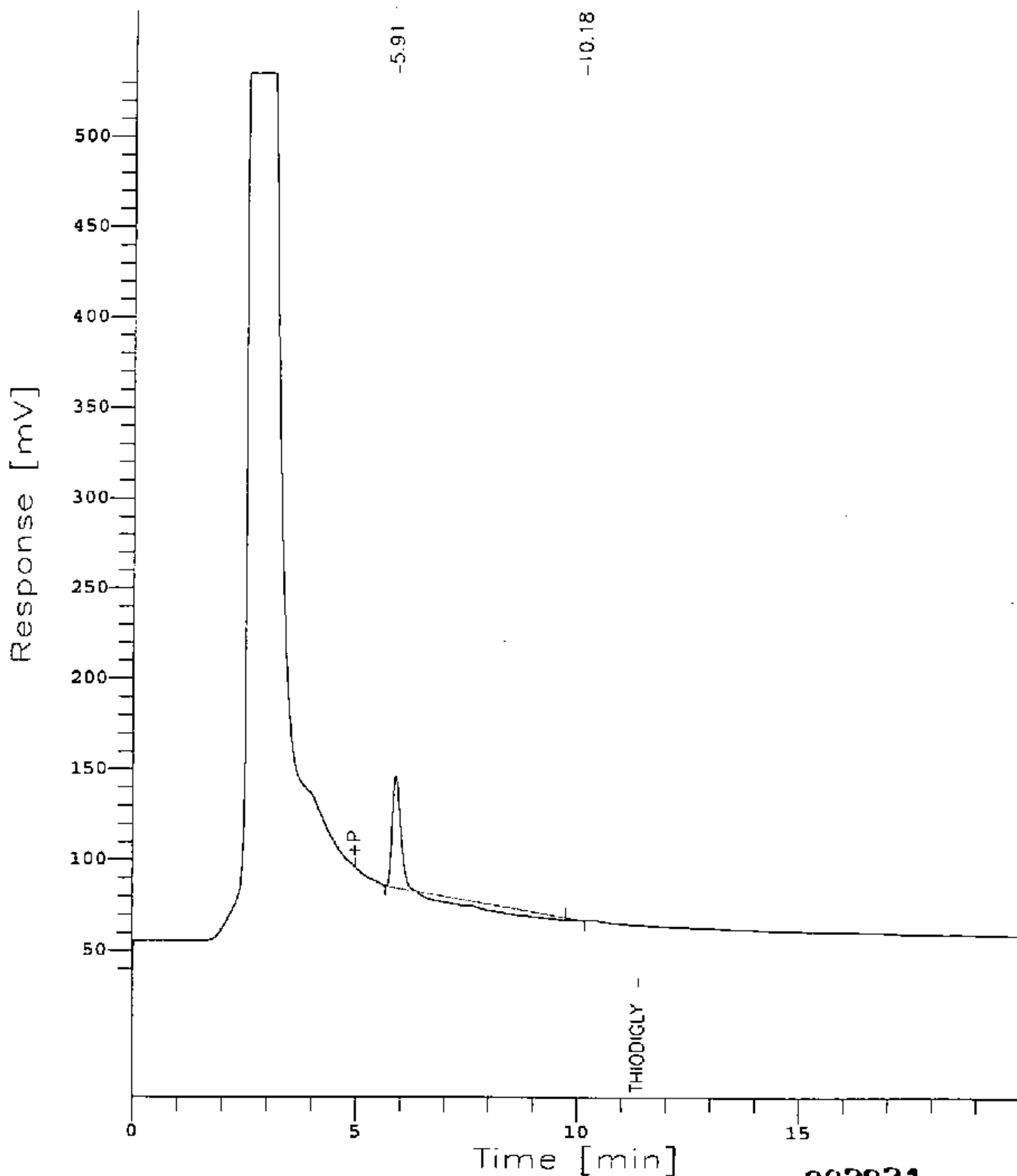
Chromatogram

51 114

Sample Name : CDDMTW12
FileName : c:\2700\data3\COE-026.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 20.00 min
Plot Offset : 35 mV

Sample #: 26
Date : 12/8/93 01:44 PM
Time of Injection: 12/8/93 12:58 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV



002924

=====

Software Version: 3.3 <4B11>

Sample Name : CCS*120893*2

Time : 12/8/93 02:50 PM

Sample Number: 27

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/8/93 01:45 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-027.RAW

Result File : C:\2700\DATA3\COE-027.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\coehunt.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
3	THIODIGLYCOL	12.275	15472435.00	761997.59	*B
			15472435.00	761997.59	

=====

Chromatogram

Sample Name : CCS*120893*2

FileName : C:\2700\DATA3\COE-027.raw

Method : tdg.ins

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset : 35 mV

Sample #: 27

Date : 12/8/93 02:50 PM

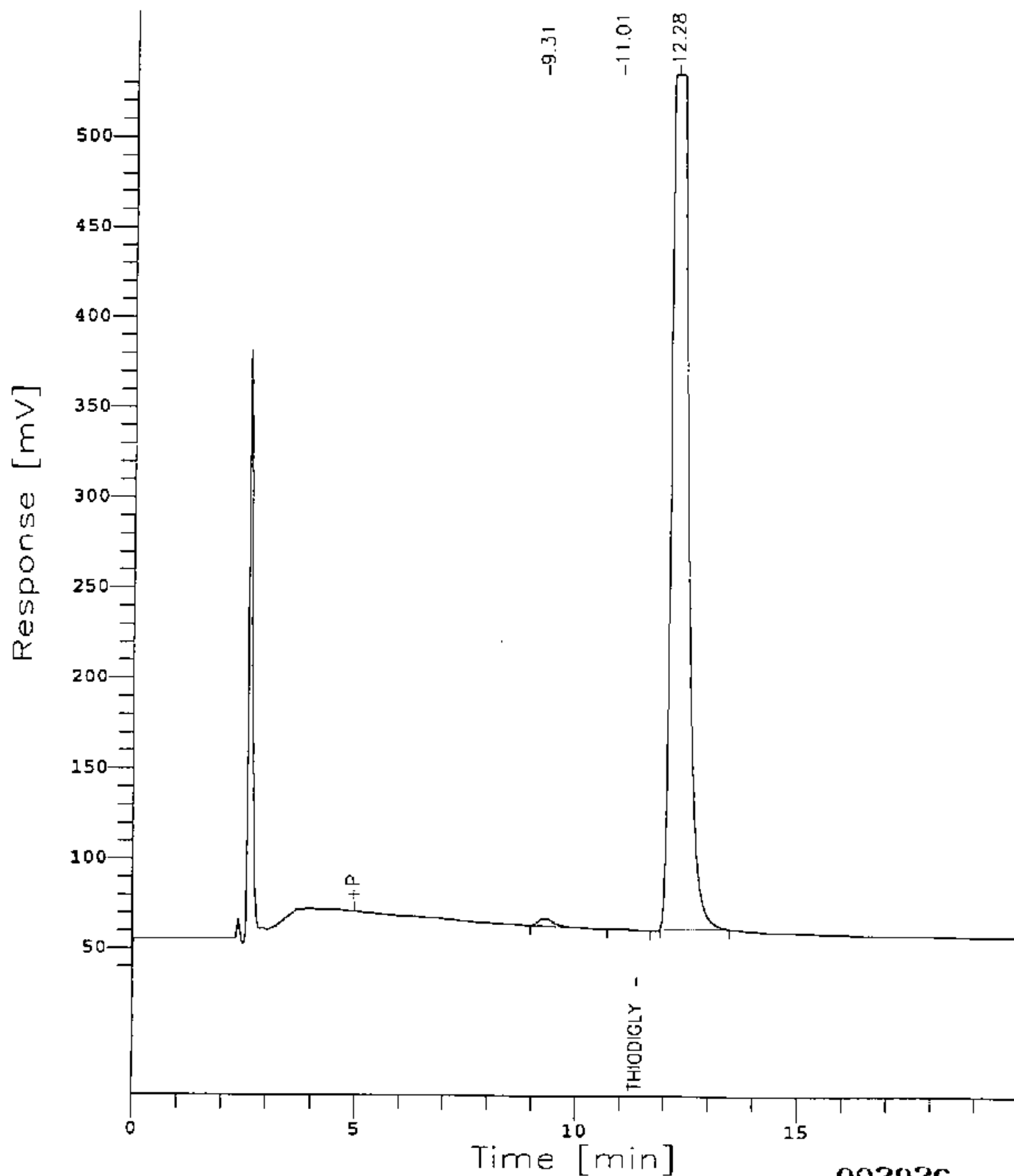
Time of Injection: 12/8/93 01:45 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002926

MISCELLANEOUS DOCUMENTS SECTION

Contains the following copies (NA those not required):

1. Sample arrival notice(s)
2. Extraction logbook page(s)
3. Extraction personal logbook page(s)
4. % Moisture data sheet NA
5. Extract chain of custody logbook page
6. Analyst notebook pages of standards preparation and concentrations
7. Standard solutions inventory NA
8. Instrument logbook page(s)
9. Example calculations
10. Error correction codes

UWZ2
G44757
CDDMTW

Environmental Science and Engineering 11/17/93 STATUS:

P# 1 OF 2

*** SAMPLE ARRIVAL NOTICE FOR DEPARTMENT 1243 ***

C# 2 OF 5

PROJECT NUMBER 7934082G 0201
FIELD GROUP CDDMTNPROJECT NAME HUNTSVILLE COE - DDMT
PROJECT MANAGER P.C. WILBER
LAB COORDINATOR PATRICK WILBER

COLLECTION DATES: A-11/16/93

RECEIPT DATES: A-11/17/93

LAB DUE DATES: A-12/15/93

TURNAROUND:

QC

COMMENTS/QC FR:

MATRIX: M DET. LIMIT SPEC'D: NONE SPECIFIED

SAMPLE FRACTIONS C, C, EC, EC, EC, LC, LC, LC, LC, MS, MS, MS, N, NF, NP, NP, VP, VP, VP, VP, VP,

SAMPLE SEQ #

COLLECTION DATE CODES: AA

RECEIPT DATE CODES: AA

LAB DUE DATE CODES: AA

			EXTRACT	DET. LMT.	
			GROUP	CRITERIA	54
001	ACENAPHTHENE	,UG/L	34205*8310/3520-G	610	00
002	ACENAPHTHYLENE	,UG/L	34200*8310/3520-G	610	00
003	ANTHRACENE	,UG/L	34220*8310/3520-G	610	00
004	BENZO(A)ANTHRACENE	,UG/L	34526*8310/3520-G	610	00
005	BENZO(A)PYRENE	,UG/L	34247*8310/3520-G	610	00
006	BENZO(B)FLUORANTHENE	,UG/L	34230*8310/3520-G	610	00
007	BENZO(GH)PERYLENE	,UG/L	34521*8310/3520-G	610	00
008	BENZO(K)FLUORANTHENE	,UG/L	34242*8310/3520-G	610	00
009	CHRYSENE	,UG/L	34320*8310/3520-G	610	00
010	DIBEN(A,H)ANTH CENE	,UG/L	34556*8310/3520-G	610	00
011	FLUORANTHENE	,UG/L	34376*8310/3520-G	610	00
012	FLUORENE	,UG/L	34381*8310/3520-G	610	00
013	INDENO(1,2,3-CD) PYRENE	,UG/L	34403*8310/3520-G	610	00
014	NAPHTHALENE	,UG/L	34696*8310/3520-G	610	00
015	PERYANTHRENE	,UG/L	34461*8310/3520-G	610	00
016	PYRENE	,UG/L	34469*8310/3520-G	610	00
017	THIODIGLYCOL	,UG/L	89797*DW22	DW22	00
018	ALDRIN	,UG/L	39330*8080/3520-G	8080W	00
019	BHC, A	,UG/L	39337*8080/3520-G	8080W	00
020	BHC, B	,UG/L	39338*8080/3520-G	8080W	00
021	BHC, D	,UG/L	34259*8080/3520-G	8080W	00
022	BHC, G (LINDANE)	,UG/L	39340*8080/3520-G	8080W	00
023	CHLORDANE	,UG/L	39350*8080/3520-G	8080W	00
024	DDD, PP'	,UG/L	39310*8080/3520-G	8080W	00
025	DDE, PP'	,UG/L	39320*8080/3520-G	8080W	00
026	DDT, PP'	,UG/L	39300*8080/3520-G	8080W	00
027	DIELDRIN	,UG/L	39380*8080/3520-G	8080W	00
028	ENDOSULFAN, A	,UG/L	34361*8080/3520-G	8080W	00
029	ENDOSULFAN, B	,UG/L	34356*8080/3520-G	8080W	00
030	ENDOSULFAN SULFATE	,UG/L	34361*8080/3520-G	8080W	00
031	ENDRIN	,UG/L	39330*8080/3520-G	8080W	00
032	ENDRIN ALDEHYDE	,UG/L	34366*8080/3520-G	8080W	00
033	HEPTACHLOR	,UG/L	39410*8080/3520-G	8080W	00
034	METHOXYCHLOR	,UG/L	39480*8080/3520-G	8080W	00
035	HEPTACHLOR EPOXIDE	,UG/L	39420*8080/3520-G	8080W	00
036	TOXAPHENE	,UG/L	39400*8080/3520-G	8080W	00
037	PCB-1016	,UG/L	34671*8080/3520-G	8080W	00
038	PCB-1221	,UG/L	39488*8080/3520-G	8080W	00
039	PCB-1232	,UG/L	39492*8080/3520-G	8080W	00
040	PCB-1247	,UG/L	39496*8080/3520-G	8080W	00

O-OPEN L-IN LAB E-EXTRACTED N=NOT REQUESTED D-DONE S-SCHEDULED

* "STURET" = NOT ON DEPT AVAIL NUMS

002928

Environmental Science and Engineering 11/16/93 STATUS:

P# 1 OF 2

*** SAMPLE ARRIVAL NOTICE FOR DEPARTMENT 1243 ***

C# 2 OF 5

PROJECT NUMBER 99340826 0201
FIELD GROUP EDDMTWPROJECT NAME HUNTSVILLE COE - DDMT
PROJECT MANAGER P.C. WILBER
LAB COORDINATOR PATRICK WILBER

COLLECTION DATES: A-11/14/93 B-11/15/93

RECEIPT DATES : A-11/16/93

LAB DUE DATES : A-12/14/93

TURNAROUND :

QC :

COMMENTS/QC FR:

MATRIX : M

DET. LIMIT SPEC'D : NONE SPECIFIED

SAMPLE FRACTIONS C, C, EC, EC, EC, LC, LC, LC, LC, MS, MS, MS, N, NF, NF, NP, NP, VP, VP, VP, VP, VP,

COLLECTION DATE CODES: 8888888888
RECEIPT DATE CODES: AAAAAAAAAA
LAB DUE DATE CODES: AAAAAAAAAA

SAMPLE SEQ #

		EXTRACT		DET. LMT.	12333155
		GROUP		CRITERIA 47232458225	
001	ACENAPHTHENE	UG/L	34205*8310/3520-G	610	0000000000N
002	ACENAPHTHYLENE	UG/L	34200*8310/3520-G	610	0000000000N
003	ANTHRACENE	UG/L	34220*8310/3520-G	610	0000000000N
004	BENZO (A) ANTHRACENE	UG/L	34526*8310/3520-G	610	0000000000N
005	BENZO (A) PYRENE	UG/L	34247*8310/3520-G	610	0000000000N
006	BENZO (B) FLUORANTHENE	UG/L	34230*8310/3520-G	610	0000000000N
007	BENZO (GHI) PERYLENE	UG/L	34521*8310/3520-G	610	0000000000N
008	BENZO (K) FLUORANTHENE	UG/L	34242*8310/3520-G	610	0000000000N
009	CHRYSENE	UG/L	34320*8310/3520-G	610	0000000000N
010	DIBEN (A,H) ANTH' CENE	UG/L	34556*8310/3520-G	610	0000000000N
011	FLUORANTHENE	UG/L	34376*8310/3520-G	610	0000000000N
012	FLUORENE	UG/L	34381*8310/3520-G	610	0000000000N
013	INDENO (1,2,3-CD) PYRENE	UG/L	34403*8310/3520-G	610	0000000000N
014	NAPHTHALENE	UG/L	34696*8310/3520-G	610	0000000000N
015	PHENANTHRENE	UG/L	34461*8310/3520-G	610	0000000000N
016	PYRENE	UG/L	34469*8310/3520-G	610	0000000000N
017	THIODIGLYCOL	UG/L	99797*UN22	UN22	0000000000N
018	ALDRIN	UG/L	39330*8080/3520-G	8080W	0000000000N
019	BHC, A	UG/L	39337*8080/3520-G	8080W	0000000000N
020	BHC, B	UG/L	39338*8080/3520-G	8080W	0000000000N
021	BHC, D	UG/L	34259*8080/3520-G	8080W	0000000000N
022	BHC, G (LINDANE)	UG/L	39340*8080/3520-G	8080W	0000000000N
023	CHLORDANE	UG/L	39350*8080/3520-G	8080W	0000000000N
024	DDD, PP'	UG/L	39310*8080/3520-G	8080W	0000000000N
025	DDE, PP'	UG/L	39320*8080/3520-G	8080W	0000000000N
026	DDT, PP'	UG/L	39300*8080/3520-G	8080W	0000000000N
027	DIELDRIN	UG/L	39380*8080/3520-G	8080W	0000000000N
028	ENDOSULFAN, A	UG/L	34361*8080/3520-G	8080W	0000000000N
029	ENDOSULFAN, B	UG/L	34356*8080/3520-G	8080W	0000000000N
030	ENDOSULFAN SULFATE	UG/L	34351*8080/3520-G	8080W	0000000000N
031	ENDRIN	UG/L	39390*8080/3520-G	8080W	0000000000N
032	ENDRIN ALDEHYDE	UG/L	34356*8080/3520-G	8080W	0000000000N
033	HEPTACHLOR	UG/L	39410*8080/3520-G	8080W	0000000000N
034	METHOXYCHLOR	UG/L	39480*8080/3520-G	8080W	0000000000N
035	HEPTACHLOR EPOXIDE	UG/L	39420*8080/3520-G	8080W	0000000000N
036	TOXAPHENE	UG/L	39400*8080/3520-G	8080W	0000000000N
037	PCB-1016	UG/L	34671*8080/3520-G	8080W	0000000000N
038	PCB-1221	UG/L	39488*8080/3520-G	8080W	0000000000N
039	PCB-1232	UG/L	39492*8080/3520-G	8080W	0000000000N
040	PCB-1242	UG/L	39496*8080/3520-G	8080W	0000000000N

O-OPEN L-IN LAB E-EXTRACTED N-NOT REQUESTED D-DONE S-SCHEDULED
* 'STORET' - NOT ON DEPT AVAIL NUMS

002929

Environmental Science and Engineering 11/15/93 STATUS:

P# 1 OF 2

*** SAMPLE ARRIVAL NOTICE FOR DEPARTMENT 1243 ***

C# 2 OF 5

PROJECT NUMBER 79340820 0201
FIELD GROUP EDDMTWPROJECT NAME HUNTSVILLE COS - DDMT
PROJECT MANAGER P.C. WILBER
LAB COORDINATOR PATRICK WILBER

COLLECTION DATES: A-11/13/93

RECEIPT DATES: A-11/15/93

LAB DUE DATES: A-12/12/93

TURNAROUND:

QC

COMMENTS/QC PR:

MATRIX: M

DET. LIMIT SPEC'D: NONE SPECIFIED

SAMPLE FRACTIONS: C, C, EC, EC, EC, EC, LC, LC, LC, LC, MS, MS, MS, N, NP, NP, NP, VP, VP, VP, VP, VP.

COLLECTION DATE CODES: AAA
RECEIPT DATE CODES: AAA
LAB DUE DATE CODES: AAA

SAMPLE SEQ #

			EXTRACT	DET. LMT.
			GROUP	CRITERIA
001	ACENAPHTHENE	,UG/L	34205*8310/3520-G	510
002	ACENAPHTHYLENE	,UG/L	34200*8310/3520-G	510
003	ANTHRACENE	,UG/L	34220*8310/3520-G	610
004	BENZO (A) ANTHRACENE	,UG/L	34526*8310/3520-G	610
005	BENZO (A) PYRENE	,UG/L	34247*8310/3520-G	510
006	BENZO (B) FLUORANTHENE	,UG/L	34230*8310/3520-G	610
007	BENZO (GHI) PERYLENE	,UG/L	34521*8310/3520-G	610
008	BENZO (K) FLUORANTHENE	,UG/L	34242*8310/3520-G	610
009	CHRYSENE	,UG/L	34320*8310/3520-G	610
010	DIBEN (A,H) ANTH' CENE	,UG/L	34555*8310/3520-G	610
011	FLUORANTHENE	,UG/L	34375*8310/3520-G	610
012	FLUORENE	,UG/L	34381*8310/3520-G	510
013	INDENO (1,2,3-CD) PYRENE	,UG/L	34403*8310/3520-G	610
014	NAFTHALENE	,UG/L	34596*8310/3520-G	610
015	PHENANTHRENE	,UG/L	34461*8310/3520-G	610
016	PYRENE	,UG/L	34469*8310/3520-G	510
017	THIODIGLYCOL	,UG/L	99797*UM22	UM22
018	ALDRIN	,UG/L	39330*8080/3520-G	8080W
019	BHC, A	,UG/L	39337*8080/3520-G	8080W
020	BHC, B	,UG/L	39338*8080/3520-G	8080W
021	BHC, D	,UG/L	34259*8080/3520-G	8080W
022	BHC, G (LINDANE)	,UG/L	39340*8080/3520-G	8080W
023	CHLORDANE	,UG/L	39350*8080/3520-G	8080W
024	DDD, PP'	,UG/L	39310*8080/3520-G	8080W
025	DDE, PP'	,UG/L	39320*8080/3520-G	8080W
026	DDT, PP'	,UG/L	39300*8080/3520-G	8080W
027	DIELDRIN	,UG/L	39380*8080/3520-G	8080W
028	ENDOSULFAN, A	,UG/L	34361*8080/3520-G	8080W
029	ENDOSULFAN, B	,UG/L	34356*8080/3520-G	8080W
030	ENDOSULFAN SULFATE	,UG/L	34351*8080/3520-G	8080W
031	ENDRIN	,UG/L	39390*8080/3520-G	8080W
032	ENDRIN ALDERYDE	,UG/L	34366*8080/3520-G	8080W
033	HEPTACHLOR	,UG/L	39410*8080/3520-G	8080W
034	METHOXYCHLOR	,UG/L	39480*8080/3520-G	8080W
035	HEPTACHLOR EPOXIDE	,UG/L	39420*8080/3520-G	8080W
036	TOXAPHENE	,UG/L	39400*8080/3520-G	8080W
037	PCB-1016	,UG/L	34671*8080/3520-G	8080W
038	PCB-1221	,UG/L	39485*8080/3520-G	8080W
039	PCB-1232	,UG/L	39492*8080/3520-G	8080W
040	PCB-1242	,UG/L	39496*8080/3520-G	8080W

O-OPEN L-IN LAB E-EXTRACTED N-NOT REQUESTED D-DONE S-SCHEDULED
* *STORET* * NOT ON DEPT AVAIL NUMS

002930

Environmental Science and Engineering 11/15/93 STATUS:

P# 1 OF 2

*** SAMPLE ARRIVAL NOTICE FOR DEPARTMENT 1243 ***

C# 2 OF 5

PROJECT NUMBER 7934082G 0201
FIELD GROUP CDDMTWPROJECT NAME HUNTSVILLE COE - DDMT
PROJECT MANAGER P.C. WILBER
LAB COORDINATOR PATRICK WILBERCOLLECTION DATES: A-11/12/93
RECEIPT DATES : A-11/13/93
LAB DUE DATES : A-12/10/93TURNAROUND :
QC :

MATRIX : W DET. LIMIT SPEC'D : NONE SPECIFIED

COMMENTS/QC FR:

SAMPLE FRACTIONS C, C, EC, EC, EC, LC, LC, LC, LC, MS, MS, MS, N, NF, NP, NP, VP, VP, VP, VP, VP.

COLLECTION DATE CODES: A
RECEIPT DATE CODES: A
LAB DUE DATE CODES: A

			EXTRACT DET. LMT.		SAMPLE SEQ #
			GROUP	CRITERIA 3	
001	ACENAPHTHENE	,UG/L	34205*8310/3520-G	610	0
002	ACENAPHTHYLENE	,UG/L	34200*8310/3520-G	610	0
003	ANTHRACENE	,UG/L	34220*8310/3520-G	610	0
004	BENZO (A) ANTHRACENE	,UG/L	34526*8310/3520-G	610	0
005	BENZO (A) PYRENE	,UG/L	34247*8310/3520-G	610	0
006	BENZO (B) FLUORANTHENE	,UG/L	34230*8310/3520-G	610	0
007	BENZO (K) FLUORANTHENE	,UG/L	34521*8310/3520-G	610	0
008	BENZO (K) FLUORANTHENE	,UG/L	34242*8310/3520-G	610	0
009	CHRYSENE	,UG/L	34320*8310/3520-G	610	0
010	DIBEN (A, H) ANTH' CENE	,UG/L	34556*8310/3520-G	610	0
011	FLUORANTHENE	,UG/L	34376*8310/3520-G	610	0
012	FLUORENE	,UG/L	34381*8310/3520-G	610	0
013	INDENO (1, 2, 3-CD) PYRENE	,UG/L	34403*8310/3520-G	610	0
014	NAPHTHALENE	,UG/L	34696*8310/3520-G	610	0
015	PHENANTHRENE	,UG/L	34461*8310/3520-G	610	0
016	PYRENE	,UG/L	34469*8310/3520-G	610	0
017	THIODIGLYCOL	,UG/L	59797*UN22	UN22	0
018	ALDRIN	,UG/L	39330*8080/3520-G	8080N	0
019	BHC, A	,UG/L	39337*8080/3520-G	8080N	0
020	BHC, B	,UG/L	39338*8080/3520-G	8080N	0
021	BHC, D	,UG/L	34259*8080/3520-G	8080N	0
022	BHC, G (LINDANE)	,UG/L	39340*8080/3520-G	8080N	0
023	CHLORDANE	,UG/L	39350*8080/3520-G	8080N	0
024	DDO, PP'	,UG/L	39310*8080/3520-G	8080N	0
025	DDE, PP'	,UG/L	39320*8080/3520-G	8080N	0
026	DDT, PP'	,UG/L	39300*8080/3520-G	8080N	0
027	DIELDRIN	,UG/L	39380*8080/3520-G	8080N	0
028	ENDOSULFAN, A	,UG/L	34361*8080/3520-G	8080N	0
029	ENDOSULFAN, B	,UG/L	34356*8080/3520-G	8080N	0
030	ENDOSULFAN SULFATE	,UG/L	34351*8080/3520-G	8080N	0
031	ENDRIN	,UG/L	39390*8080/3520-G	8080N	0
032	ENDRIN ALDEHYDE	,UG/L	34366*8080/3520-G	8080N	0
033	HEPTACHLOR	,UG/L	39410*8080/3520-G	8080N	0
034	METHOXYCHLOR	,UG/L	39440*8080/3520-G	8080N	0
035	HEPTACHLOR EPOXIDE	,UG/L	39420*8080/3520-G	8080N	0
036	TOXAPHENE	,UG/L	39400*8080/3520-G	8080N	0
037	PCB-1016	,UG/L	34671*8080/3520-G	8080N	0
038	PCB-1221	,UG/L	39401*8080/3520-G	8080N	0
039	PCB-1232	,UG/L	39492*8080/3520-G	8080N	0
040	PCB-1242	,UG/L	39496*8080/3520-G	8080N	0

O-OPEN L-IN LAB E-EXTRACTED N-NOT REQUESTED D-DONE S-SCHEDULED
* *STORET* - NOT ON DEPT AVAIL NUMS

002931

Environmental Science and Engineering 11/12/93 STATUS:

P# 1 OF 2

*** SAMPLE ARRIVAL NOTICE FOR DEPARTMENT 1243 ***

C# 2 OF 5

PROJECT NUMBER 7934082G 0201
FIELD GROUP CDMTWPROJECT NAME HUNTSVILLE COE - DDMT
PROJECT MANAGER P.C. WILBER
LAB COORDINATOR PATRICK WILBER

COLLECTION DATES: A=11/11/93

RECEIPT DATES : A=11/12/93

LAB DUE DATES : A=12/10/93

TURNAROUND :

QC :

COMMENTS/QC FR:

MATRIX : M

DET. LIMIT SPEC'D : NONE SPECIFIED

SAMPLE FRACTIONS C, C, EC, EC, EC, LC, LC, LC, LC, MS, MS, MS, N, NF, NP, NP, VP, VP, VP, VP, VP.

COLLECTION DATE CODES: AAAAA
RECEIPT DATE CODES: AAAAA
LAB DUE DATE CODES: AAAAA

			EXTRACT		DET. LMT. 11445	
			GROUP	CRITERIA	02121	
001	ACENAPHTHENE	UG/L	34205*8310/3520-G	610	0000N	
002	ACENAPHTHYLENE	UG/L	34200*8310/3520-G	610	0000N	
003	ANTHRACENE	UG/L	34220*8310/3520-G	610	0000N	
004	BENZO (A) ANTHRACENE	UG/L	34526*8310/3520-G	610	0000N	
005	BENZO (A) PYRENE	UG/L	34247*8310/3520-G	610	0000N	
006	BENZO (B) FLUORANTHENE	UG/L	34230*8310/3520-G	610	0000N	
007	BENZO (GHI) PERYLENE	UG/L	34521*8310/3520-G	610	0000N	
008	BENZO (K) FLUORANTHENE	UG/L	34242*8310/3520-G	610	0000N	
009	CHRYSENE	UG/L	34320*8310/3520-G	610	0000N	
010	DIBEN (A, H) ANTH' CENE	UG/L	34556*8310/3520-G	610	0000N	
011	FLUORANTHENE	UG/L	34376*8310/3520-G	610	0000N	
012	FLUORENE	UG/L	34381*8310/3520-G	610	0000N	
013	INDENO (1, 2, 3-CD)	PYRENE	34403*8310/3520-G	610	0000N	
014	NAPHTHALENE	UG/L	34696*8310/3520-G	610	0000N	
015	PHENANTHRENE	UG/L	34461*8310/3520-G	610	0000N	
016	PYRENE	UG/L	34469*8310/3520-G	610	0000N	
017	THIODIGLYCOL	UG/L	99797*UW22	UW22	0000N	
018	ALDRIN	UG/L	39330*8080/3520-G	8080W	0000N	
019	BHC, A	UG/L	39337*8080/3520-G	8080W	0000N	
020	BHC, B	UG/L	39338*8080/3520-G	8080W	0000N	
021	BHC, D	UG/L	34259*8080/3520-G	8080W	0000N	
022	BHC, G (LINDANE)	UG/L	39340*8080/3520-G	8080W	0000N	
023	CHLORDANE	UG/L	39350*8080/3520-G	8080W	0000N	
024	DOD, PP'	UG/L	39310*8080/3520-G	8080N	0000N	
025	DDE, PP'	UG/L	39320*8080/3520-G	8080W	0000N	
026	DDT, PP'	UG/L	39300*8080/3520-G	8080W	0000N	
027	DIELDRIN	UG/L	39380*8080/3520-G	8080W	0000N	
028	ENDOSULFAN, A	UG/L	34361*8080/3520-G	8080W	0000N	
029	ENDOSULFAN, B	UG/L	34356*8080/3520-G	8080W	0000N	
030	ENDOSULFAN SULFATE	UG/L	34351*8080/3520-G	8080W	0000N	
031	ENDRIN	UG/L	39380*8080/3520-G	8080W	0000N	
032	ENDRIN ALDEHYDE	UG/L	34356*8080/3520-G	8080W	0000N	
033	HEPTACHLOR	UG/L	39410*8080/3520-G	8080W	0000N	
034	METHOXYCHLOR	UG/L	39480*8080/3520-G	8080W	0000N	
035	HEPTACHLOR EPOXIDE	UG/L	39420*8080/3520-G	8080W	0000N	
036	TOXAPHENE	UG/L	39400*8080/3520-G	8080W	0000N	
037	PCB-1015	UG/L	34671*8080/3520-G	8080W	0000N	
038	PCB-1221	UG/L	39488*8080/3520-G	8080W	0000N	
039	PCB-1232	UG/L	39492*8080/3520-G	8080W	0000N	
040	PCB-1242	UG/L	39496*8080/3520-G	8080W	0000N	

O-OPEN L-IN LAB E-EXTRACTED N-NOT REQUESTED D-DONE S-SCHEDULED
* "STORET" = NOT ON DEPT AVAIL NUMS

002932

ESE ENVIRONMENTAL SCIENCE AND ENGINEERING, INC.

ORGANIC LABORATORY/EXTRACTION LOG SHEET

PROJECT: Monticelli CoE - DDMT/Extraction - Sample Smith
 PROJECT NO.: 7954826 0201 CASE NO.: N/A EXTRACTION METHOD: UW22
 EXTRACTOR(S): CAT (3142) CLEANUP: 240-71.45um peroxide CHECKED BY: BMN SAMPLE FRACTION: LC
 DATE: 11/19/93 TIME: 0900 BALANCE USED: N/A

SAMPLE NO.	VOLUME - ml MASS - g.	INITIAL FINAL PH	TYPEDATE OF CLEANUP	FINAL VOL SOLVENT	SURRO- GATE ADDED Y/N	COMMENTS
CONTAINER 3	200 ml	6-8	240-71.45um	1000 ml H ₂ O	N	added 0.4ml per L1, 899831-02
41						UW22. Low Spk in H ₂ O 57.34 ppm
42						TDC 9120193 Rec 3/20/94
EBTSW 27						added 0.4ml 89982-3 UW22
27 MS						High Spk in H ₂ O, 819.2 ppm ^{per 100 ml} TDC in
27050						TDC 11/1/93 Rec imp 31.194 to 27050
L1						H ₂ O
N1						Spiked: CAT Withdrawn: BMN
N2						
B1K						
CONTAINER 4	200 ml	6-8	240-71.45um	1000 ml H ₂ O	N	added per sample LDDMTW + 4.5.4.13
5						3.5.35.35.44, 1400 11/18/93 CAT
7						
12						
35						EBTSW + 27 Log No 51174
58						
39						
44						NPLC H ₂ O BG/53
CHAIN OF CUSTODY RECORD						

003

BOOK NO: 0431

002933

PROJECT Fluximill COE-DDMT/Evapor - Inside Smith

Continued From Page

79340826 1201

UW22

79340726 1200

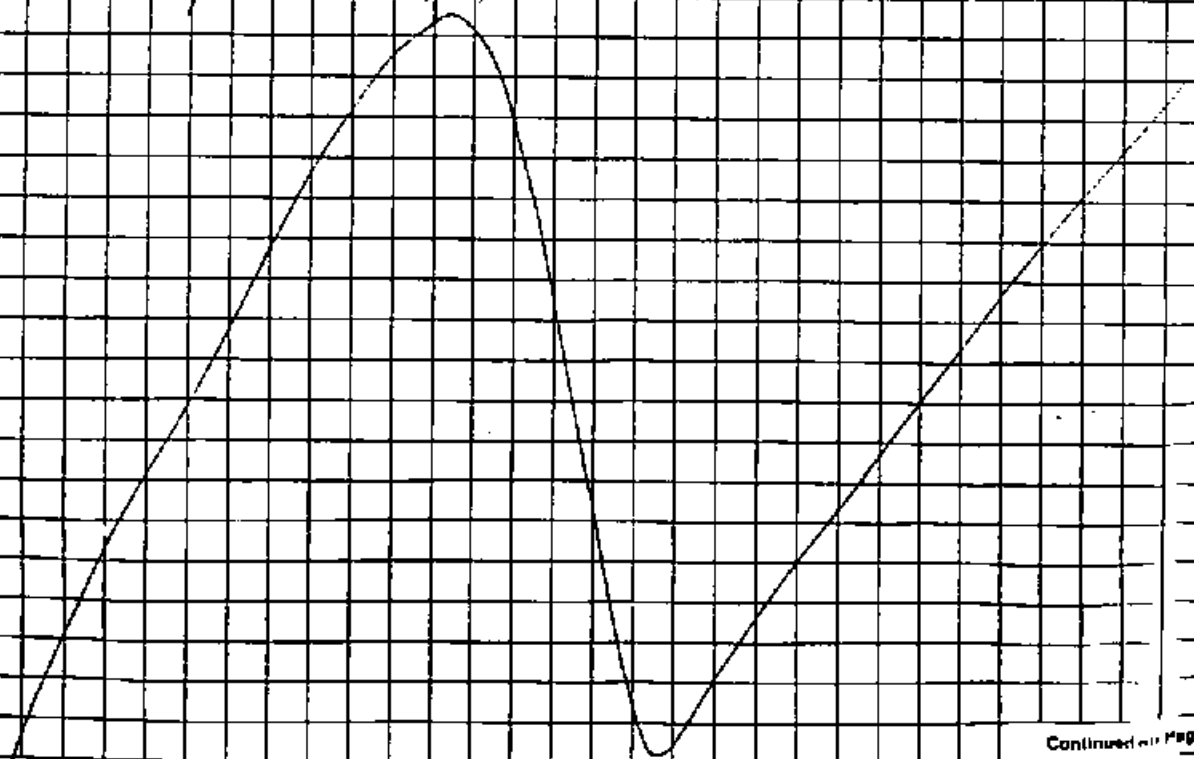
LC

CAT

CDDMTW + 3, 5, 13, 35, 58, 89, 41, 42, 44, 7,

EBTSWT 37, 29 MS/MSD, LI, HI, NR, BK

1. Poured up 200ml sample into 250ml volume flask
2. Spiked sample
3. Conc to ~50ml
4. Pump sample through KOD-7 column, column eluted with solvent with 50ml NPAC H₂O
5. Conc to ~25ml 11/18/93 CAT
6. Inject sample into GET, added 1.0ml sample through up to 10ml with NPAC H₂O, after Conc to ~5ml.
7. Poured sample through 40um porous disc into 100ml vial 11/19/93 CAT



Continued on Page

Christine Thompson
Signed

11/18/93
Date

Read and Understood By

R
Signed

11/19/93
Date

002934

SAMPLES: CDDMTW 3-5, 7, 13, 35, 38, 39, 41, 42, 44
EBTSW 27

SAMPLE FRACTION: LC
 EXTRACTION SOLVENT: HPLC H2O

UW22 CHECKLIST

1. Check out lot folder
2. Silane treat glassware
3. 200ml sample into 250ml beaker Use HPLC H2O for QC
4. Spike samples
5. Add 2 teflon boiling chips, concentrate to 50ml by boiling the sample
6. Check PH of the sample, adjust to PH 7±1 PH= 6.8
7. Pack column (20cm X 1cm) with 8g of XAD-7 Resin
8. Transfer the sample to the column allow the sample to pass through, collect in the same beaker
9. Rinse the column with 50ml HPLC H2O, collect in the same beaker giving a volume of 100ml
10. Concentrate to <25 by boiling the sample
11. Quantitatively transfer to a 50ml beaker
12. Concentrate to <5ml by boiling the sample
13. Transfer to a G.C. tube
14. Add 1.0ml UW22 buffer solution, bring to 10.0ml with HPLC H2O
15. Filter sample through .45um acrodisc, collect in 6ml shorty vial
16. Check lot folder off of the clipboard, turn in to the analyst

17. Place samples in fridge c

QC REQUIRED

BLK

LSPK

HSPK-1

HSPK-2

HPLC H2O LOT# BG 153

YES

NO

✓

✓

✓

✓

Chain of
Custody

Woods Lab-C
11/18/93
CRT

11/19/93
CRT

CAT

CAT

11/18/93

11/19/93

002935

**ESE ENVIRONMENTAL SCIENCE
AND ENGINEERING, INC.**

ORGANIC LABORATORY/EXTRACTION LOG SHEET

PROJECT: *Therapeutic Coc-DDMT*

EXTRACTION METHOD: *UW72*

PROJECT NO.: 79340826 0201

CASE NO: AA

SAMPLE EXTRACTION: 15

EXTRACTOR(S) CAT (3192)

CLEANUP XAD-7/45um ACQUANT

CHECKED BY: *Benn*

DATE: 11/18/93

TIME: 0900

BALANCE USED: 1/14

[illegible]

PROJECT Huntwell COE-DDMT

Continued From Page

79380826 0201

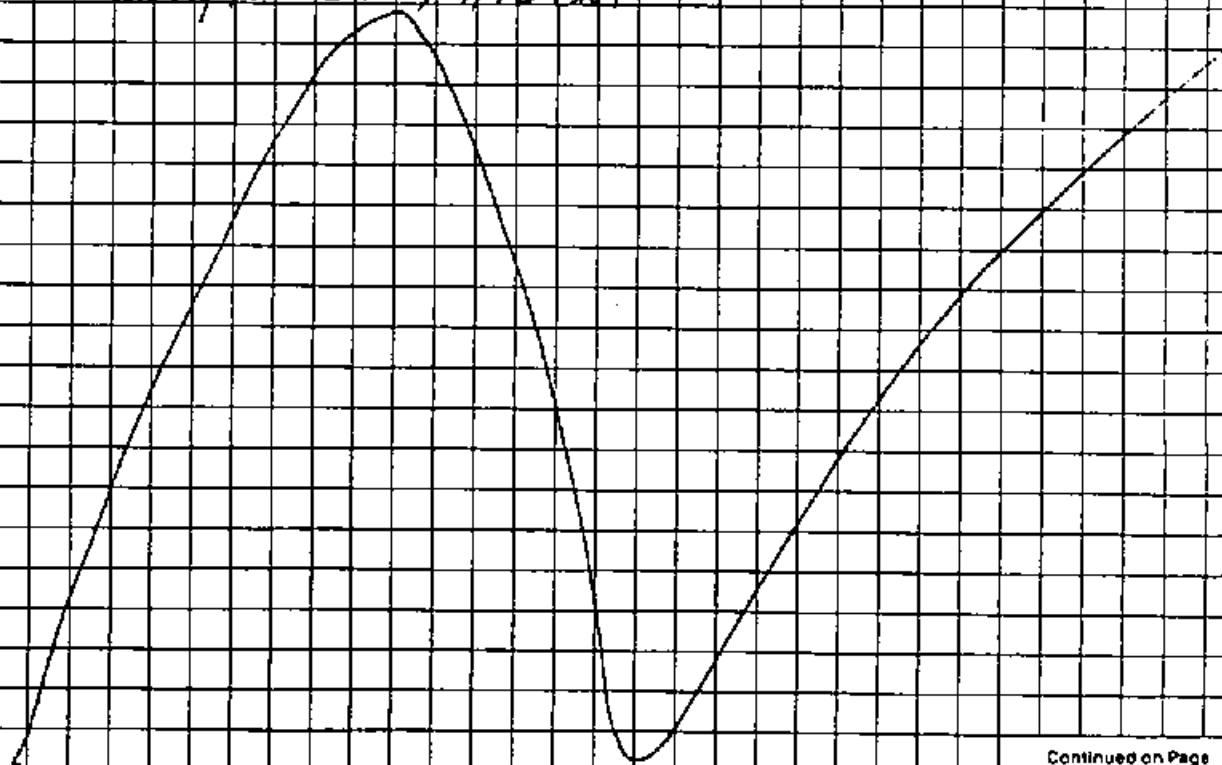
CAT

uw22

LC

CDDMTW 7-12, L1, H1, H2, BIK

1. Poured ^{some} sample into 250 ml vial, fitted Teflon.
2. Spiked sample
3. Core to ~50 ml
4. Re-sample through RAD-7 given column. Eluted with some HPLC H₂O
5. Core to ~25 ml. 11/18/93 CAT
6. Quant. transferred to some HPLC.
7. Core to ~5 ml
8. Quant. transferred to HPLC, added 1.0 ml buffer, through up to 10 ml with HPLC H₂O
9. Poured sample through 43 um particle into vial, 11/19/93 CAT



Continued on Page

Christine Thompson
Signed

11/18/93
Date

Read and Understood By

14
Signed

11/19/93
Date

002937

SAMPLES: CDDMTW# 9-12SAMPLE FRACTION: LC
EXTRACTION SOLVENT: HPLC H2OUW22 CHECKLIST

1. Check out lot folder
2. Silane treat glassware
3. 200ml sample into 250ml beaker Use HPLC H2O for QC
4. Spike samples
5. Add 2 teflon boiling chips, concentrate to 50ml by boiling the sample
6. Check PH of the sample, adjust to PH 7±1 PH= 6.8
7. Pack column (20cm X 1cm) with 8g of XAD-7 Resin
8. Transfer the sample to the column allow the sample to pass through, collect in the same beaker
9. Rinse the column with 50ml HPLC H2O, collect in the same beaker giving a volume of 100ml
10. Concentrate to <25 by boiling the sample
11. Quantitatively transfer to a 50ml beaker
12. Concentrate to <5ml by boiling the sample
13. Transfer to a G.C. tube
14. Add 1.0ml UW22 buffer solution, bring to 10.0ml with HPLC H2O
15. Filter sample through .45um acrodisc, collect in 6ml shorty vial
16. Check lot folder off of the clipboard, turn in to the analyst

17. Place samples in fridge C

QC REQUIRED

BLK

LSPK

HSPK-1

HSPK-2

HPLC H2O LOT# 36 153YESNO✓✓✓✓Chain of
Custody
Hood's Lab C
11/18/93
CAT
Floyd's Lab 19
11/18/93
CAT

002938

ENVIRONMENTAL SCIENCE AND ENGINEERING, INC. ORGANIC LABORATORY SAMPLE CHECK IN/OUT LOG				
FIELD GROUP AND SAMPLE SEQUENCE	CONTINUED * 3, 14, 26, 36, 41, 42	EXTRACT TYPE	800/810 H2O	
DATE/TIME IN	11-19-93			
DATE/TIME OUT				
FIELD GROUP AND SAMPLE SEQUENCE	CONTINUED * 1-3	EXTRACT TYPE	800/810 H2O	
DATE/TIME IN	11-19-93			
DATE/TIME OUT				
FIELD GROUP AND SAMPLE SEQUENCE	CONTINUED * 7, 16, 24, 36, 41, 42	EXTRACT TYPE	8310 H2O	
DATE/TIME IN	11-19-93			
DATE/TIME OUT				
FIELD GROUP AND SAMPLE SEQUENCE	LAKEVIEW * 236-251	EXTRACT TYPE	L416	
DATE/TIME IN				
DATE/TIME OUT				
FIELD GROUP AND SAMPLE SEQUENCE	KEEPEX * 38 / KEEPEX * 235, 7, 10, 27-29, 51	EXTRACT TYPE	380 CLP 000 Soil Chem	
DATE/TIME IN	11-19-93			
DATE/TIME OUT	11-19-93			
FIELD GROUP AND SAMPLE SEQUENCE	CONTINUED * 9-12 + QC	EXTRACT TYPE	UW22	
DATE/TIME IN	11/19/93			
DATE/TIME OUT	12-1-93			

(ORGANLAB 07/91)

STANDARD LABELING CONVENTION AND ASSOCIATED
DILUTION CODES

All standard solutions used by the HPLC group have the following characteristic nomenclature:

First three digits - ESE laboratory notebook number

Next two digits - page number in the lab notebook
(pages 1-9 are recorded as 01-09)

Last digit - sequence number on the notebook page

The six digit code is followed by a hyphen and a dilution code and multiplier (if required). The dilution codes are based on factors of 10 as the alphabetic character advances. All "A" dilution codes designate a primary stock standard, or the most concentrated combined stock in a series. "B", "C", and "D" designate 1:10, 1:100, and 1:1000 dilutions of the "A" stock, respectively. The last character, a multiplier, is used to denote dilutions which are not a factor of 10 dilution of the primary solution.

EXAMPLE: STD# 888097-C5, preparation documented in lab notebook number 888 on page 9 as the seventh standard listed on the page. "C5" denotes a 1:20 dilution of the "A" stock (1:100 x 5)

LABORATORY NOTEBOOK

Notebook No.: 00972Assigned to: Curtis Campbell, Ph.D.Date: 9/3/93

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Rochester, New York
Printed in U.S.A.

2
PROJECT THIODIGLYCOL

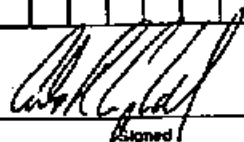
Notebook No. 972

Continued From Page

TDG - CCN STOCK

0.2383 g $\rightarrow$ 25 mL HPLC H₂O $\rightarrow$ 9532 μ g/mLAldrich, 99+%, Lot # 676024W; B+S HPLC H₂O Lot # BF565
BRANKE-AE60 # 048266

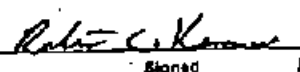
Continued on Page


Signed

9-13-93

Date

Read and Understood By


Signed

9-20-93

Date

002943

PROJECT

OW22 CAL

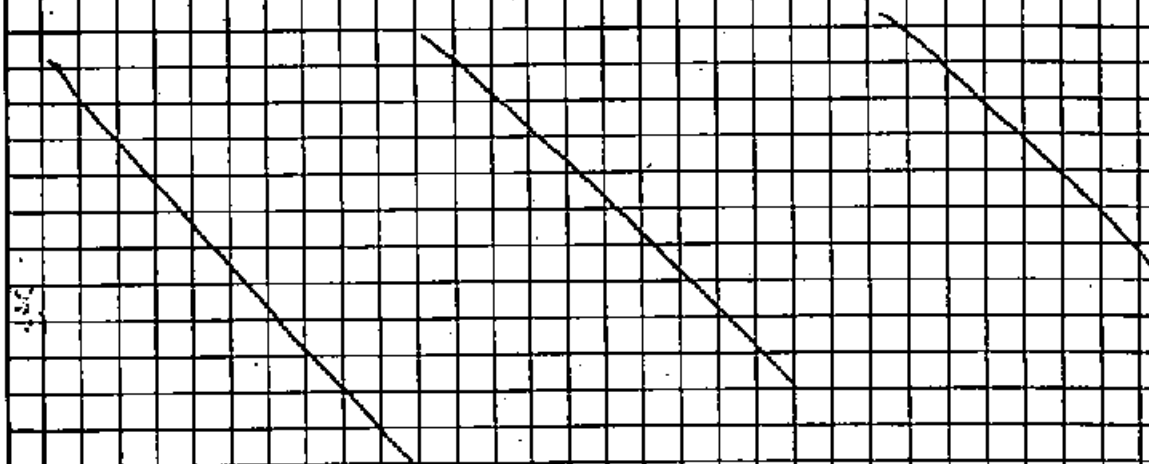
Continued From Page

CURVE FROM CAL STOCK 899901-A 8804 μ/L 0.5-L 899901-A $\rightarrow$ 10-L H₂O $\rightarrow$ 899901-B 8804 μ/L 0.1-L 899901-A $\rightarrow$ 10-L H₂O $\rightarrow$ 899901-C 8804 μ/L

WORKING LEVELS

CORE μ/L 0.5-L 899901-B $\rightarrow$ 10-L H₂O $\rightarrow$ 899901-D5 440200.2 -B $\rightarrow$ 10-L H₂O $\rightarrow$ -D2 176081.0 -C $\rightarrow$ -D 88040.5 -C $\rightarrow$ -E5 44020.1 -C $\rightarrow$ -E 880.40.5 -D $\rightarrow$ -F5 440.2

F5 LEVEL RUN - NOT USED IN OW22 METHOD FOR POINTING LN 18 RUN.

CAL FROM STOCK 972021-A 9532 μ/L RUN AT A 'D-LEVEL' TARGET: 9532 μ/L 

Continued on Page

[Signature]
Signed

10-18-93

Date

Read and Understood By

[Signature]
Signed

10-20-93

Date

002944

LABORATORY NOTEBOOK

Notebook No.: 00899
Assigned to: Bob Hemerit
Date: 7/23/92

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Rochester, New York
Printed in U.S.A.

002945

PROJECT THIODIGLYCOL

Continued From Page

899871-CC LOW LOW SPIKE

$$0.6 \text{ mL of } 899871-A (81320 \text{ ppm TOC}) \xrightarrow[\text{THIODIGLYCOL}]{\text{THIODIGLYCOL}} 899871-CC (491.5 \text{ ppm TOC})$$

SPIKE 0.1 mL in 10 mL of sample

$$\text{Target: } (0.1 \text{ mL}) (491.5 \text{ ppm TOC}) = 49.15 \text{ ppm TOC}$$

$$(105) ((105 - 0.05) / 105)$$

CALC 5-18-93

Prepared 9-18-93 by RCK Exam 3-18-94

899871-B LOW HIGH SPIKE THIODIGLYCOL

$$2.5 \text{ mL } 899871-A (8152 \text{ ppm TOC}) \xrightarrow[\text{THIODIGLYCOL}]{\text{THIODIGLYCOL}} 899871-B (819.2 \text{ ppm TOC})$$

SPIKE 0.4 mL in 200 mL of sample

$$\text{Target } (819.2 \text{ ppm TOC}) (0.4 \text{ mL}) \times \frac{1000 \text{ mL}}{200 \text{ mL}} = 1638 \text{ ppm TOC}$$

Prepared 9-20-93 Exam 3-20-94

899871-D7 LOW LOW SPIKE THIODIGLYCOL

$$1.4 \text{ mL } 899871-B (819.2 \text{ ppm TOC}) \xrightarrow[\text{THIODIGLYCOL}]{\text{THIODIGLYCOL}} 899871-D7 (114.7 \text{ ppm TOC})$$

SPIKE 0.4 mL in 200 mL of sample

57.34 ppm
9-23-93
$$\text{Target } (114.7 \text{ ppm TOC}) (0.4 \text{ mL}) \times \frac{1000 \text{ mL}}{200 \text{ mL}} = 229.4 \text{ ppm TOC}$$

Prepared 9-26-93 Exam 3-26-94

Continued on Page

Read and Understood By

Signed Robert C. Kerner Date 9-26-93

Signed Spill McNeill

Date 9/27/93

002946

90

PROJECT THIODIGLYCOLNotebook No. 899Continued From Page 898899801-A THIODIGLYCOL CALIBRATION STOCK SOLUTION8 g of 2,2'-THIODIETHANOL, 99+%, (ALDRICH LOT 07502 RW)was pipetted into a 25 mL volumetric flask and wasbrought to volume with HPLC water

$$\frac{0.22019 \text{ g}}{25 \text{ mL}} \times \frac{1000 \text{ mL}}{1} \times \frac{1000 \text{ ng}}{1 \text{ g}} = 8804 \text{ ng/mL} = 8804 \text{ } \mu\text{g/mL}$$

2,2'-THIODIETHANOL was received 1-15-92 and opened 1-23-93Calibration stock prepared 9-28-93Calibration stock expires 9-28-94

Continued on Page

002947

Read and Understood By

Robert C. Kennel
Signed9-28-93
DateSgt. McMill
Signed10/7/93
Date

92

PROJECT THIODIGLYCOL

Notebook No. 819

Continued From Page

899921-E 44122 High Spd THIODIGLYCOL

2.5 ml 899791-A (2192 PPM TOG) $\frac{25 \mu\text{L}}{1000 \mu\text{L}} \rightarrow$ 89992-B (819.2 PPM TOG)

SPIKE 0.4 ml in 200 ml of sample

TARGET $\frac{(819.2 \text{ PPM TOG})(0.4 \text{ ml})}{200 \text{ ml}} \times 1000 \text{ ml} = 1638 \text{ mg/ml}$

prepared: 11-1-93 exp: 5-1-94 RLL

Continued on Page

002948

Robert C. Korman

Signed

11-1-93

Date

Read and Understood By

Dy O. Hall

Signed

11/5/13

Date

94

PROJECT THIOGLYCOLNotebook No. 899Continued From Page N/A

THIOGLYCOL in WATER HIGH SPIKE 899941-B

2.5 ml 899941-A (847.2 μ S/ml) $\xrightarrow[25 \text{ ml}]{\text{water}}$ 899941-B (847.2 μ S/LTD)
 (5) ml 11-17-93

SPIKE 0.4 ml of 899941-B in 200 ml of sample

Target: $\frac{(847.2 \mu\text{S/LTD})(0.4 \text{ ml})}{200 \text{ ml}} \times 1000 \text{ ml} = 1694.4 \mu\text{S/L}$

Prepared 11-17-93 RCK Exp 5-19-94

Continued on Page

Robert K. Kamef
 Signed

11-17-93
 Date

Read and Understood By

R. J. Egan
 Signed

002949

11/17/93
 Date

PROJECT THIDDIGLYCOL

Continued From Page N 1A

Calibration Curve for THIDDIGLYCOL (C₁₄H₂₂O₂)

Prepared 12-2-93 B. Kammer

mg/L
TDC

1.0 mL of 899901-A (8804 mg/mL) into 10 mL w/ HPLC w/	→ 899951-B 880400
0.1 mL ↓ ↓ ↓	→ 899951-C 88040
0.5 mL of 899951-B (88040 mg/L) into 10 mL w/ HPLC w/	→ 899951-D5 44020
0.2 mL ↓ ↓ ↓	→ 899951-D2 17608
0.1 mL ↓ ↓ ↓	→ 899951-D 8804
0.5 mL of 899951-C (88040 mg/L) into 10 mL w/ HPLC w/	→ 899951-E5 4402
0.1 mL ↓ ↓ ↓	→ 899951-E 880.4
0.5 mL of 899951-D (8804 mg/L) into 10 mL ↓	→ 899951-F5 440.2

STOCK STD 899901-A prepared 9-25-93 by B. Kammer

899952 - Continuing Calibration 1-mL standard STDs
prepared 12-2-93

1.0 mL 97201-A (9532 mg/L) into 10 mL w/ HPLC w/	→ 899952-B 95320
0.1 mL 899951-B (95320 mg/L) ↓ ↓	→ 899952-D 9532

EC/ Stock prepared 9-13-93 by C. Campbell

Continued on Page

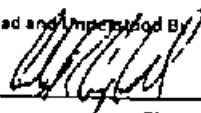
Robert C. Kammer

Signed

12-1-93

Date

Read and Interpreted By



Signed

12/2/93

Date

002950

B-0383

51 141

INSTRUMENT LOGBOOK
SYSTEM #5 ROOM 1800
PAGE 0

HP 1050 INSTRUMENT CONFIGURATION:

	<u>MODULE</u>	<u>MODEL #</u>	<u>SERIAL #</u>
1	QUATERNARY PUMP	79852A	3225A01597
1	AUTOSAMPLER	79855A	3141A01577
1	V/W UV DETECTOR	79853C	3225J00998
1	SPARGING SYSTEM	79856A	3114A00694

002951

Environmental
Science &
Engineering, Inc.

CHROMATOGRAPHIC ANALYSIS LOG

Date 12-2-93
 Analyst ELC
 Project MOBILE/CARROLL IS.
 Case/Method UW22
 Instrument ID #5 R-1800
 Data System TC 2700 II
 Analysis Type TOG in H₂O

COLUMN
 Packing ULTRASPHERE ODS
 Length x I.D. (mm) 250 x 4.6
 dp 5 Temp °C 40
 Serial No. 2UE3279
 GUARD COLUMN
 Packing M
 Col # / Date 1A

INJECTOR
Autosampler or Manual?
 Inj Vol (μL) 100
 Sequence File DHCA
 DETECTOR
 UV at 215 nm
 Other ANAL RANGE = 0.1

Mobile Phase/Gradient Program Description Pump A PHOSPHATE BUFFER Pump B A/W

10-um @ 100% A

PHCA 643728

PHBA 643727

PHCA 644138

Prefix: UW22

Run No.	Sample No.	Run No.	Sample No.	Run No.	Sample No.
1	MOBILE PHASE BLK	27	SPM2XCIH2NZX60	53	CCSX120393X4
2	B99901-DS	28	CIH3WZx5	54	UW22 H1 SPK VER
3	F5	29	37	55	UW22 L6
4	E	30	41	56	LW18 H1
5	E5	31	60	57	LW18 L6
6	D	32	61		
7	D2	33	66		
8	D5	34	73		
9	CCSX120293X1	35	CCSX120293X2		
10	MBXTHAMA-PHCA#1	36	MBXTHAMA-PHBA#1		
11	SR1	37	SR1		
12	SR2	38	SR2		
13	SR3	39	SR3		
14	SPM1XCIH2NZX20	40	SPM1XCIH2NZX36		
15	SPM2	41	SPM2		
16	EBTBSLX21	42	CIH2WZx1		
17	EBTBSLX12	43	3		
18	13	44	36		
19	14	45	42		
20	20	46	43		
21	CCSX120393X1	47	53		
22	MBXTHAMA-PHBA#1	48	54		
23	SR1	49	56		
24	SR2	50	67		
25	SR3	51	74		
26	SPM1XCIH2WZx60	52	CCSX120393X3		

F266750

BOOK NO. B-0393

000044

002952



Environmental
Science &
Engineering, Inc.

CHROMATOGRAPHIC ANALYSIS LOG

51 143

Date 12-7-93
Analyst CRG
Project C.O.E. HUNTSVILLE
Case/Method UW22
Instrument ID #5 R-1800
Data System R 2700
Analysis Type ITG in H₂O

COLUMN
Packing ULTRASPHARE
Length x I.D. (mm) 250 x 4.6
Tp 5 Temp °C Ambient
Serial No. 2UE 3279
GUARD COLUMN
Packing N/A
Col # / Date 1/8

INJECTOR
Autosampler or Manual?
Inj Vol (µL) 100
Sequence File COEHUNT
DETECTOR
UV at 215 nm
Other Output range: 0.1AU

Mobile Phase/Gradient Program Description Pump A - Phosphate Buffer Pump B - AcN

1.0 mL/min @ 100% A

REFID C.O.E					
G44757 1-22			G44758 27-31		
Run No.	Sample No.	Run No.	Sample No.	Run No.	Sample No.
1	MOBILE PHASE BLK	27	CCS# 120893#2		
2	CCS# 120793#1	28	MB#GC#3		
3	MB#GC#1	29	SP1 3		
4	SP1 1	30	SP2 3		
5	SP2 1	31	SP3 ↓ 3		
6	SP3 ↓ 1	32	CDDMTW#48		
7	CDDMTW#3	33	↓ 49		
8	4	34	↓ 50		
9	5	35	↓ 51		
10	7	36	CCS# 120893#3		
11	13	37	MB#GC#4		
12	35	38	SP1 4		
13	38	39	SP2 4		
14	39	40	SP3 ↓ 4		
15	41	41	CDDMTW#8		
16	42	42	14		
17	↓ 44	43	15		
18	CCS# 120893#1	44	29		
19	MB#GC#2	45	32		
20	SP1 2	46	37		
21	SP2 2	47	45		
22	SP3 ↓ 2	48	46		
23	CDDMTW#9	49	47		
24	10	50	CCS# 120993#1		
25	11	51	CCS# 120993#2		
26	↓ 12				

F268250

000046

BOOK NO: B-0383

002953

EXAMPLE CALCULATION

For Method UW 22

Calculated by: *Curtis R. Campbell*Lot No. *644757*Date: *12-8-93*Sample No. *SP1*QC*1*Response for Thiodiglycol (TDG) = *664813* (area units)

The concentration ($\mu\text{g/L}$) of TDG calculated from the calibration curve equation ($y = mx + b$) where x = response for TDG and m and b are from the curve data.

$$\text{Conc. of TDG} = 2134.9 \mu\text{g/L (1L/1000mL)}$$

$$= 2.135 \mu\text{g/mL}$$

Total μg extracted = final extract volume *10 mL* x extract

$$\text{concentration } 2.135 \mu\text{g/mL} = 21.35 \mu\text{g}$$

Amount of TDG spiked (target) = *14 mL* of *57.3 $\mu\text{g/mL}$* standard,

$$= 22.92 \mu\text{g}$$

% Recovery = [(amt. in extract - amt. in blank) + target conc.] x 100

$$= [(21.35 - 0) + 22.92] \times 100$$

$$= 93.1 \%$$

002954

ERROR CORRECTION CODES

CODE	EXPLANATION
WP	Entry Made In Wrong Place
WI	Wrong Information Recorded
CE	Calculation Error
SE	Spelling Error
IW	Illegible Writing Error
FO	Data Changed Upon Further Observation
TE	Transcription Error
FE	Further Explanation Provided

ANALYTICAL DATA

SDG NO: 44759.

CROSS REFERENCE TABLE FOR SDG: G44759 15:56:42 10 JAN 1994

THIS SDG INCLUDES THE FOLLOWING BATCHES :
G44759

PRINTED BY : RUBY WYROSDICK

ABBREVIATION	COMPLETE NAME
AA	MW45EBLK
AB	MW46EBLK
AC	MW47EBLK

COVER PAGE

Lab Name: ESE

Project No.: 7934082G

SDG No: G44759

Client ID	Laboratory ID	Matrix (S/W)	Analysis	Date Collected	Date Received	Date Analyzed
CCV1	CCV*120293*1	W	TDGCL	00/00/00	00/00/00	12/02/93
CCS1	CCS*120893*4	W	TDGCL	00/00/00	00/00/00	12/09/93
PBLK1	MB*QC*4	W	TDGCL	00/00/00	00/00/00	12/09/93
SP1	SP1*QC*4	W	TDGCL	00/00/00	00/00/00	12/09/93
SP2	SP2*QC*4	W	TDGCL	00/00/00	00/00/00	12/09/93
SP3	SP3*QC*4	W	TDGCL	00/00/00	00/00/00	12/09/93
MW8	CDDMTW*8	W	TDGCL	11/17/93	11/18/93	12/09/93
MW14	CDDMTW*14	W	TDGCL	11/17/93	11/18/93	12/09/93
MW15	CDDMTW*15	W	TDGCL	11/18/93	11/19/93	12/09/93
MW29	CDDMTW*29	W	TDGCL	11/17/93	11/18/93	12/09/93
MW32	CDDMTW*32	W	TDGCL	11/18/93	11/19/93	12/09/93
MW37SP	CDDMTW*37	W	TDGCL	11/18/93	11/19/93	12/09/93
AA	CDDMTW*45	W	TDGCL	11/18/93	11/19/93	12/09/93
AB	CDDMTW*46	W	TDGCL	11/18/93	11/19/93	12/09/93
AC	CDDMTW*47	W	TDGCL	11/18/93	11/19/93	12/09/93
CCS2	CCS*120893*5	W	TDGCL	00/00/00	00/00/00	12/09/93

Comments:

ANALYSIS DATA SHEET

Client ID

CCV1

Lab Name: ESE Project No.: 7934082G SDG No.: G44759
Matrix: (soil/water) WATER Lab Sample ID: CCV*120293*1
Sample wt/vol: . Lab File ID:
%Moisture: pH: Dilution Factor: 1.00
Date Analyzed: 12/02/93 Date Received: 00/00/00

CAS NO.	COMPOUND	Q
	THIODIGLYCOL (UG/L)	9480.

ANALYSIS DATA SHEET

PBLK1

Lab Name: ESE Project No.: 7934082G SDG No.: G44759
Matrix: (soil/water) WATER Lab Sample ID: MB*QC*4
Sample wt/vol: 200. Lab File ID:
%Moisture: pH: Dilution Factor: 1.00
Date Analyzed: 12/09/93 Date Received: 00/00/00

CAS NO.	COMPOUND	Q
	THIODIGLYCOL (UG/L)	44.0 U

ANALYSIS DATA SHEET

Client ID

SP1

Lab Name: ESE Project No.: 7934082G SDG No.: G44759
Matrix: (soil/water) WATER Lab Sample ID: SP1*QC*4
Sample wt/vol: 200. Lab File ID:
%Moisture: pH: Dilution Factor: 1.00
Date Analyzed: 12/09/93 Date Received: 00/00/00

CAS NO.	COMPOUND	Q
	THIODIGLYCOL (UG/L)	95.9

51 152

Client ID

ANALYSIS DATA SHEET

SP2

Lab Name: ESE Project No.: 7934082G SDG No.: G44759
Matrix: (soil/water) WATER Lab Sample ID: SP2*QC*4
Sample wt/vol: 200. Lab File ID:
%Moisture: pH: Dilution Factor: 1.00
Date Analyzed: 12/09/93 Date Received: 00/00/00

CAS NO.

COMPOUND

Q

THIODIGLYCOL (UG/L)	1520.	
---------------------	-------	--

Client ID

MW37SP

Date Received: 11/19/93

002964

QUALITY CONTROL DATA

002965

SDG #: G44759

Instrument ID:

Curve #	Analysis Date	Concentration	Response	Predicted Concentration	Retention Time (min)	Correlation Coeff. (r)
1	12/02/93	0. 880.4 4402. 8804. 17608. 44020.	0. 267276. 1404762. 2822469. 5641882. 4309406.	90.7 913. 4410. 8770. 17400. 44100.	. 11.41 11.54 11.46 11.44 11.40	1.0000

Control Limits: $r = 0.995$

Comments:

ESE METHOD BLANK SUMMARY

Client ID

PBLK1

Lab Name: ESE

Project No: 7934082G

SDG No.: G44759

Lab Sample ID: MB*QC*4

Lab File ID:

Matrix: (soil/water) WATER

Instrument ID:

Date Analyzed : 12/09/93

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

CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
=====	=====	=====
MW8	CDDMTW*8	12/09/93
MW14	CDDMTW*14	12/09/93
MW15	CDDMTW*15	12/09/93
MW29	CDDMTW*29	12/09/93
MW32	CDDMTW*32	12/09/93
MW37SP	CDDMTW*37	12/09/93
AA	CDDMTW*45	12/09/93
AB	CDDMTW*46	12/09/93
AC	CDDMTW*47	12/09/93

COMMENTS:

51 158

Client ID

REFERENCE STANDARD

SP1

Lab Name: ESE

SDG No: G44759

Lab Sample ID: SP1*QC*4

Date Analyzed: 12/09/93

Standard Source:

Instrument ID:

Analyte	True	Found	C	%Recv	Limits
TDGCL	115.	880.	U	765.2	37-119

Comments:

FORM V ESE

002968

51 159

Client ID

REFERENCE STANDARD

SP2

Lab Name: ESE

SDG No: G44759

Lab Sample ID: SP2*QC*4

Date Analyzed: 12/09/93

Standard Source:

Instrument ID:

Analyte	True	Found	C	%Recv	Limits
TDGCL	1640.	1520.		92.7	37-119

Comments:

FORM V ESE

002969

51 160

Client ID

REFERENCE STANDARD

SP3

Lab Name: ESE

SDG No: G44759

Lab Sample ID: SP3*QC*4

Date Analyzed: 12/09/93

Standard Source:

Instrument ID:

Analyte	True	Found	C	%Recv	Limits
TDGCL	1640.	1480.		90.2	37-119

Comments:

FORM V ESE

002970

51 161

Client ID

CALIBRATION VERIFICATION

CCV1

Lab Name: ESE

Project No: 7934082G

SDG No: G44759

Lab Sample ID: CCV*120293*1

Date Analyzed: 12/02/93

Instrument ID:

Analyte	True	Found	C	%Diff	Limit
TDGCL	9530.	9480.		0.5	

Comments :

RAW DATA

51 163

GC OR HPLC BATCH DOCUMENTATION CHECKLIST

Initial or NA	ESE Standard
☒	Batch printout (include % moisture <u>NA</u>)
☒	Method-reference & deviations
☒	Dilution factors checked
☒	Sample Arrival Notices
☒	Extraction logsheets - copies
☒	Chromatographic logsheets or copies
☒	Instrument logbook pages
☒	(include instrument ID # <u>SR-600</u>) copies
☒	Extractor notebook pages - copies
☒	Analyst notebook pages - copies
☒	Correspondence and memos
☒	Chromatograms (labeled ☒)
	unused chromatograms noted & explained ☒
	column used ☒ , instrument conditions ☒
SW-846 Supplement	
<u>NA</u>	Check sample results
<u>NA</u>	Surrogate results
<u>NA</u>	Evaluation standard results (pesticides only)
<u>NA</u>	Retention windows
Navy Supplement	
<u>NA</u>	Control Charts (each required analyte)
Air Force Supplement	
<u>NA</u>	Second column confirmation form
Notes:	
<u>CCL</u>	<u>12/15/93</u>
Analyst Initials	Date
<u>R03</u>	<u>12/15/93</u>
Checked by	Date

002973

ESE BATCH : G44759

QC TYPE : ESE
 ANALYST : CURTIS CAMPBELL
 EXTRACTOR : CHRISTINE THOMPSON
 DATA ENTRY : CURTIS CAMPBELL

REPORT DATE/TIME : 12/15/93 09:53:56
 ANALYSIS DATE : 12/09/93
 EXTRACT DATE : 11/22/93

STATUS :

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMTW	79340828 0201	HUNTSVILLE COE - DDMT	PATRICK WILBER

Sample Specific Raw Data

SAMPLE CODE	EXTRACT DATE	ANALYSIS DATE	ANALYSIS TIME	SAMPLE VOLUME (ML)	EXTRACT VOLUME (ML)	INJECTION VOLUME (NA)	MOISTURE
CCV*120293*1		12/02/93	11:07PM				
CCS*120893*4		12/09/93	08:56AM				
MB*QC*4	11/22/93	12/09/93	09:43AM	200	10		
SP1*QC*4	11/22/93	12/09/93	10:30AM	200	10		
SP2*QC*4	11/22/93	12/09/93	11:17AM	200	10		
SP3*QC*4	11/22/93	12/09/93	12:04PM	200	10		
DA*CDMTW*8	11/22/93	12/09/93	12:51PM	200	10		
DA*CDMTW*14	11/22/93	12/09/93	01:38PM	200	10		
DA*CDMTW*15	11/22/93	12/09/93	02:25PM	200	10		
DA*CDMTW*29	11/22/93	12/09/93	03:12PM	200	10		
DA*CDMTW*32	11/22/93	12/09/93	03:59PM	200	10		
DA*CDMTW*37	11/22/93	12/09/93	04:46PM	200	10		
DA*CDMTW*45	11/22/93	12/09/93	05:33PM	200	10		
DA*CDMTW*46	11/22/93	12/09/93	06:20PM	200	10		
DA*CDMTW*47	11/22/93	12/09/93	07:07PM	200	10		
CCS*120893*5		12/09/93	07:54PM				

Parameter Specific Raw Data

SAMPLE CODE	STORET NAME	STATUS	RESPONSE (AREA)	DIL	TYPE	CURVE	RET TIME	SPIKE SOL CONC (UG/ML)	SPIKE SAMP VOL (L)	SPIKE VOLUME (ML)	DIL CODE	CALC'D TARGET (UG/L)
CCV*120293*1	TDGCL	OK	3054509	1		1	11.43					9532
CCS*120893*4	TDGCL	OK	14551739	1	MANUAL	1	11.24					14309406
MB*QC*4	TDGCL	OK	0		FINAL		0					
SP1*QC*4	TDGCL	OK	594156	1		1	11.15	57.34	.2	0.4	N	114.58
SP2*QC*4	TDGCL	OK	9825057	1		1	11.03	819.2	.2	0.4	N	1638.4
SP3*QC*4	TDGCL	OK	9565360	1		1	10.92	819.2	.2	0.4	N	1638.4
DA*CDMTW*8	TDGCL	OK	0				0					
DA*CDMTW*14	TDGCL	OK	0				0					
DA*CDMTW*15	TDGCL	OK	0				0					
DA*CDMTW*29	TDGCL	OK	0				0					
DA*CDMTW*32	TDGCL	OK	0				0					
DA*CDMTW*37	TDGCL	OK	0				0					
DA*CDMTW*45	TDGCL	OK	0				0					
DA*CDMTW*46	TDGCL	OK	0				0					
DA*CDMTW*47	TDGCL	OK	0				0					
CCS*120893*5	TDGCL	OK	13626210	1	MANUAL	1	10.88					14309406

STORET: 99797 METHOD: UN22 THIOPHOLYCOX, WG/L LINE

CALIBRATION CURVE # 1 (UG/L)

CURVE DETECTION LIMIT= 880.4 DATE: 02 DEC 1993 LARGEST RESPONSE=14309406 %RSD=2.5914

CONC	0	880.4	4402	8804	17608	44020
RESP	0	267276	1404762	2822469	5641862	14309406
CONC'	90.7	913	4410	8770	17400	44100
R.T.		11.41	11.54	11.46	11.44	11.40

CONC = 9.0668E-01+ 3.0750E-03*RESP+ *RESP**2+ *RESP**3
 95% C.I. = 1.0882E-02 1.6974E-05
 CORRELATION COEFFICIENT = 1.0000

METHOD BLANK(S)

SAMPLE ID CONCENTRATION

QC#4 0.0

CONTINUING CALIBRATION STANDARD(S) *** Optional Quality Control Check ***

STANDARD ID	CALC. CONC	KNOWN CONC	DIFFERENCE
120893*4	14600000	14300000	2.2
120893*5	13600000	14300000	-4.9

CONTINUING CALIBRATION VERIFICATION SAMPLE(S) *** Optional Quality Control Check ***

SAMPLE ID	CALC. CONC	KNOWN CONC	DIFFERENCE
120293*1	9480	9530	-5

STANDARD MATRIX SPIKE(S)

SAMPLE ID	UNSP CONC	SPK CONC	FOUND	TARGET	% RECV	REL DIFF.
SP1*QC*4	0.0	95.9	95.9	115	83.4	
SP2*QC*4	0.0	1520	1530	1640	92.7	10.6
SP3*QC*4	0.0	1480	1480	1640	90.2	7.8

SAMPLE RESULTS

99797-UW22
TRIODIGLYC
OL
SAMPLE ID UG/L
CODMTW*8 <44.0
CODMTW*14 <44.0
CODMTW*15 <44.0
CODMTW*29 <44.0
CODMTW*32 <44.0
CODMTW*37 <44.0
CODMTW*45 <44.0
CODMTW*46 <44.0
CODMTW*47 <44.0

002977

FINAL CONCENTRATION	UG/L
INJECTION VOLUME	NA
SAMPLE VOLUME	ML
EXTRACT VOLUME	ML
CURVE CONCENTRATION	UG/L
SPIKE SOLN CONCENTRATION	UG/ML
SPIKE VOLUME	ML
SPIKE SAMPLE VOLUME	L
TARGET CONCENTRATION	DG/L
RESPONSE DESCRIPTION	AREA
CONVERSION FACTOR	NA

$$DG/L = \frac{(UG/L) * (ML)}{(NA) - (ML)}$$
$$f = \frac{\{ \dots \} * \{ \dots \}}{\{ \dots \} * \{ \dots \} + \{ \dots \} / 100}$$
$$DG/L = \frac{(UG/ML) \times (ML)}{(L)}$$

Environmental Science and Engineering Analytical Services
Computer QC Checks

51 169

Batch No.: G44759 Analysis Date: 12/09/93 Analyst: CURTIS CAMPBELL

	<u>"Exceptions"</u>		
	<u>Yes</u>	<u>No</u>	<u>Comment / Corrective Action</u>
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Extract holding time within criteria?	X		
Curve correlation coefficient $\geq 0.995?$	X		
Calibration curve y-intercept $<$ curve detection limit?	X		
Sample responses within highest standard response?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Standard matrix spike duplicate present?	X		
Standard matrix spike duplicate within acceptance criteria?	X		
Sample matrix spike present?		X	
Sample matrix spike within acceptance criteria?		X	

Note: Any "NO" answer requires a comment.

NOT REQUESTED

CPC
12/15/93

002979

Environmental Science and Engineering Analytical Services
Internal QA/QC Checklist For GC and HPLC Analysis

Batch No.: G44759

Analysis Date: 12/09/93

Analyst: CURTIS CAMPBELL

	N/A	Yes	"Exceptions"	
			No	Comment / Corrective Action
Is the method blank free of contamination?		✓		
If not, has the data been blank corrected?	✓			
Are all analysis free of contamination from previous analysis?		✓		
If not, does the quality of the data remain unimpaired?	✓			
Are calibration curves entered correctly?		✓		
Are reported values consistent with the required units?		✓		
Are detection limits reported correctly?		✓		
Are dilution factors entered correctly?		✓		
Is the batch checked for data entry error(s)?		✓		
Have sufficient continuing calibration standards (CCS) been analyzed?		✓		
If not, is an appropriate explanation provided?	✓			
Are the CCS within criteria?		✓		
If not, is an appropriate explanation provided?	✓			
Has second column confirmation been performed for all positive identifications made in the primary analysis?	✓			
Have they been performed within analysis holding time?	✓			
Is an example calculation provided?		✓		
Has the batch documentation checklist been completed?		✓		

Note: Any "NO" answer requires a comment.
Additional Comments:

Completed By: [Signature]
Date: 12-15-93

Reviewed By: [Signature]
Date: 12/15/93

Notification of appropriate Laboratory Coordinators required for "Exceptions":

Signature	Date	Comments
<u>[Signature]</u>	<u>12/16/93</u>	<u>CC</u>

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

002980

=====

ANALYSIS DATE: 12-03-93 ANALYST: CRC 3254 BATCH: G43728 PROJECT: UW22 CAL

=====

Sample Name	File Name	Date Of Injection	Time Of Injection	Ret. Time [Min]	THIODIGLYCOL Area
899901-F5	UW22003.rst	12/2/93	08:45 PM	11.43	144162
899901-E	UW22004.rst	12/2/93	09:17 PM	11.41	257276
899901-E5	UW22005.rst	12/2/93	09:39 PM	11.54	1404762
899901-D	UW22006.rst	12/2/93	10:01 PM	11.46	2822469
899901-D2	UW22007.rst	12/2/93	10:23 PM	11.44	5641882
899901-D5	UW22008.rst	12/2/93	10:45 PM	11.40	14309406
CCV*120293*1	UW22009.rst	12/2/93	11:07 PM	11.43	3054509
Averages				11.44	3949209
XRSO				0.39	125.24

NOTE: LEVEL 899901-F5
Data not used - below
C.R.L. for UW22 method.
CRC
12/3/93

ASCII File Created Successfully - Stored in: C:\UW22.prn

=====

Software Version: 3.3 <4B11>

Sample Name : MOBILE PHASE BLK

Time : 12/2/93 08:21 PM

Sample Number: 1

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 08:01 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA\UW22001.RAW

Result File : C:\2700\DATA\UW22001.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\UW22CAL.SEQ

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 0

=====

THIODIGLYCOL IN WATER BY UW22

No Peaks Available To Report

002982

Chromatogram

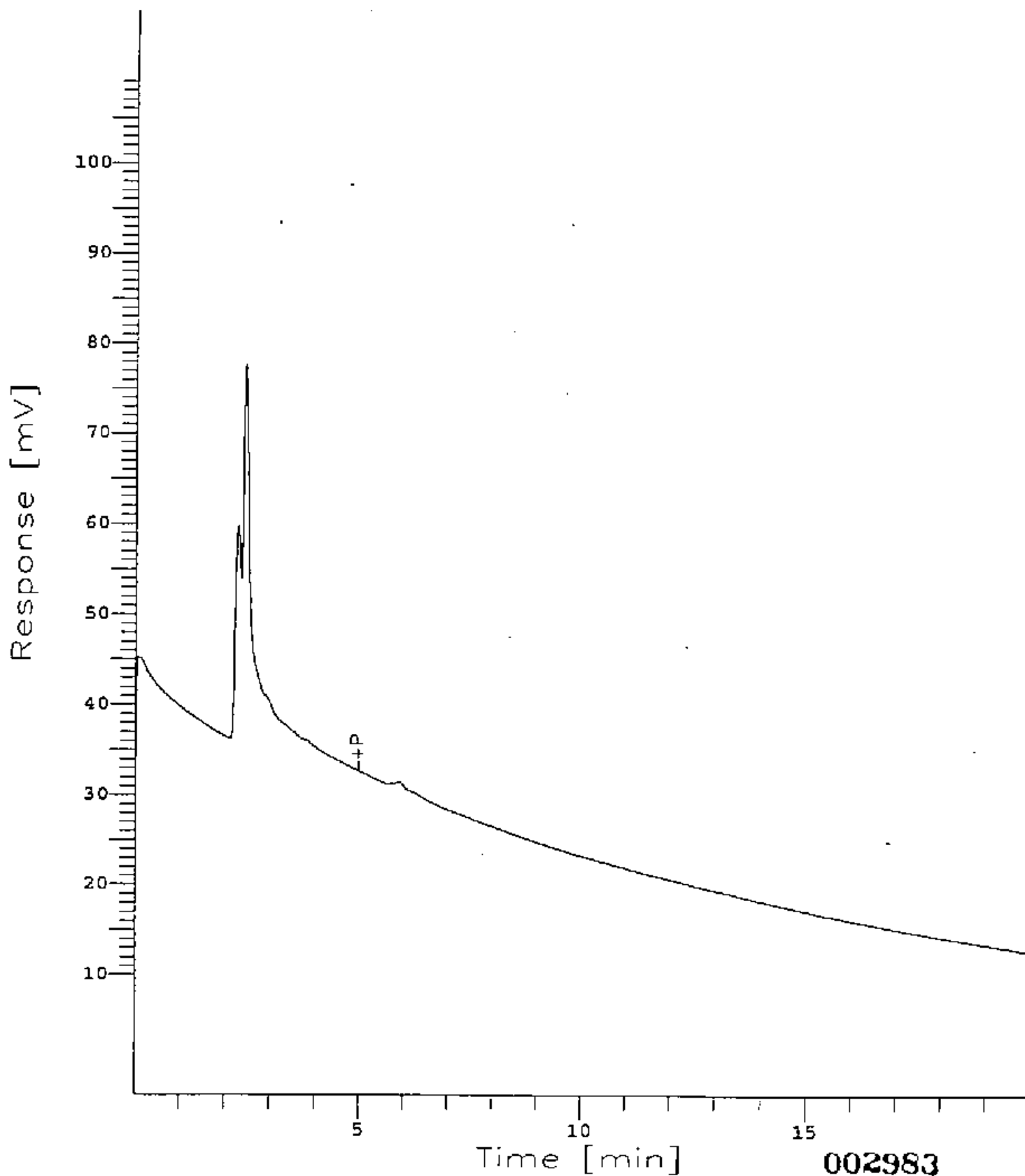
51 173

Sample Name : MOBILE PHASE BLK
FileName : C:\2700\DATA\UM22001.raw
Method : tdg.ins
Start Time : 0.02 min
Scale Factor : 0.0

End Time : 19.98 min
Plot Offset: 10 mV

Sample #: 1
Date : 12/2/93 08:25 PM
Time of Injection: 12/2/93 08:01 PM
Low Point : 10.00 mV
Plot Scale: 100.0 mV
High Point : 110.00 mV

Page 1 of 1



=====

Software Version: 3.3 <4B11>

Sample Name : 899901-D5

Time : 12/2/93 08:43 PM

Sample Number: 2

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 08:23 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA\UW22002.RAW

Result File : C:\2700\DATA\UW22002.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\UW22CAL.SEO

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 1

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1	THIODIGLYCOL	11.370	14256310.50	759793.96	B
			14256310.50	759793.96	

=====

*Data not used.
Duplicate sp.
CRC
12/3/93*

002984

Chromatogram

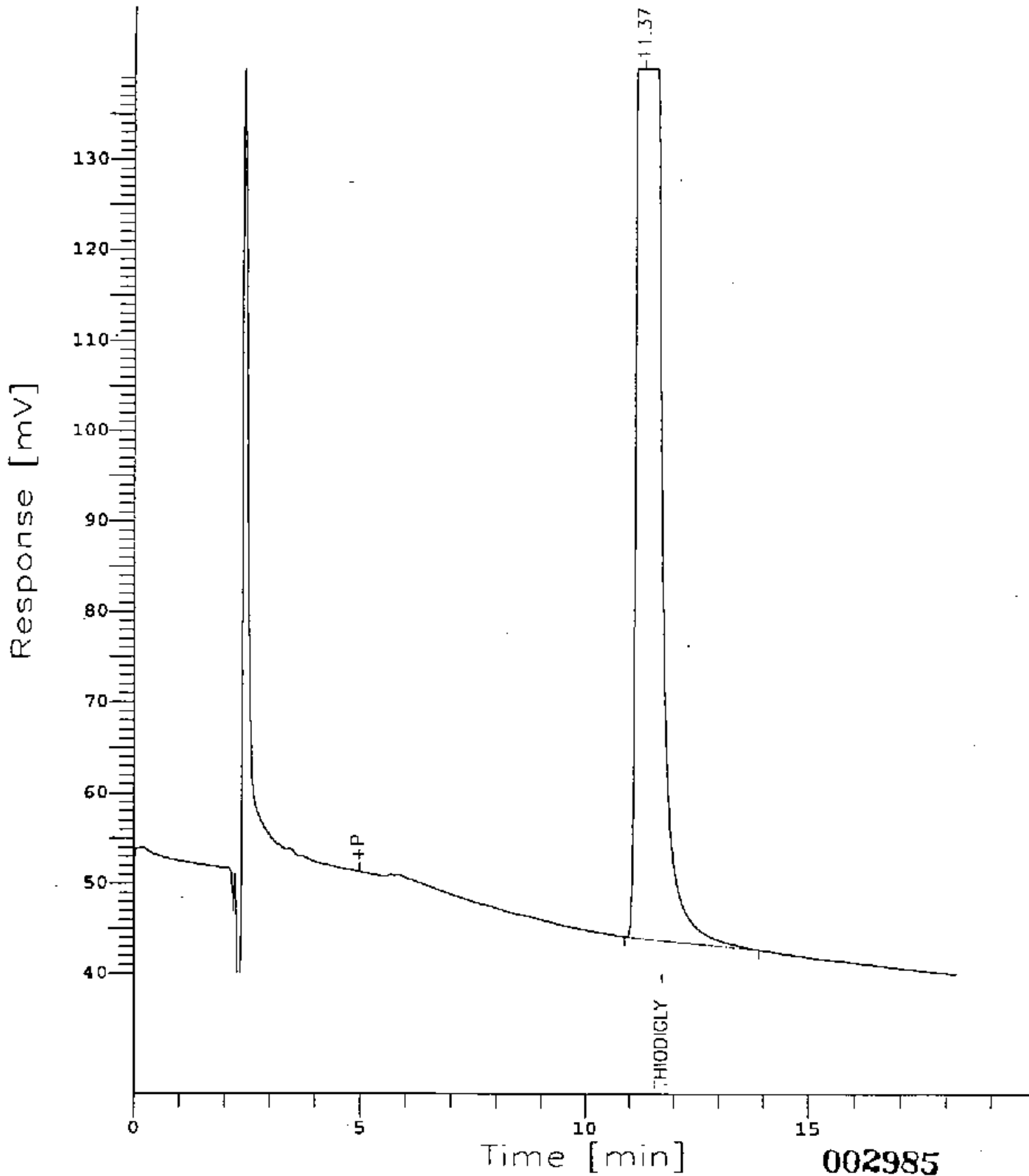
51 175

Sample Name : 899901-D5
FileName : c:\2700\data\UW22002.raw
Method : tdp.ins
Start Time : 0.00 min
Scale Factor: D.D

End Time : 19.98 min
Plot Offset: 40 mV

Sample #: 2
Date : 12/2/93 08:43 PM
Time of Injection: 12/2/93 08:23 PM
Low Point : 40.00 mV
Plot Scale: 100.0 mV

Page 1 of 1



=====

Software Version: 3.3 <4B11>

Sample Name : 899901-F5

Sample Number: 3

Operator : CRC

Time : 12/3/93 10:43 AM

Study : UW22 CALIBRATION

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 08:45 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22003.RAW

Result File : C:\2700\DATA3\UW22003.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 1

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1	THIODIGLYCOL	11.434	144161.50	7835.51	B
			144161.50	7835.51	

Data not used
Below CRC
CRC
12/3/93

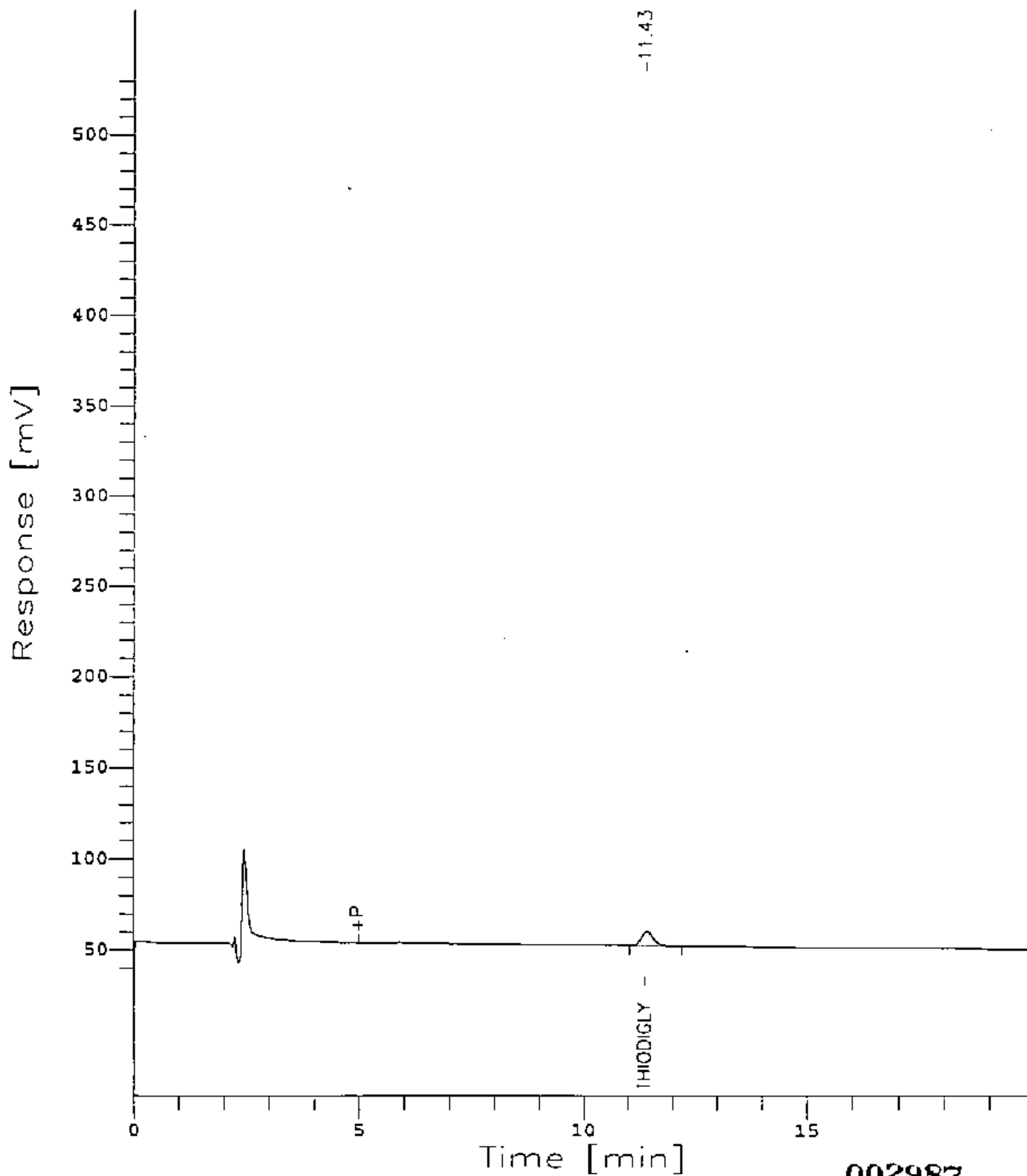
Chromatogram

51 177

Sample Name : B99901-F5
Filename : c:\2700\data3\0422003.raw
Method : tdg
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 19.98 min
Plot Offset: 35 mV

Sample #: 3
Date : 12/3/93 10:43 AM
Time of Injection: 12/2/93 08:45 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV



002987

=====

Software Version: 3.3 <4B11>

Sample Name : 899901-E

Time : 12/3/93 10:43 AM

Sample Number: 4

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 09:17 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22004.RAW

Result File : C:\2700\DATA3\UW22004.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.726	9990.00	524.96	B
2	THIODIGLYCOL	11.410	267276.00	14529.69	B
			277266.00	15054.65	

=====

Chromatogram

51 179

Sample Name : 899901-E

FileName : c:\2700\data3\UW22004.raw

Method : tdg

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 19.98 min

Plot Offset: 35 mV

Sample #: 4

Date : 12/3/93 10:43 AM

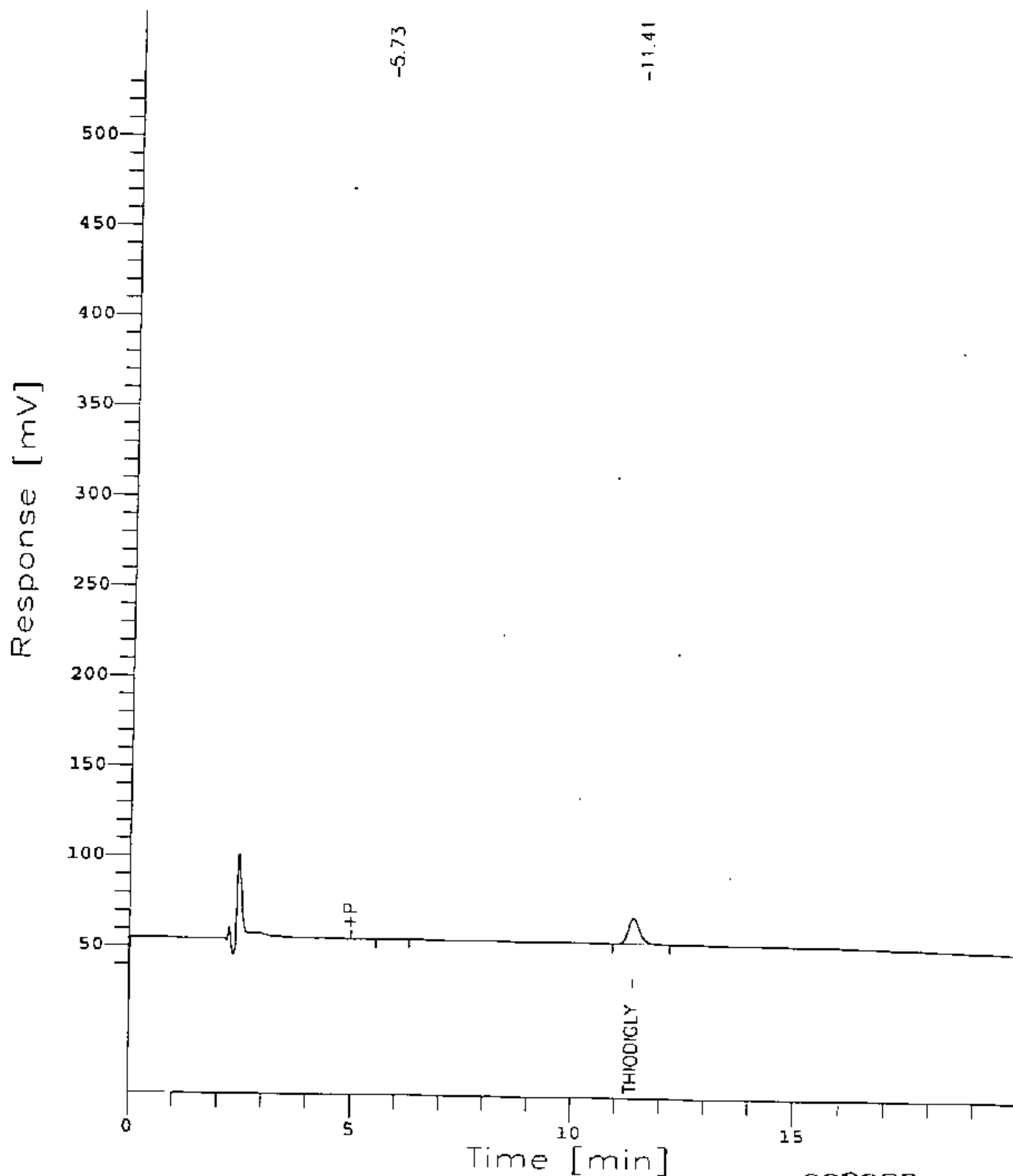
Time of Injection: 12/2/93 09:17 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002989

=====

Software Version: 3.3 <4B11>

Sample Name : 899901-E5

Sample Number: 5

Operator : CRC

Time : 12/3/93 10:43 AM

Study : UW22 CALIBRATION

Instrument : SYSTEM_5

AutoSampler : NONE

Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 09:39 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22005.RAW

Result File : C:\2700\DATA3\UW22005.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Sample Amount : 1.0000

Area Reject : 3000.000000

Dilution Factor : 1.00

Noise Threshold: 75

Multiplier : 1.0000

Area Threshold : 300

Divisor : 1.0000

Bunch Factor: 5

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 1

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1	THIODIGLYCOL	11.535	1404762.00	74792.38	B
			1404762.00	74792.38	

Chromatogram

51 181

Sample Name : 809901-E5

FileName : c:\2700\data3\11\22005.raw

Method : cdg

Start Time : 0.00 min

Scale factor: 0.0

End Time : 19.98 min

Plot Offset: 35 mV

Sample #: 5

Date : 12/3/93 10:43 AM

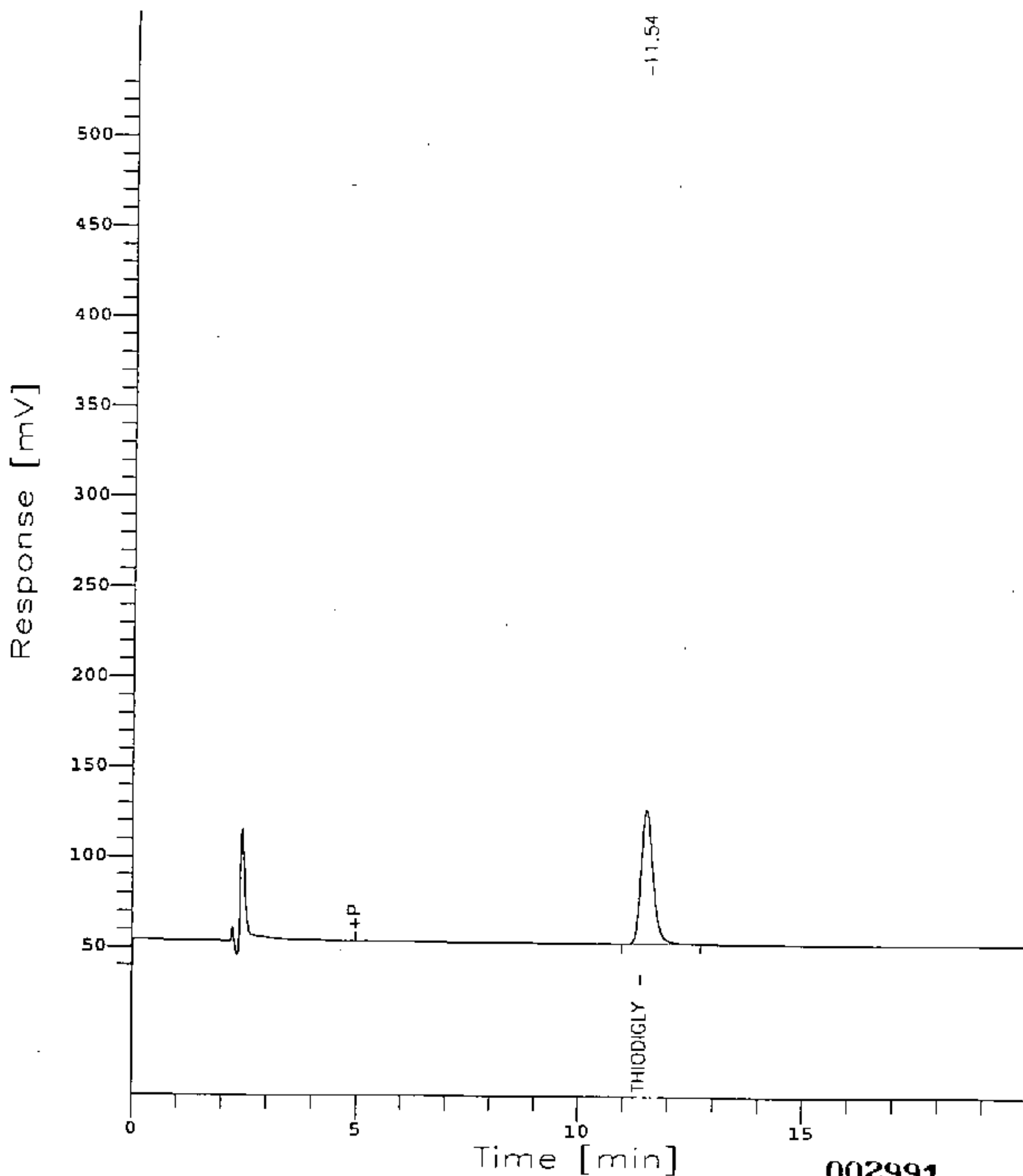
Time of Injection: 12/2/93 09:39 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002991

=====

Software Version: 3.3 <4B11>

Sample Name : 899901-D

Time : 12/3/93 10:43 AM

Sample Number: 6

Study : UW22 CALIBRATION

Operator : CRC

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 10:01 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22006.RAW

Result File : C:\2700\DATA3\UW22006.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.749	11131.00	571.24	B
2	THIODIGLYCOL	11.455	2822469.00	150578.93	B
			2833600.00	151150.17	

=====

Chromatogram

51 183

Sample Name : 899901-0

FileName : c:\2700\data3\UW22006.raw

Method : tdp

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 19.98 min

Plot Offset: 35 mV

Sample #: 6

Date : 12/3/93 10:43 AM

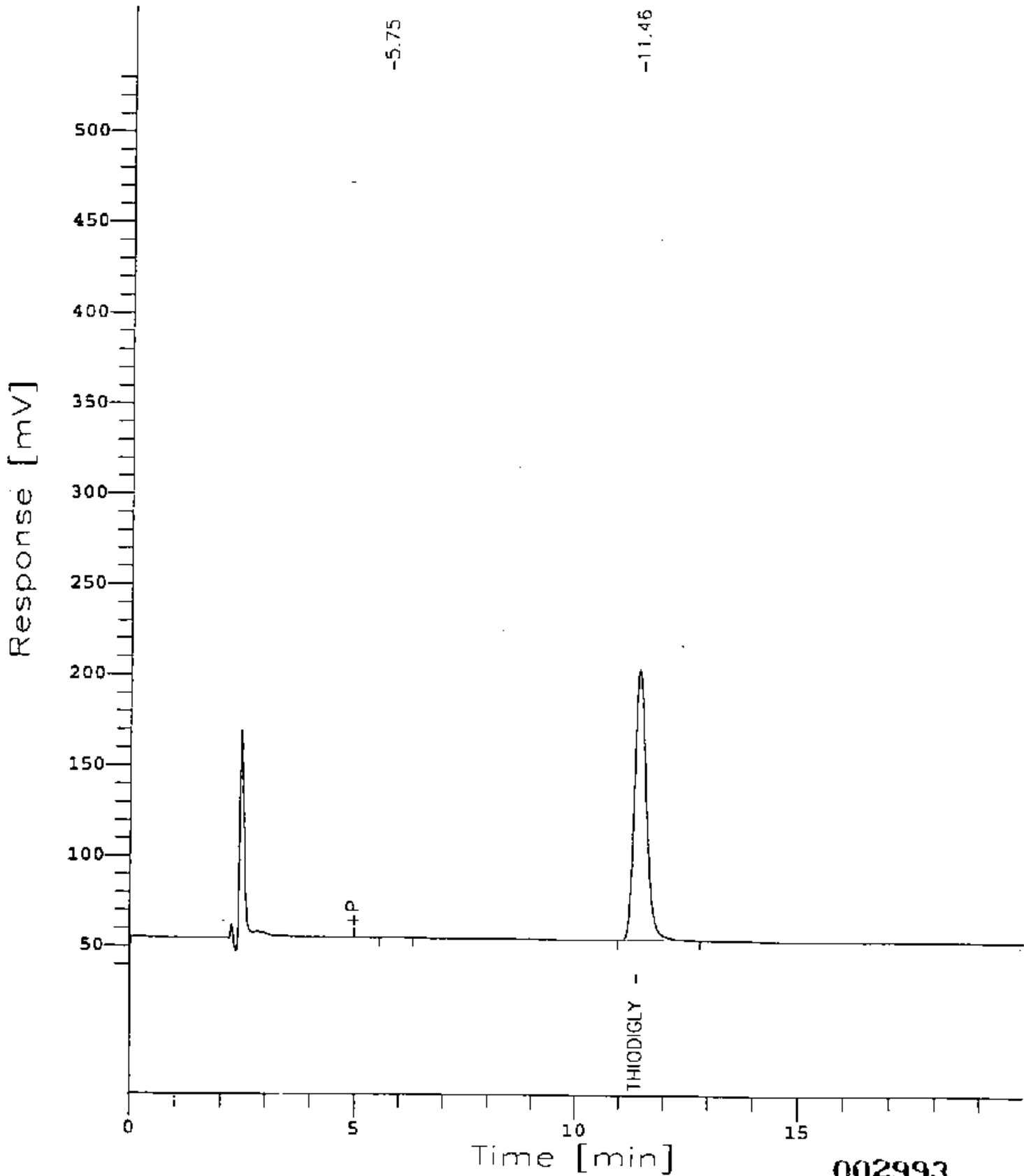
Time of Injection: 12/2/93 10:01 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002993

=====

Software Version: 3.3 <4B11>

Sample Name : 899901-D2

Sample Number: 7

Operator : CRC

Time : 12/3/93 10:44 AM

Study : UW22 CALIBRATION

Instrument : SYSTEM_5

AutoSampler : NONE

Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 10:23 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22007.RAW

Result File : C:\2700\DATA3\UW22007.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Sample Amount : 1.0000

Area Reject : 3000.000000

Dilution Factor : 1.00

Noise Threshold: 75

Multiplier : 1.0000

Area Threshold : 300

Divisor : 1.0000

Bunch Factor: 5

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 1

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1	THIODIGLYCOL	11.441	5641882.00	301412.32	B
			5641882.00	301412.32	

=====

Chromatogram

51 185

Sample Name : 899901-02

FileName : c:\2700\data3\W22007.raw

Method : tdg

Start Time : 0.00 min

Scale Factor: 0.0

End Time : 19.98 min

Plot Offset: 35 mV

Sample #: 7

Date : 12/3/93 10:44 AM

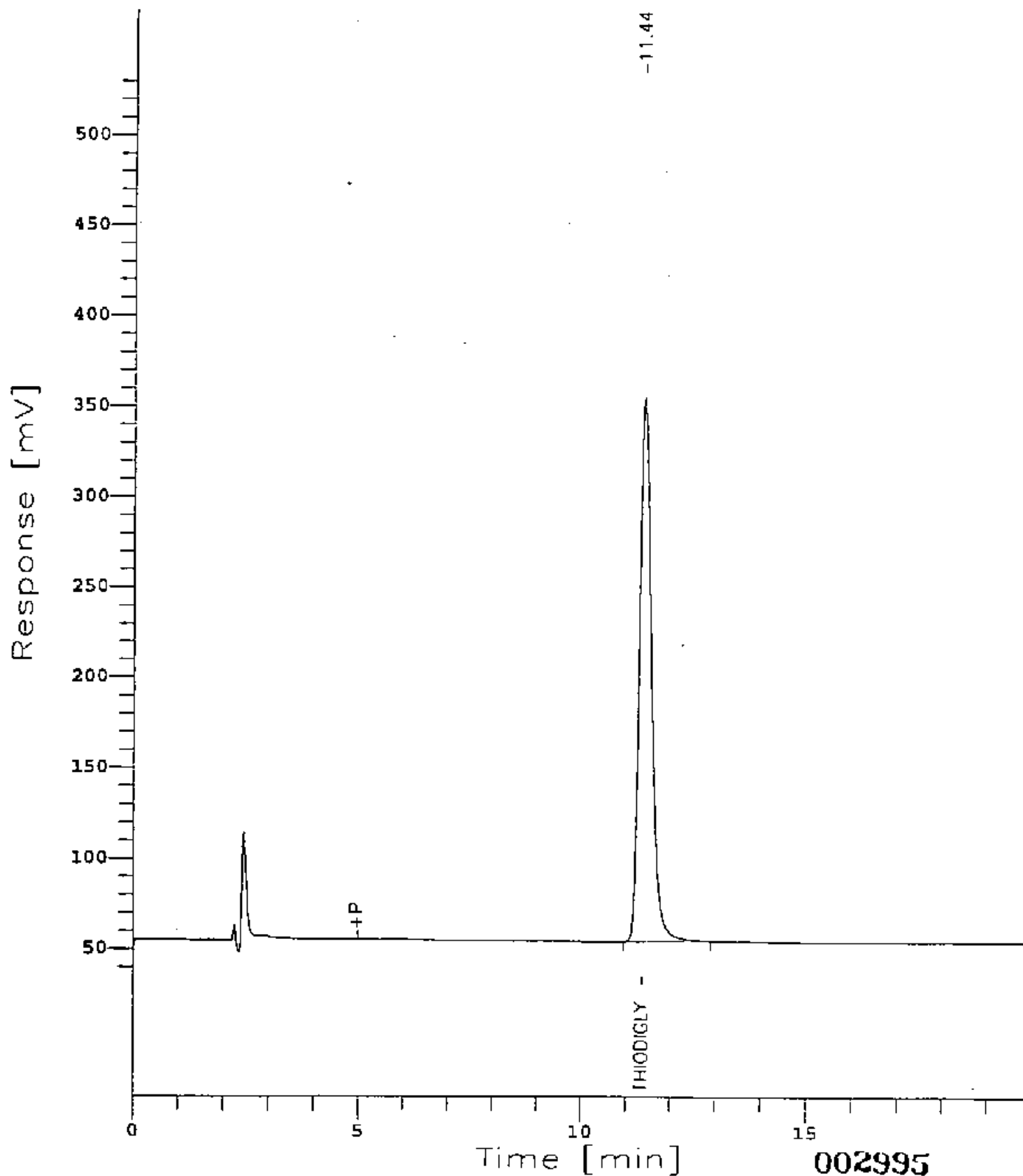
Time of Injection: 12/2/93 10:23 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : 899901-D5

Sample Number: 8

Operator : CRC

Time : 12/3/93 10:44 AM

Study : UW22 CALIBRATION

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 10:45 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22008.RAW

Result File : C:\2700\DATA3\UW22008.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.749	11949.00	711.60	B
2	THIODIGLYCOL	11.400	14309406.00	760443.53	B
			14321355.00	761155.13	

=====

Chromatogram

Sample Name : 899901-D5

FileName : c:\2700\data3\UW22008.raw

Method : tdg

Start Time : 0.00 min

Scale Factor: 0.0

End Time : 19.98 min

Plot Offset: 35 mV

Sample #: B

Date : 12/3/93 10:44 AM

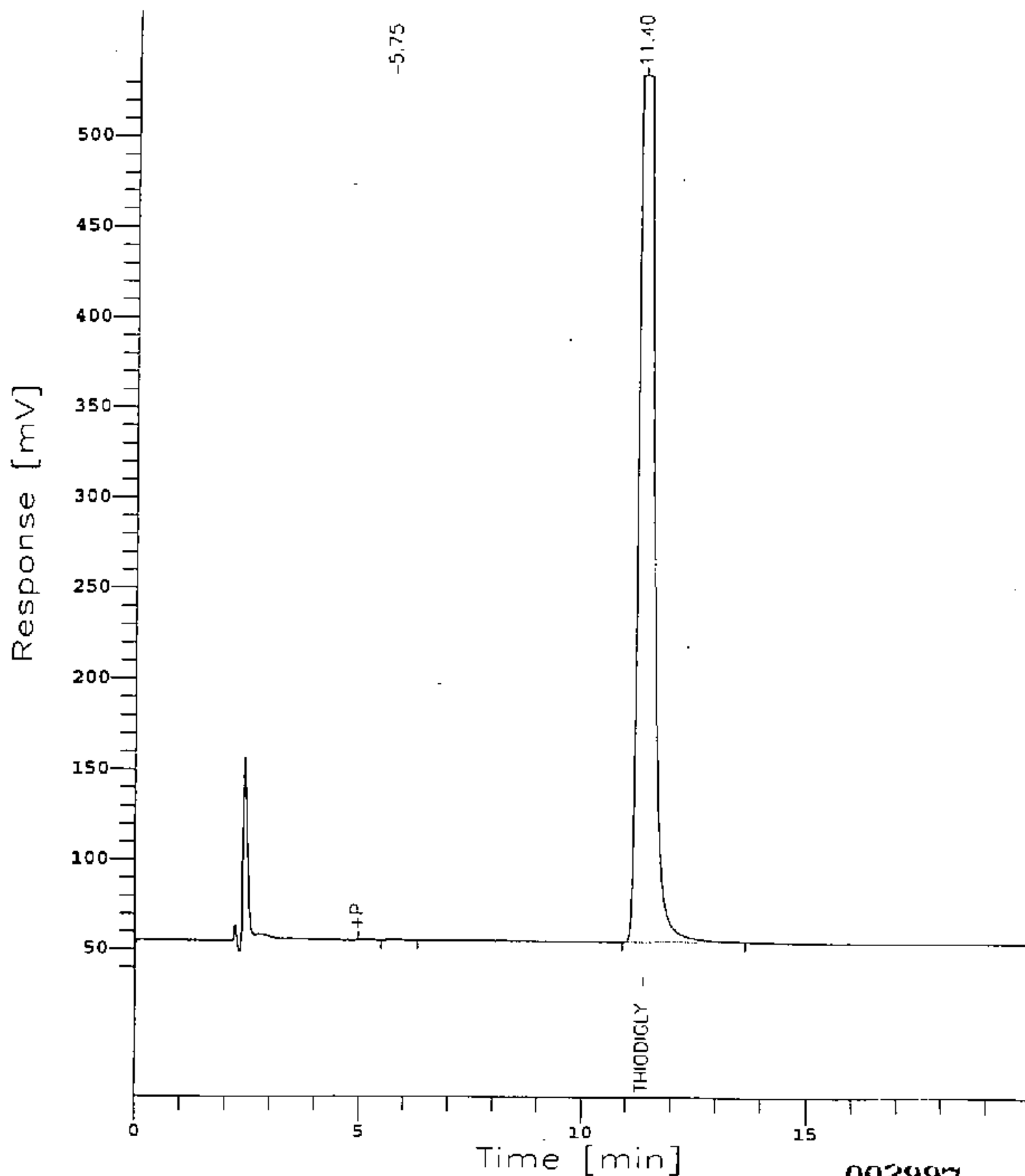
Time of Injection: 12/2/93 10:45 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



002997

=====

Software Version: 3.3 <4B11>

Sample Name : CCV*120293*1

Sample Number: 9

Operator : CRC

Time : 12/3/93 10:44 AM

Study : UW22 CALIBRATION

Instrument : SYSTEM_5

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/2/93 11:07 PM

Delay Time : 0.00 min.

End Time : 19.98 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\UW22009.RAW

Result File : C:\2700\DATA3\UW22009.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\phca.seq

Inj. Volume : 1 ul

Area Reject : 3000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 1

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1	THIODIGLYCOL	11.431	3054509.00	163697.20	B
			3054509.00	163697.20	

=====

Chromatogram

Sample Name : CCV*120293*1

File Name : c:\2700\data3\UM22009.raw

Method : tdp

Start Time : 0.00 min

Scale Factor: 0.0

End Time : 19.98 min

Plot Offset: 35 mV

Sample #: 9

Date : 12/3/93 10:44 AM

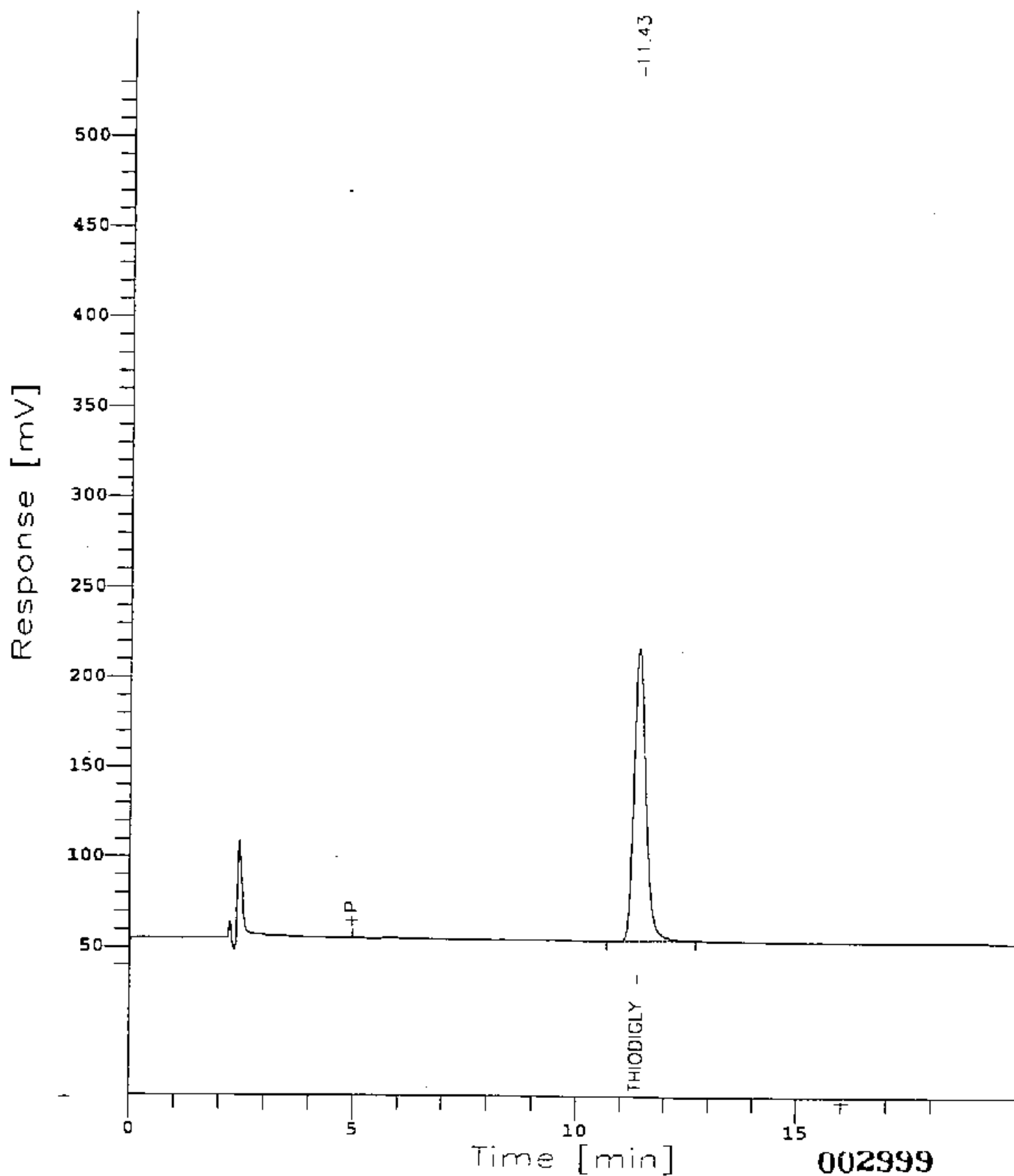
Time of Injection: 12/2/93 11:07 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



=====

ANALYSIS DATE: 12-09-93 ANALYST: CRC 3254 BATCH: 44759 PROJECT: COE HUNTSVILLE

=====

Sample Name	File Name	Date Of Injection	Time Of Injection	THIODIGLYCOL	
				Ret. Time [Min]	Area
CCS*120893*4	COE-052.rst	12/9/93	08:56 AM	11.24	14551739
KB*QC*4	COE-037.rst	12/9/93	09:43 AM	-----	-----
SP1*QC*4	COE-038.rst	12/9/93	10:30 AM	11.15	594156
SP2*QC*4	COE-039.rst	12/9/93	11:17 AM	11.03	9825057
SP3*QC*4	COE-040.rst	12/9/93	12:04 PM	10.92	9565360
CDONTW*8	COE-041.rst	12/9/93	12:51 PM	-----	-----
CDONTW*14	COE-042.rst	12/9/93	01:38 PM	-----	-----
CDONTW*15	COE-043.rst	12/9/93	02:25 PM	-----	-----
CDONTW*29	COE-044.rst	12/9/93	03:12 PM	-----	-----
CDONTW*32	COE-045.rst	12/9/93	03:59 PM	-----	-----
CDONTW*37	COE-046.rst	12/9/93	04:46 PM	-----	-----
CDONTW*45	COE-047.rst	12/9/93	05:33 PM	-----	-----
CDONTW*46	COE-048.rst	12/9/93	06:20 PM	-----	-----
CDONTW*47	COE-049.rst	12/9/93	07:07 PM	-----	-----
CCS*120893*5	COE-050.rst	12/9/93	07:54 PM	10.88	13626210
Averages				11.04	9632504
NRSD				1.36	57.31

ASCII File Created Successfully - Stored in: C:\HUNT3.prn

Sequence File : C:\2700\DATA3\COEHUNT.seq
 Created by : CRC on : 12/7/93 01:29 PM
 Edited by : on : 12/15/93 09:30 AM
 Number Of Times Edited : 8

Sequence File Header Information:

Study Name : COE HUNTSVILLE
 Segment Interface : YES
 Number of Cycles : 52
 Instrument Type : 760 / 900 Series Intelligent Interface
 Injection Type : SINGLE

Cycle	Sample Name	Sample Number	Site	Rack	Vial	Sequence Sample Descriptions		Inj. Volume	Dil. Factor	Mult	Divisor	Addend	Inst File	Output Device
						Sample Amount	ISTD Amount							
1	MOBILE PHASE BLK	1	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
2	CCS*120793*1	2	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
3	MB*QC*1	3	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
4	SP1*QC*1	4	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
5	SP2*QC*1	5	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
6	SP3*QC*1	6	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
7	CDDMTW*3	7	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
8	CDDMTW*4	8	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
9	CDDMTW*5	9	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
10	CDDMTW*7	10	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
11	CDDMTW*13	11	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
12	CDDMTW*35	12	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
13	CDDMTW*38	13	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
14	CDDMTW*39	14	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
15	CDDMTW*41	15	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
16	CDDMTW*42	16	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
17	CDDMTW*44	17	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
18	CCS*120893*1	18	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
19	MB*QC*2	19	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
20	SP1*QC*2	20	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
21	SP2*QC*2	21	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
22	SP3*QC*2	22	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
23	CDDMTW*9	23	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
24	CDDMTW*10	24	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
25	CDDMTW*11	25	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
26	CDDMTW*12	26	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
27	CCS*120893*2	27	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
28	MB*QC*3	28	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
29	SP1*QC*3	29	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
30	SP2*QC*3	30	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
31	SP3*QC*3	31	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
32	CDDMTW*48	32	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
33	CDDMTW*49	33	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
34	CDDMTW*50	34	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
35	CDDMTW*51	35	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
36	CCS*120893*3	36	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
37	CCS*120893*4	37	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
38	MB*QC*4	38	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
39	SP1*QC*4	39	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
40	SP2*QC*4	40	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
41	SP3*QC*4	41	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
42	CDDMTW*8	42	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
43	CDDMTW*14	43	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
44	CDDMTW*15	44	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
45	CDDMTW*29	45	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
46	CDDMTW*32	46	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
47	CDDMTW*37	47	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
48	CDDMTW*45	48	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
49	CDDMTW*46	49	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
50	CDDMTW*47	50	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
51	CCS*120893*5	51	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:
52	CCS*120893*6	52	A	1	1	1.000	1.000	1.000	1.000	1.000	1.000	0.000	tdg	LPT1:

=====

Software Version: 3.3 <4B11>

Sample Name : CCS*120893*4

Time : 12/15/93 09:31 AM

Sample Number: 52

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 08:56 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-052.RAW

Result File : C:\2700\DATA3\COE-052.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\coehunt.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

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THIODIGLYCOL IN WATER BY UW22

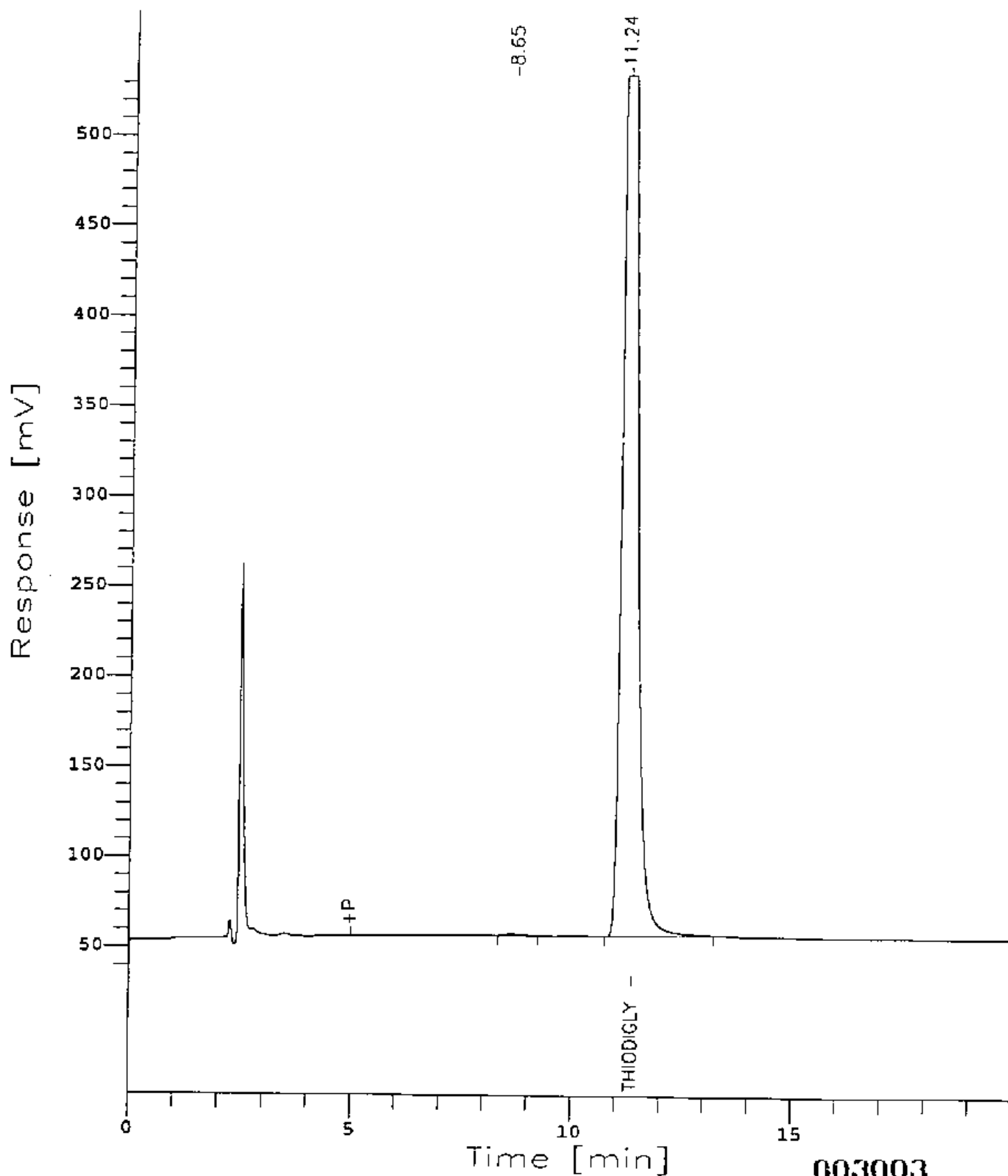
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
2	THIODIGLYCOL	11.235	14551739.00	735660.88	B
			14551739.00	735660.88	

=====

Sample Name : CCS*120893*3
FileName : c:\2700\data3\COE-052.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor: 0.0
End Time : 20.00 min
Plot Offset: 35 mV

Sample #: 52
Date : 12/9/93 09:31 AM
Time of Injection: 12/9/93 08:56 AM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV

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003003

=====

Software Version: 3.3 <4B11>

Sample Name : MB*QC*4

Sample Number: 37

Operator : CRC

Time : 12/9/93 10:23 AM

Study : COE HUNTSVILLE

Instrument : SYSTEM_0

AutoSampler : NONE

Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 09:43 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-037.RAW

Result File : C:\2700\DATA3\COE-037.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\coehunt.seq

Inj. Volume : 1 ul

Sample Amount : 1.0000

Area Reject : 125000.000000

Dilution Factor : 1.00

Noise Threshold: 75

Multiplier : 1.0000

Area Threshold : 300

Divisor : 1.0000

Bunch Factor: 5

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

No Peaks Available To Report

Chromatogram

51 195

Sample Name : MB*QC*4

FileName : c:\2700\data3\COE-037.raw

Method : tdg.ins

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset : 35 mV

Sample #: 37

Date : 12/9/93 10:23 AM

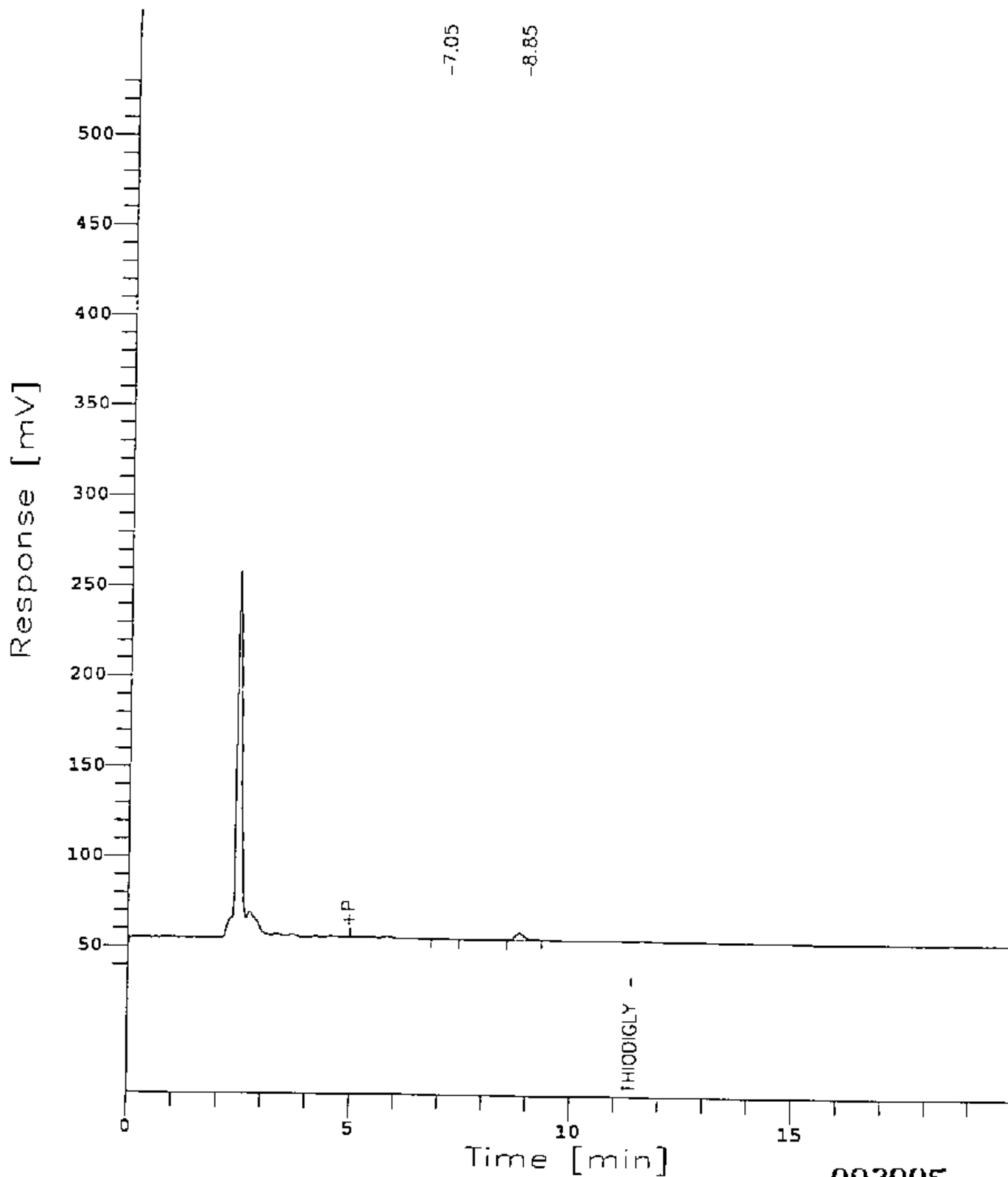
Time of Injection: 12/9/93 09:43 AM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



003005

=====

Software Version: 3.3 <4B11>

Sample Name : SP1*QC*4

Time : 12/9/93 10:50 AM

Sample Number: 38

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 10:30 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-038.RAW

Result File : C:\2700\DATA3\COE-038.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
3	THIODIGLYCOL	11.148	594155.50	30355.46	B
			594155.50	30355.46	

=====

Chromatogram

51 197

Sample Name : SP1*QC*4

FileName : c:\2700\data3\COE-038.raw

Method : tdg.ins

Start Time : 0.00 min

Scale Factor: 0.0

End Time : 20.00 min

Plot Offset: 35 mV

Sample #: 38

Date : 12/9/93 10:50 AM

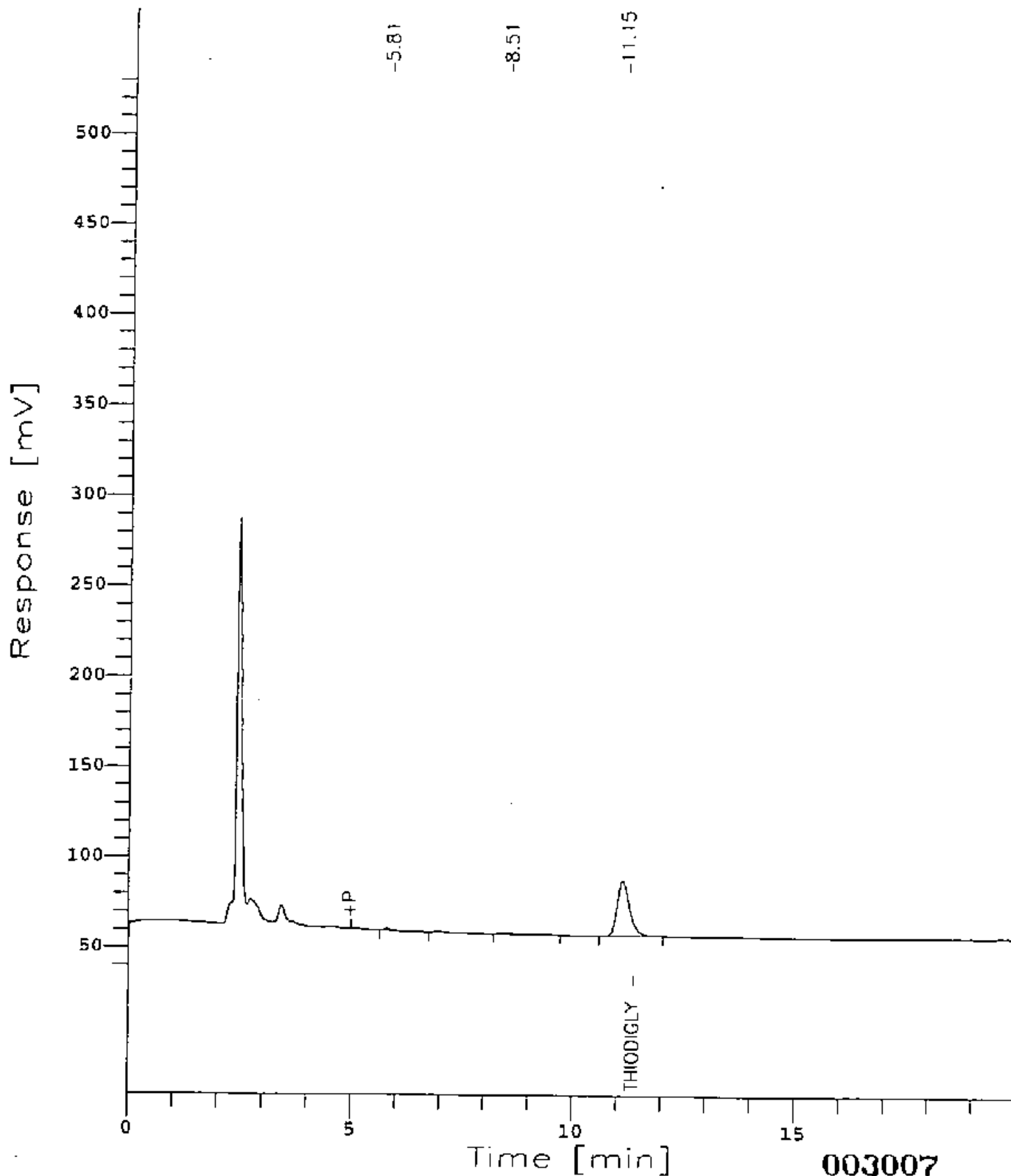
Time of Injection: 12/9/93 10:30 AM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



003007

=====

Software Version: 3.3 <4B11>

Sample Name : SP2*QC*4

Time : 12/9/93 11:37 AM

Sample Number: 39

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 11:17 AM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-039.RAW

Result File : C:\2700\DATA3\COE-039.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
2	THIODIGLYCOL	11.026	9825057.00	502581.31	B
			9825057.00	502581.31	

=====

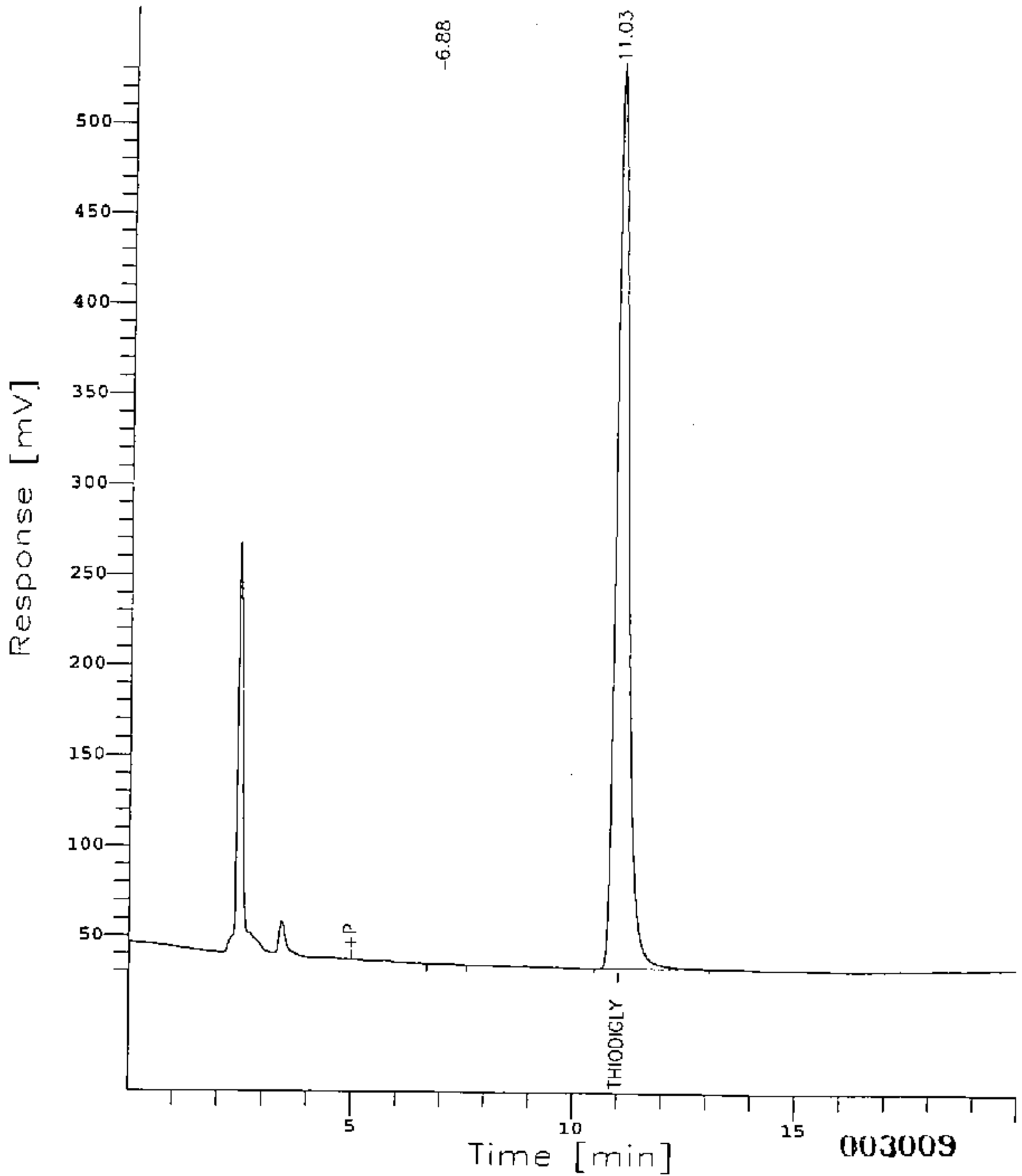
Chromatogram

51 199

Sample Name : SP2*QC*4
FileName : C:\2700\DATA3\COE-039.raw
Method : tdp.fns
Start Time : 0.02 min
Scale Factor: 0.0

End Time : 20.00 min
Plot Offset: 30 mV

Sample #: 39
Date : 12/15/93 09:19 AM
Time of Injection: 12/9/93 11:17 AM
Low Point : 30.00 mV
Plot Scale: 500.0 mV
High Point : 530.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : SP3*QC*4

Time : 12/9/93 12:24 PM

Sample Number: 40

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 12:04 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-040.RAW

Result File : C:\2700\DATA3\COE-040.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 6

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
5	THIODIGLYCOL	10.924	9565360.50	496509.95	B
			9565360.50	496509.95	

=====

Chromatogram

Sample Name : SP3+QC*4

FileName : C:\2700\DATA3\COE-D40.raw

Method : tdg.ins

Start Time : 0.02 min

Scale Factor: 0.0

End Time : 20.00 min

Plot Offset: 25 mV

Sample #: 40

Date : 12/15/93 09:20 AM

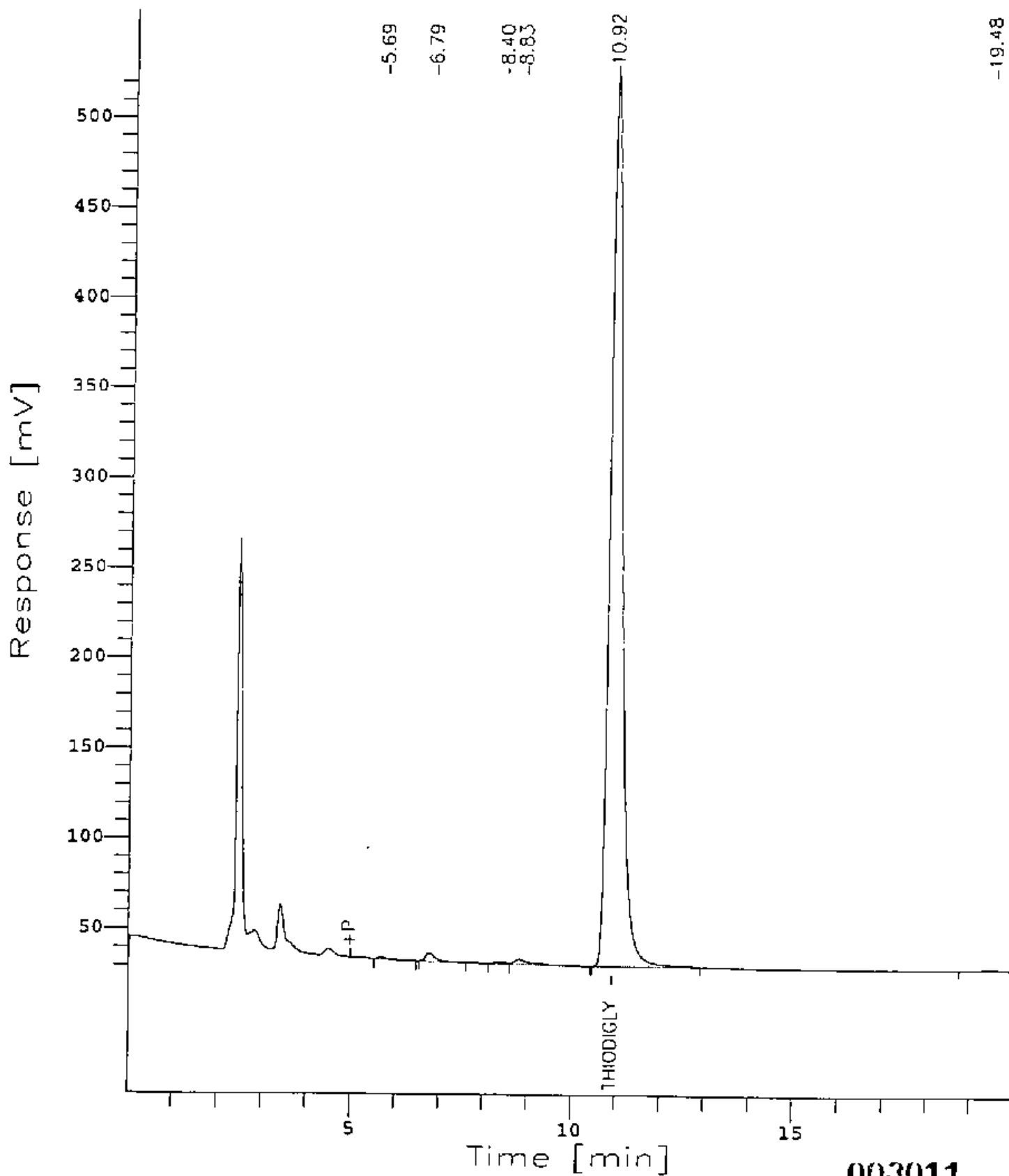
Time of Injection: 12/9/93 12:04 PM

Low Point : 25.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 525.00 mV



003011

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*8

Time : 12/9/93 01:11 PM

Sample Number: 41

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 12:51 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-041.RAW

Result File : C:\2700\DATA3\COE-041.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.270	425775.45	75237.78	B
			425775.45	75237.78	

=====

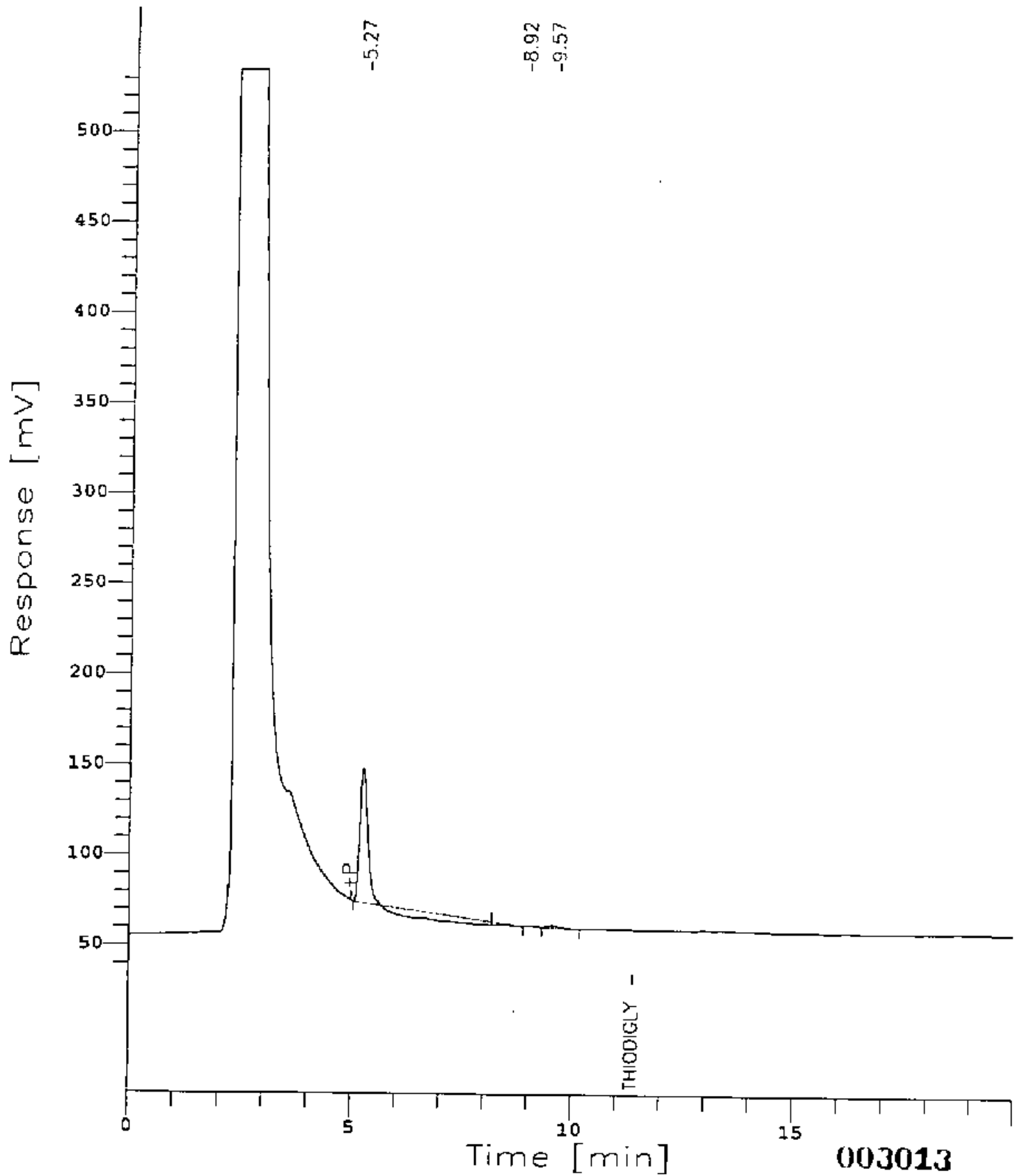
Chromatogram

51 203

Sample Name : CDDMTW*8
FileName : c:\2700\data3\COE-041.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 20.00 min
Plot Offset: 35 mV

Sample #: 41
Date : 12/9/93 01:11 PM
Time of Injection: 12/9/93 12:51 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV



003013

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*14

Time : 12/9/93 01:58 PM

Sample Number: 42

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 01:38 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-042.RAW

Result File : C:\2700\DATA3\COE-042.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 4

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.239	2698722.00	204880.09	B
			2698722.00	204880.09	

=====

Chromatogram

51 205

Sample Name : CDDMTV#14

FileName : c:\2700\data3\COE-042.raw

Method : tdg.ins

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset : 35 mV

Sample #: 42

Date : 12/9/93 01:58 PM

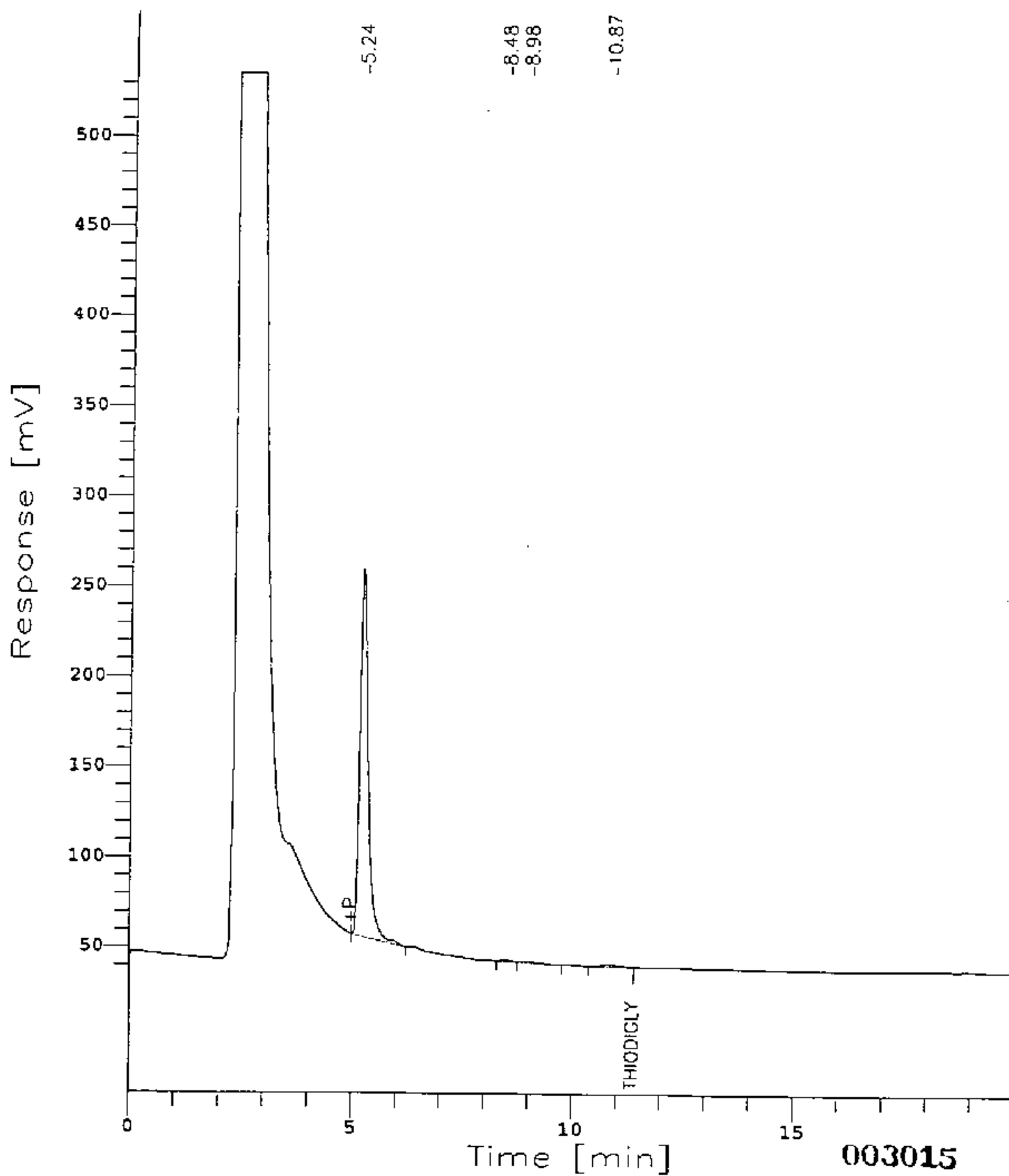
Time of Injection: 12/9/93 01:38 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*15

Time : 12/9/93 02:45 PM

Sample Number: 43

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 02:25 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-043.RAW

Result File : C:\2700\DATA3\COE-043.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.287	2194352.00	170140.20	B
			2194352.00	170140.20	

Chromatogram

Sample Name : CODMTW*15

FileName : c:\2700\data3\CDE-043.raw

Method : tdg.ins

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset: 35 mV

Sample #: 43

Date : 12/9/93 02:45 PM

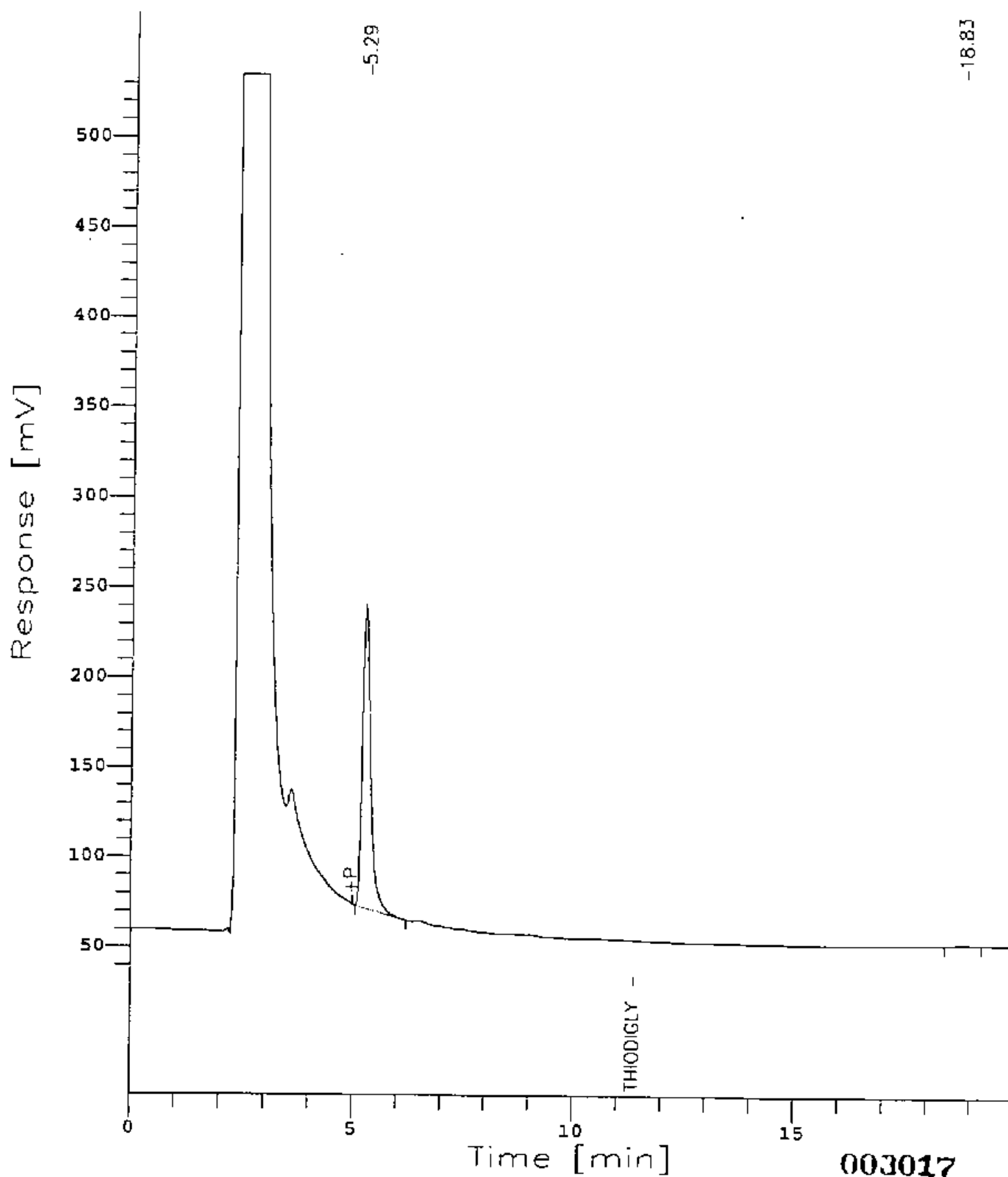
Time of Injection: 12/9/93 02:25 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



003017

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*29

Time : 12/9/93 03:32 PM

Sample Number: 44

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 03:12 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-044.RAW

Result File : C:\2700\DATA3\COE-044.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 4

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.373	1007123.02	101543.40	B
2		8.717	461196.38	-1930.01	V
			1468319.40	99613.39	

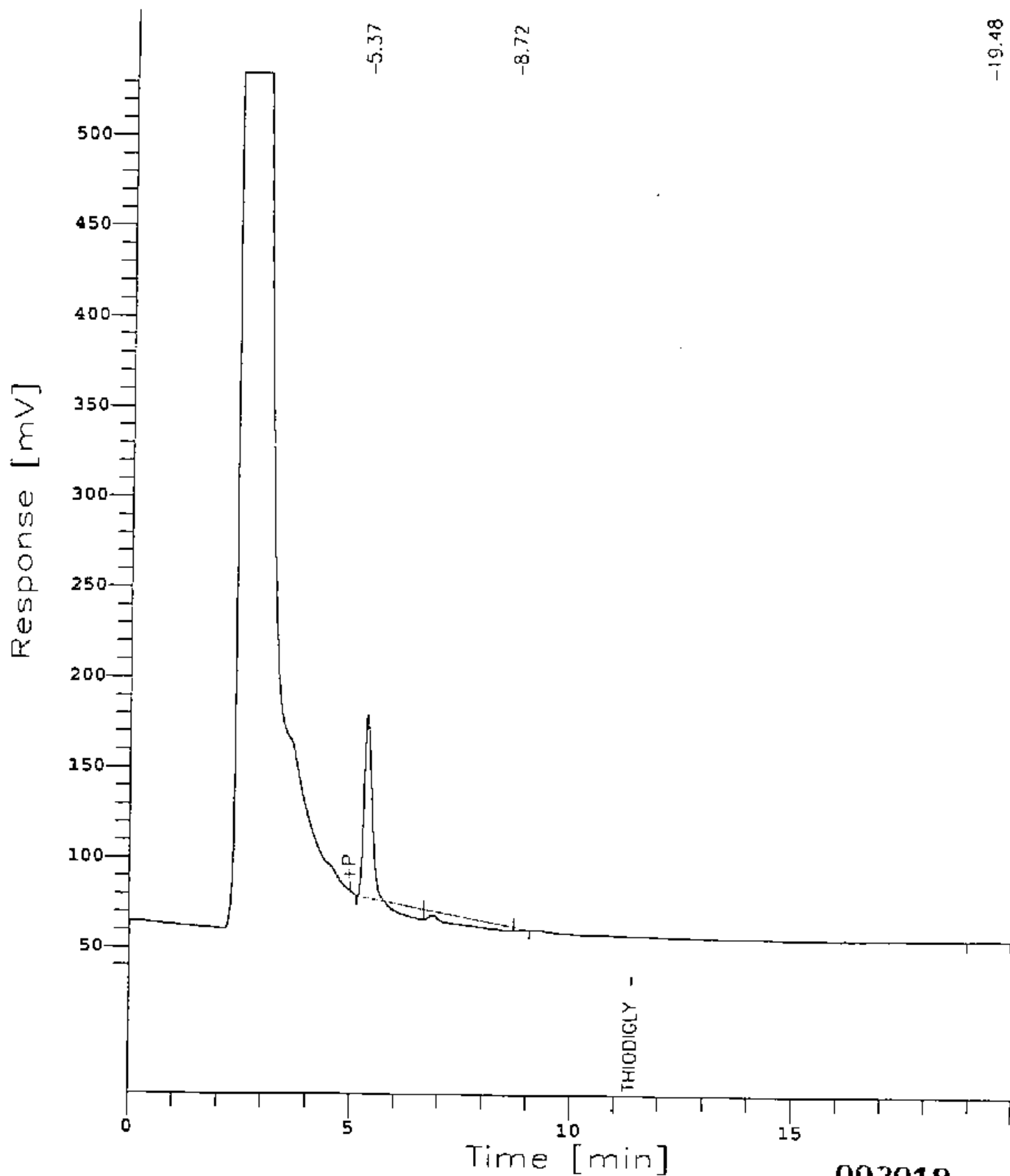
=====

Sample Name : CDDNTW*29
FileName : c:\2700\data3\CDE-044.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 20.00 min
Plot Offset: 35 mV

Sample #: 44
Date : 12/9/93 03:32 PM
Time of Injection: 12/9/93 03:12 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV

Page 1 of 1



003019

=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*32

Sample Number: 45

Operator : CRC

Time : 12/9/93 04:19 PM

Study : COE HUNTSVILLE

Instrument : SYSTEM_0

AutoSampler : NONE

Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 03:59 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-045.RAW

Result File : C:\2700\DATA3\COE-045.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Sample Amount : 1.0000

Area Reject : 125000.000000

Dilution Factor : 1.00

Noise Threshold: 75

Multiplier : 1.0000

Area Threshold : 300

Divisor : 1.0000

Bunch Factor: 5

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 4

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.251	5209554.17	395806.18	B
			5209554.17	395806.18	

=====

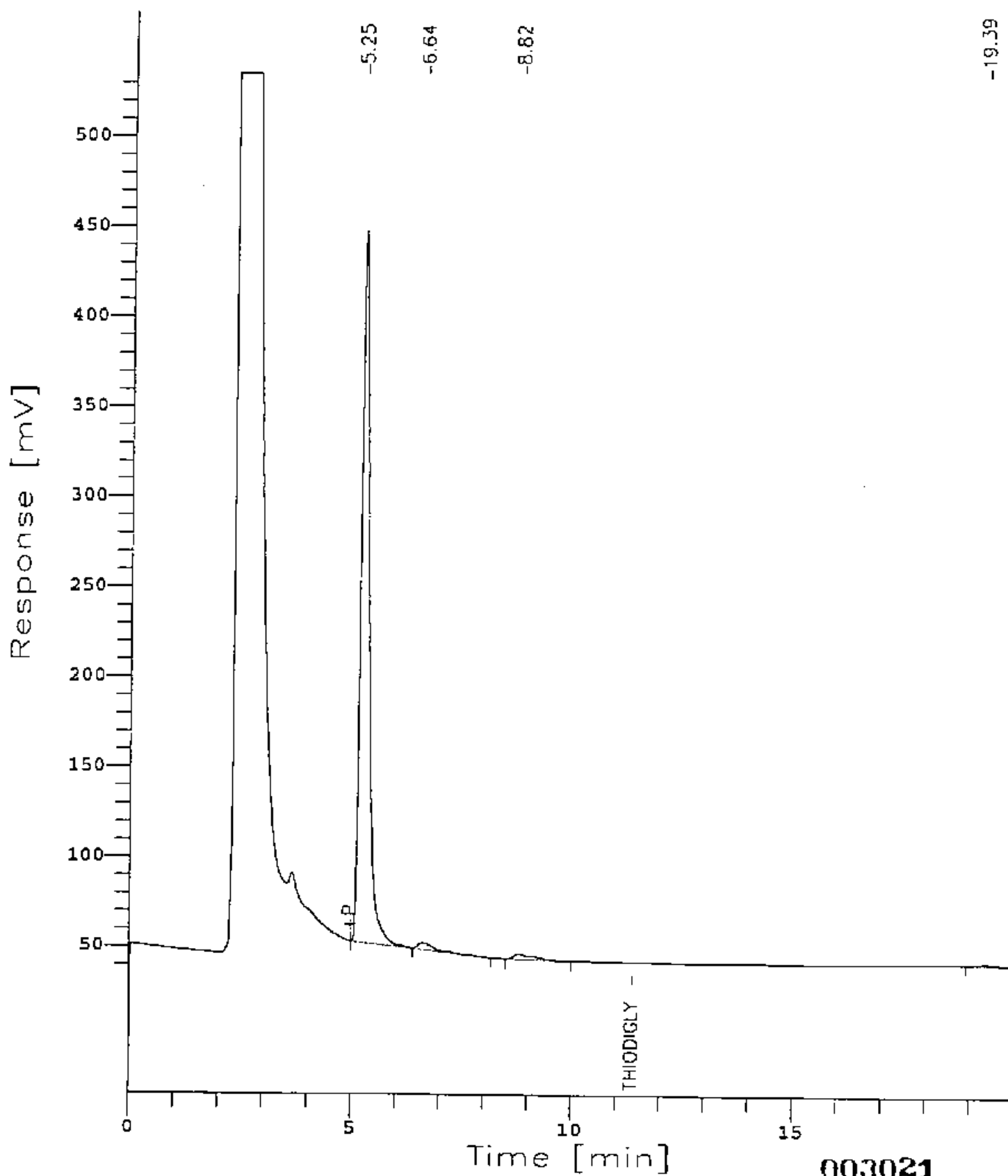
Chromatogram 51 211

Sample Name : CDDMTW*32
 File Name : c:\2700\data3\COE-045.raw
 Method : tdp.ins
 Start Time : 0.00 min
 Scale Factor : 0.0

End Time : 20.00 min
 Plot Offset : 35 mV

Sample #: 45
 Date : 12/9/93 04:19 PM
 Time of Injection: 12/9/93 03:59 PM
 Low Point : 35.00 mV
 Plot Scale: 500.0 mV
 High Point : 535.00 mV

Page 1 of 1



=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*37

Time : 12/9/93 05:06 PM

Sample Number: 46

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 04:46 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-046.RAW

Result File : C:\2700\DATA3\COE-046.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
1		5.242	6997385.00	501971.58	*B
			6997385.00	501971.58	

=====

Sample Name : CDDMTW*37

FileName : C:\2700\DATA3\COE-046.raw

Method : edg.ins

Start Time : 0.02 min

Scale Factor: 0.0

End Time : 20.00 min

Plot Offset: 30 mV

Sample #: 46

Date : 12/15/93 09:21 AM

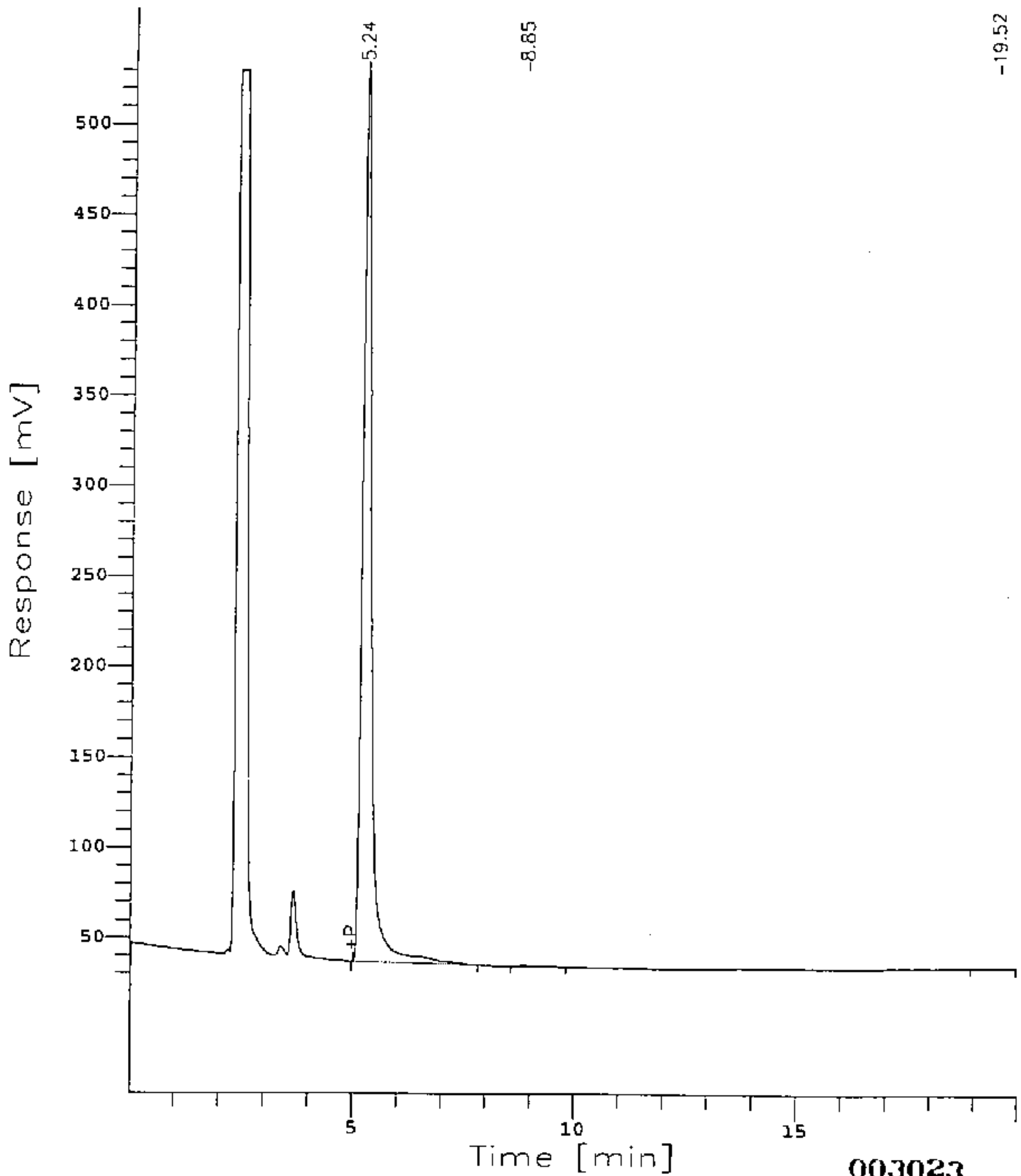
Time of Injection: 12/9/93 04:46 PM

Low Point : 30.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 530.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*45

Sample Number: 47

Operator : CRC

Time : 12/9/93 05:53 PM

Study : COE HUNTSVILLE

Instrument : SYSTEM_0

AutoSampler : NONE

Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 05:33 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-047.RAW

Result File : C:\2700\DATA3\COE-047.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Sample Amount : 1.0000

Area Reject : 125000.000000

Dilution Factor : 1.00

Noise Threshold: 75

Multiplier : 1.0000

Area Threshold : 300

Divisor : 1.0000

Bunch Factor: 5

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

No Peaks Available To Report

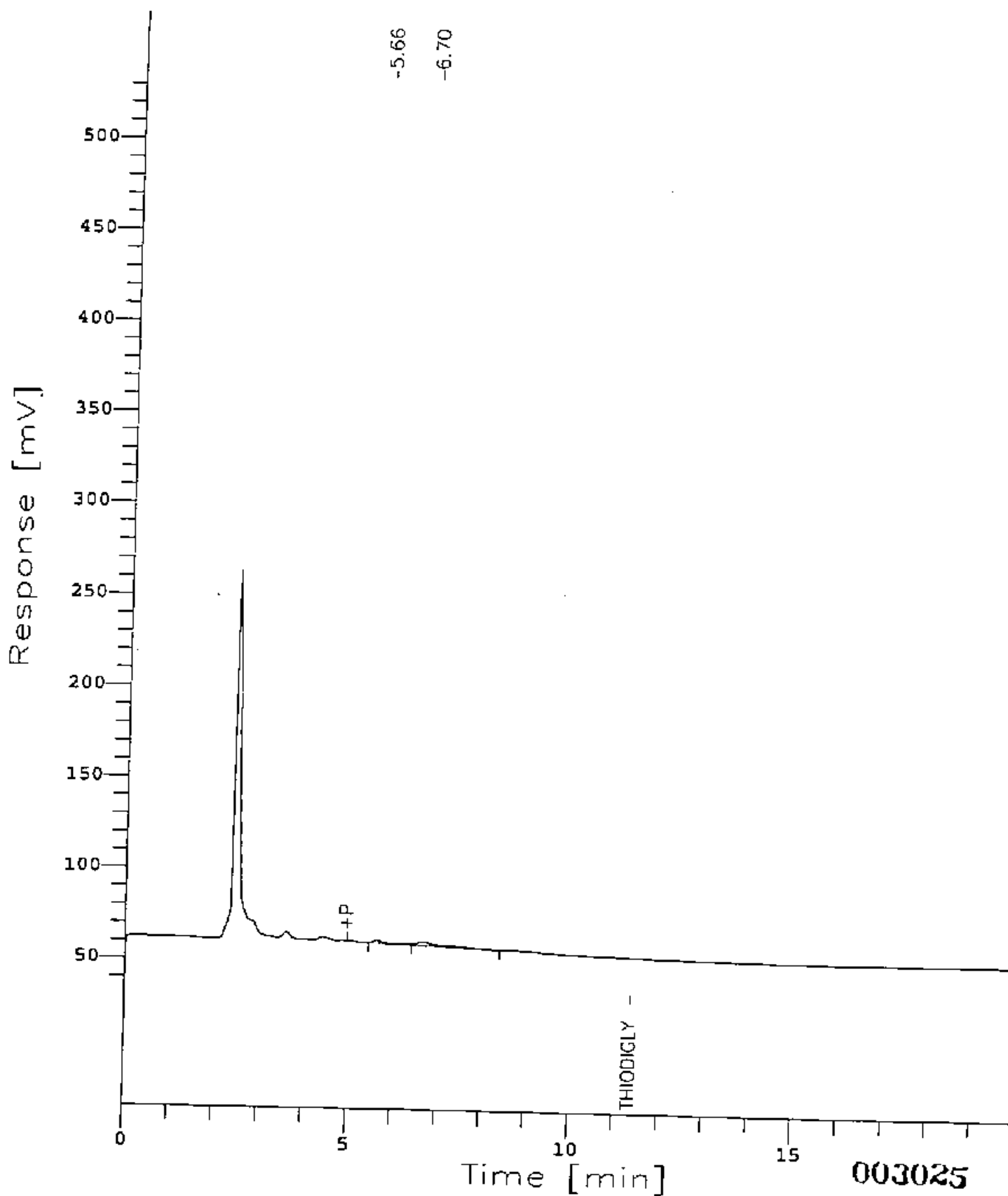
Chromatogram

51 215

Sample Name : CDDMTW*45
FileName : c:\2700\data3\COE-047.raw
Method : tdp.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 20.00 min
Plot Offset: 35 mV

Sample #: 47
Date : 12/9/93 05:53 PM
Time of Injection: 12/9/93 05:33 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
Page 1 of 1
High Point : 535.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*46

Sample Number: 48

Operator : CRC

Time : 12/9/93 06:40 PM

Study : COE HUNTSVILLE

Instrument : SYSTEM_0

AutoSampler : NONE

Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 06:20 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-048.RAW

Result File : C:\2700\DATA3\COE-048.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Sample Amount : 1.0000

Area Reject : 125000.000000

Dilution Factor : 1.00

Noise Threshold: 75

Multiplier : 1.0000

Area Threshold : 300

Divisor : 1.0000

Bunch Factor: 5

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 3

=====

THIODIGLYCOL IN WATER BY UW22

No Peaks Available To Report

Sample Name : CDDMTV#46

FileName : c:\2700\data3\COE-048.raw

Method : tdg.ins

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset: 35 mV

Sample #: 48

Date : 12/9/93 06:40 PM

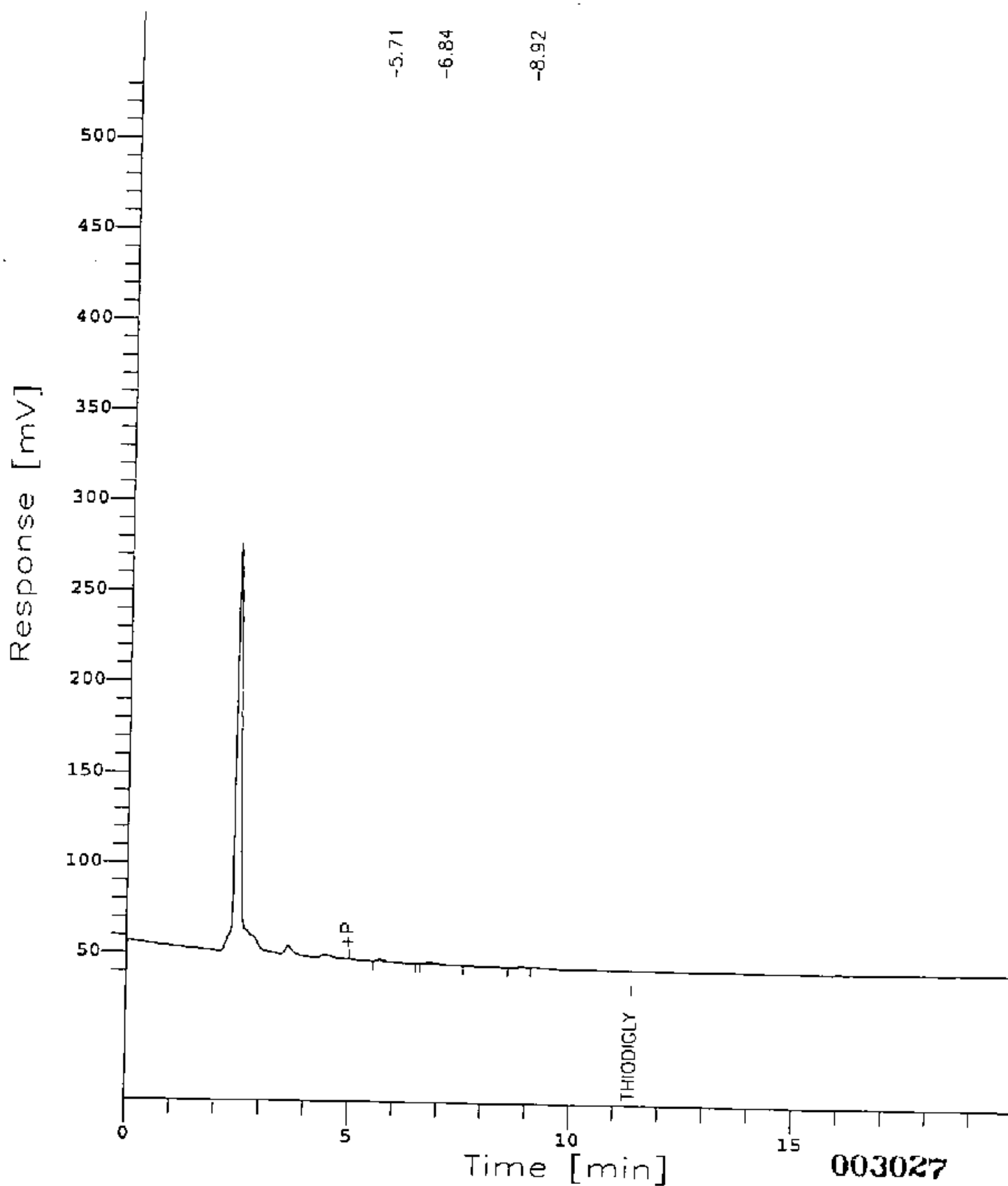
Time of Injection: 12/9/93 06:20 PM

Low Point : 35.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 535.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : CDDMTW*47

Sample Number: 49

Operator : CRC

Time : 12/9/93 07:27 PM

Study : COE HUNTSVILLE

Instrument : SYSTEM_0

AutoSampler : NONE

Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 07:07 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-049.RAW

Result File : C:\2700\DATA3\COE-049.RST

Instrument File: c:\2700\data3\tdg.ins

Process File : tdg

Sample File : tdg

Sequence File : C:\2700\DATA3\COEHUNT.seq

Inj. Volume : 1 ul

Sample Amount : 1.0000

Area Reject : 125000.000000

Dilution Factor : 1.00

Noise Threshold: 75

Multiplier : 1.0000

Area Threshold : 300

Divisor : 1.0000

Bunch Factor: 5

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 4

=====

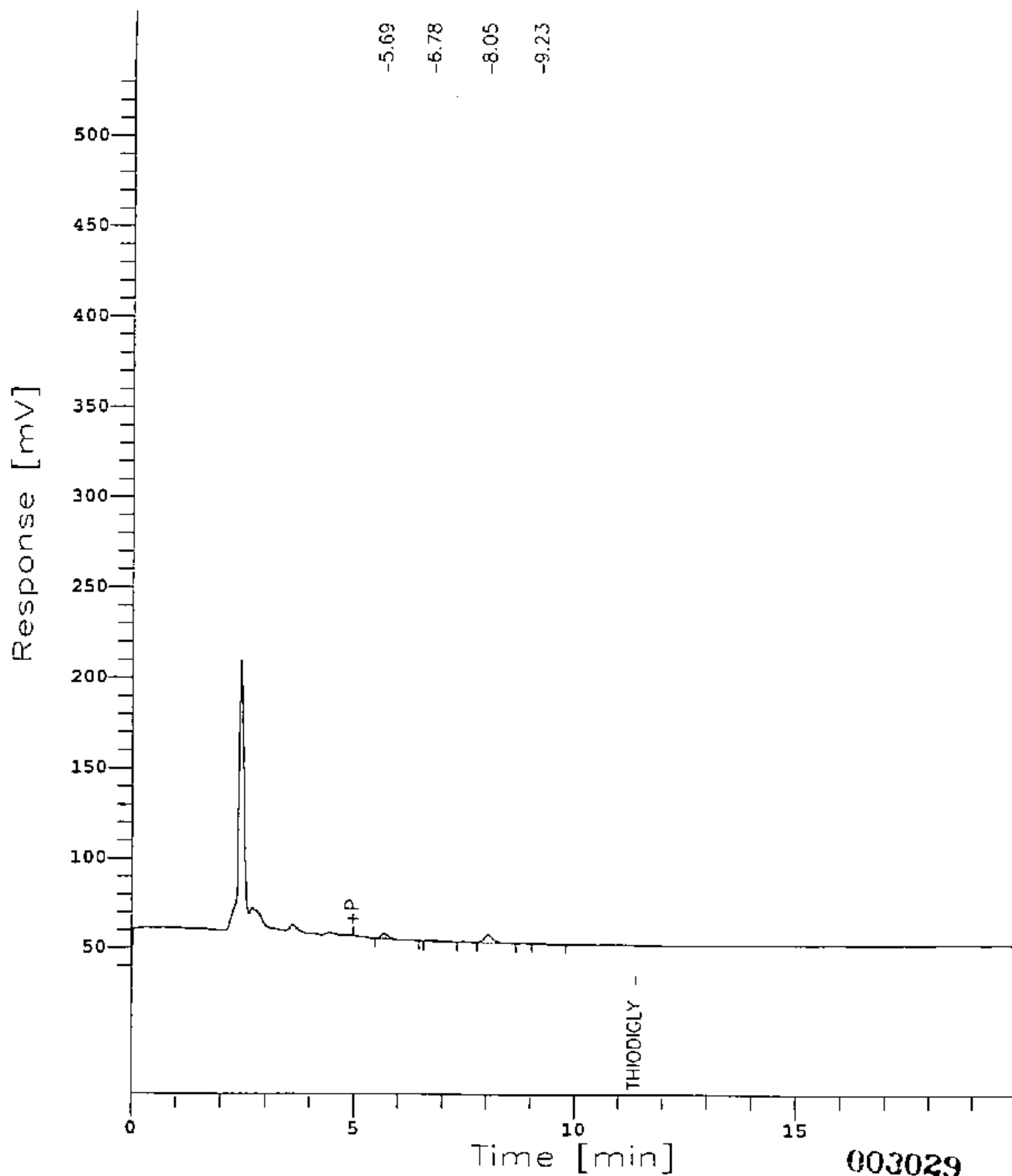
THIODIGLYCOL IN WATER BY UW22

No Peaks Available To Report

Sample Name : CDDMTW*47
FileName : c:\2700\data3\COE-049.raw
Method : tdg.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 20.00 min
Plot Offset: 35 mV

Sample #: 49
Date : 12/9/93 07:27 PM
Time of Injection: 12/9/93 07:07 PM
Low Point : 35.00 mV
Plot Scale: 500.0 mV
High Point : 535.00 mV



=====

Software Version: 3.3 <4B11>

Sample Name : CCS*120893*5

Time : 12/15/93 09:33 AM

Sample Number: 50

Study : COE HUNTSVILLE

Operator : CRC

Instrument : SYSTEM_0

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 3105270506 Data Acquisition Time: 12/9/93 07:54 PM

Delay Time : 0.00 min.

End Time : 20.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\DATA3\COE-050.RAW

Result File : C:\2700\DATA3\COE-050.RST

Instrument File: tdg

Process File : c:\2700\data3\tdg.prc

Sample File : c:\2700\data3\tdg.smp

Sequence File : c:\2700\data3\coehunt.seq

Inj. Volume : 1 ul

Area Reject : 125000.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 75

Area Threshold : 300

Bunch Factor: 5

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Liquid Chromatography -

Instrument : HP 1050, SYSTEM 5 RM 1800

Column : ULTRASPHERE ODS

Column Size : 250 X 4.6 mm, 5 um PARTICLES

Mobile Phase : PHOSPHATE BUFFER

Flow Rate : 1.0 mL/min

Temperature : AMBIENT

Detector : UV @ 215 nm

Total Number of Peaks Detected: 2

=====

THIODIGLYCOL IN WATER BY UW22

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	BL
2	THIODIGLYCOL	10.875	13626210.00	703285.04	B
			13626210.00	703285.04	

Sample Name : CCS*120893*4

FileName : C:\2700\DATA3\COE-050.raw

Method : tdg.ins

Start Time : 0.02 min

Scale Factor : 0.0

End Time : 20.00 min

Plot Offset : 30 mV

Sample #: 50

Date : 12/15/93 09:22 AM

Time of Injection: 12/9/93

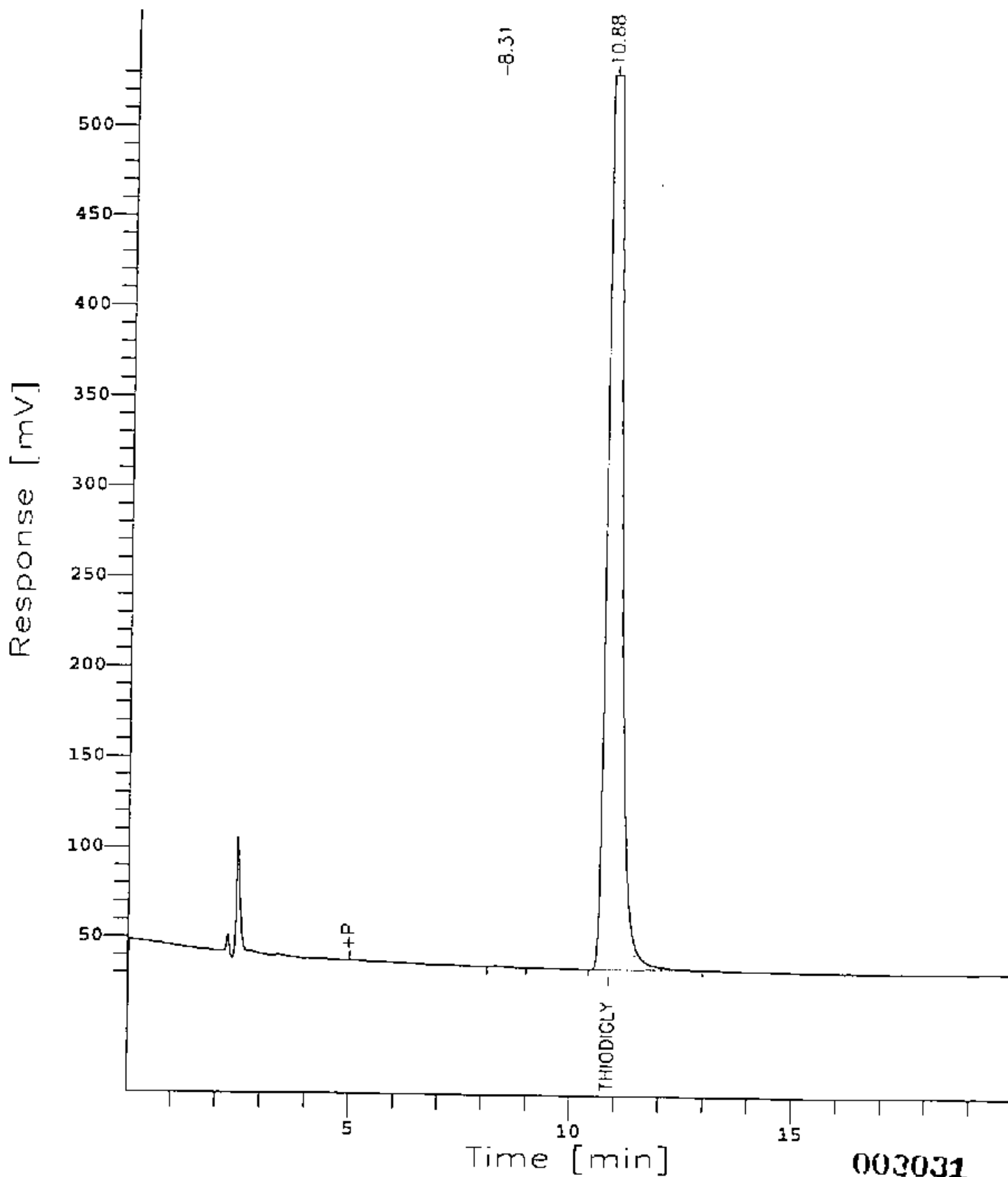
Low Point : 30.00 mV

Plot Scale: 500.0 mV

Page 1 of 1

07:54 PM

High Point : 530.00 mV



MISCELLANEOUS DOCUMENTS SECTION

G44759

UWZZ

Contains the following copies (NA those not required):

1. Sample arrival notice(s)
2. Extraction logbook page(s)
3. Extraction personal notebook page(s)
4. % Moisture data sheet NA
5. Extract chain of custody logbook page
6. Analyst notebook pages of standard preparation and concentrations
7. Standard solutions inventory
8. Instrument logbook page(s)
9. Example calculation
10. Error correction codes

Environmental Science and Engineering 11/18/93 STATUS:

P# 1 OF 2

*** SAMPLE ARRIVAL NOTICE FOR DEPARTMENT 1243 ***

C# 2 OF 5

PROJECT NUMBER 7934082G 0201
FIELD GROUP CDDMTWPROJECT NAME HUNTSVILLE COS - DDMT
PROJECT MANAGER P.C. WILBER
LAB COORDINATOR PATRICK WILBERCOLLECTION DATES: A=11/17/93
RECEIPT DATES : A=11/18/93
LAB DUE DATES : A=12/18/93TURNAROUND :
QC :
COMMENTS/QC PR:MATRIX : W DET. LIMIT SPEC'D : NONE SPECIFIED
SAMPLE FRACTIONS C, C, EC, EC, EC, LC, LC, LC, LC, MS, MS, MS, N, NP, NP, NP, VP, VP, VP, VP, VP.COLLECTION DATE CODES: AAAAAA
RECEIPT DATE CODES: AAAAAA
LAB DUE DATE CODES: AAAAAA

		EXTRACT DET. LMT. 12246		GROUP CRITERIA 842931	
001	ACENAPHTHENE	UG/L	34205*8310/3520-G	610	00000N
002	ACENAPHTHYLENE	UG/L	34200*8310/3520-G	610	00000N
003	ANTHRACENE	UG/L	34320*8310/3520-G	610	00000N
004	BENZO (A) ANTHRACENE	UG/L	34526*8310/3520-G	610	00000N
005	BENZO (A) PYRENE	UG/L	34247*8310/3520-G	610	00000N
006	BENZO (B) FLUORANTHENE	UG/L	34230*8310/3520-G	610	00000N
007	BENZO (GHI) PERYLENE	UG/L	34521*8310/3520-G	610	00000N
008	BENZO (K) FLUORANTHENE	UG/L	34242*8310/3520-G	610	00000N
009	CHRYSENE	UG/L	34320*8310/3520-G	610	00000N
010	DIBEN (A, H) ANTH' CENE	UG/L	34556*8310/3520-G	610	00000N
011	FLUORANTHENE	UG/L	34376*8310/3520-G	610	00000N
012	FLUORENE	UG/L	34381*8310/3520-G	610	00000N
013	INDENO (1,2,3-CD) PYRENE	UG/L	34403*8310/3520-G	610	00000N
014	NAPHTHALENE	UG/L	34696*8310/3520-G	610	00000N
015	PHENANTHRENE	UG/L	34461*8310/3520-G	610	00000N
016	PYRENE	UG/L	34469*8310/3520-G	610	00000N
017	THIODIGLYCOL	UG/L	99797*DW22	DW22	00000N
018	ALDRIN	UG/L	39330*8080/3520-G	8080W	00000N
019	BHC, A	UG/L	39337*8080/3520-G	8080W	00000N
020	BHC, B	UG/L	39338*8080/3520-G	8080W	00000N
021	BHC, D	UG/L	34259*8080/3520-G	8080W	00000N
022	BHC, G (LINDANE)	UG/L	39340*8080/3520-G	8080W	00000N
023	CHLORDANE	UG/L	39350*8080/3520-G	8080W	00000N
024	DDO, PP*	UG/L	39310*8080/3520-G	8080W	00000N
025	DDE, PP*	UG/L	39320*8080/3520-G	8080W	00000N
026	DDT, PP*	UG/L	39300*8080/3520-G	8080W	00000N
027	DIELDRIN	UG/L	39380*8080/3520-G	8080W	00000N
028	ENDOSULFAN, A	UG/L	34361*8080/3520-G	8080W	00000N
029	ENDOSULFAN, B	UG/L	34356*8080/3520-G	8080W	00000N
030	ENDOSULFAN SULFATE	UG/L	34351*8080/3520-G	8080W	00000N
031	ENDRIN	UG/L	39190*8080/3520-G	8080W	00000N
032	ENDRIN ALDEHYDE	UG/L	34366*8080/3520-G	8080W	00000N
033	HEPTACHLOR	UG/L	39410*8080/3520-G	8080W	00000N
034	METHOXYCHLOR	UG/L	39480*8080/3520-G	8080W	00000N
035	HEPTACHLOR EPOXIDE	UG/L	39420*8080/3520-G	8080W	00000N
036	TOXAPHENE	UG/L	39400*8080/3520-G	8080W	00000N
037	PCB-1016	UG/L	34671*8080/3520-G	8080W	00000N
038	PCB-1221	UG/L	39488*8080/3520-G	8080W	00000N
039	PCB-1232	UG/L	39492*8080/3520-G	8080W	00000N
040	PCB-1242	UG/L	39496*8080/3520-G	8080W	00000N

O-OPEN L-IN LAB E-EXTRACTED R-NOT REQUESTED D-DONE S-SCHEDULED
* 'SECRET' - NOT ON DEPT AVAIL NUMS

003033

Environmental Science and Engineering 12/15/93 STATUS:

P# 1 OF 2

*** SAMPLE ARRIVAL NOTICE FOR DEPARTMENT 1243 ***

C# 1 OF 1

PROJECT NUMBER 7934082G 0201
FIELD GROUP CUDMTWPROJECT NAME HUNTSVILLE COE - DDMT
PROJECT MANAGER P.C. WILBER
LAB COORDINATOR PATRICK WILBER

COLLECTION DATES: A-11/18/93

RECEIPT DATES : A-11/19/93

LAB DUE DATES : A-12/17/93

TURNAROUND :

QC :

COMMENTS/QC FR:

MATRIX : W

DET. LIMIT SPEC'D : NONE SPECIFIED

SAMPLE FRACTIONS C, C, EC, EC, EC, EC, LC, LC, LC, LC, MS, MS, MS, N, NF, NP, NP, VP, VP, VP, VP, VP.

COLLECTION DATE CODES: AAAAAA
RECEIPT DATE CODES: AAAAAA
LAB DUE DATE CODES: AAAAAA

SAMPLE SEQ #

		EXTRACT	DET. LMT.	133444
		GROUP	CRITERIA	527567
001	ACENAPHTHENE	UG/L	34205*8310/3520-G	610
002	ACENAPHTHYLENE	UG/L	34200*8310/3520-G	610
003	ANTHRACENE	UG/L	34220*8310/3520-G	610
004	BENZO (A) ANTHRACENE	UG/L	34526*8310/3520-G	610
005	BENZO (A) PYRENE	UG/L	34247*8310/3520-G	610
006	BENZO (B) FLUORANTHENE	UG/L	34230*8310/3520-G	610
007	BENZO (GH) PERYLENE	UG/L	34521*8310/3520-G	610
008	BENZO (K) FLUORANTHENE	UG/L	34242*8310/3520-G	610
009	CHRYSENE	UG/L	34320*8310/3520-G	610
010	DIBEN (A, H) ANTH' CENE	UG/L	34556*8310/3520-G	610
011	FLUORANTHENE	UG/L	34376*8310/3520-G	610
012	FLUORENE	UG/L	34381*8310/3520-G	610
013	INDENO (1, 2, 3-CD) PYRENE	UG/L	34403*8310/3520-G	610
014	KAPHTHALENE	UG/L	34696*8310/3520-G	610
015	PHENANTHRENE	UG/L	34461*8310/3520-G	610
016	PYRENE	UG/L	34469*8310/3520-G	610
017	THIODIGLYCOL	UG/L	99797*DM22	DM22
018	ALDRIN	UG/L	39330*8080/3520-G	8080W
019	BHC, A	UG/L	39337*8080/3520-G	8080W
020	BHC, B	UG/L	39338*8080/3520-G	8080W
021	BHC, D	UG/L	34259*8080/3520-G	8080W
022	BHC, G (LINDANE)	UG/L	39340*8080/3520-G	8080W
023	CHLORDANE	UG/L	39350*8080/3520-G	8080W
024	DDD, PP*	UG/L	39310*8080/3520-G	8080W
025	DDT, PP*	UG/L	39320*8080/3520-G	8080W
026	DDT, PP*	UG/L	39300*8080/3520-G	8080W
027	DIELDRIN	UG/L	39380*8080/3520-G	8080W
028	ENDOSULFAN, A	UG/L	34361*8080/3520-G	8080W
029	ENDOSULFAN, B	UG/L	34356*8080/3520-G	8080W
030	ENDOSULFAN SULFATE	UG/L	34351*8080/3520-G	8080W
031	ENDRIN	UG/L	39390*8080/3520-G	8080W
032	ENDRIN ALDEHYDE	UG/L	34366*8080/3520-G	8080W
033	HEPTACHLOR	UG/L	39410*8080/3520-G	8080W
034	METHOXYCHLOR	UG/L	39480*8080/3520-G	8080W
035	HEPTACHLOR EPOXIDE	UG/L	39420*8080/3520-G	8080W
036	TOLAPHERE	UG/L	39400*8080/3520-G	8080W
037	PCB-1016	UG/L	34671*8080/3520-G	8080W
038	PCB-1221	UG/L	34488*8080/3520-G	8080W
039	PCB-1232	UG/L	39492*8080/3520-G	8080W
040	PCB-1242	UG/L	39496*8080/3520-G	8080W

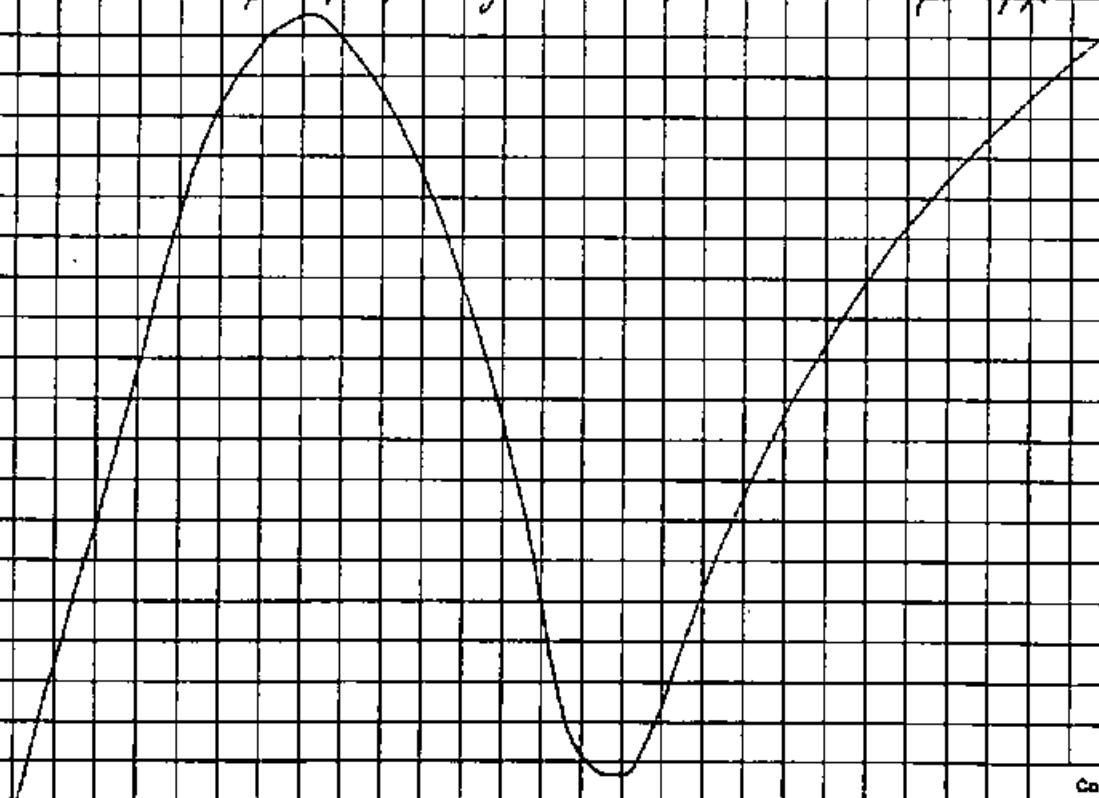
O-OPEN L-IN LAB E-EXTRACTED N-NOT REQUESTED D-DONE S-SCHEDULED
* "STORET" - NOT ON DEPT AVAIL NUMS

79340826 B201
CAT

11/22/93
LC

DDMTW: 8, 14, 15, 29, 32, 37, 45-47, L1, H1, H2, B1K

1. Poured up 300 ml sample into solvent bottles 300 ml bottles
2. Sealed Samples
3. Poured to 50 ml
4. Ran sample through XAD-7 resin column. Eluted with 50 ml HPLC Me₂O
5. Gave to 25 ml 11/22/93 CAT
6. Sample transferred to 50 ml bottles
7. Gave to 5 ml
8. Sample transferred to GCT, added to one bottle through up 10.0 ml with HPLC Me₂O 11/23/93 CAT
9. Poured sample through. Run periodic into phosy acid. 11/24/93 CAT



Continued on Page _____

Christine A. Hopkins 11/22/93
Signed Date

Read and Understood By

Jenna Censhaw 11-24-93
Signed Date

003036

SAMPLES: CDDMTW+8, 14, 15, 29, 32, 37, 45-47

SAMPLE FRACTION: LC
EXTRACTION SOLVENT: HPLC H2O

UW22 CHECKLIST

- | | |
|---|----------|
| 1. Check out lot folder | NR |
| 2. Silane treat glassware | CAT |
| 3. 200ml sample into 250ml beaker Use HPLC H2O for QC | |
| 4. Spike samples | |
| 5. Add 2 teflon boiling chips, concentrate to 50ml by boiling the sample | |
| 6. Check PH of the sample, adjust to PH 7±1 | PH=6.8 |
| 7. Pack column (20cm X 1cm) with 8g of XAD-7 Resin | |
| 8. Transfer the sample to the column allow the sample to pass through, collect in the same beaker | |
| 9. Rinse the column with 50ml HPLC H2O, collect in the same beaker giving a volume of 100ml | |
| 10. Concentrate to <25 by boiling the sample | 11/22/93 |
| 11. Quantitatively transfer to a 50ml beaker | CAT |
| 12. Concentrate to <5ml by boiling the sample | |
| 13. Transfer to a G.C. tube | |
| 14. Add 1.0ml UW22 buffer solution, bring to 10.0ml with HPLC H2O | 11/23/93 |
| 15. Filter sample through .45um acrodisc, collect in 6ml shorty vial | CAT |
| 16. Check lot folder off of the clipboard, turn in to the analyst | |
| 17. Place samples in fridge C | 11/24/93 |

QC REQUIRED

	YES	NO
BLK	☒	☐
LSPK	☒	☐
HSPK-1	☒	☐
HSPK-2	☒	☐
HPLC H2O	☒	☐

Chain of Custody	re LSPK CAT 11/20/93 11/23/93 CAT 11/24/93 CAT

ENVIRONMENTAL SCIENCE AND ENGINEERING, INC.
ORGANIC LABORATORY SAMPLE CHECK IN/OUT LOG

FIELD GROUP AND SAMPLE SEQUENCE	CDDMTUW 8-14, 25, 29, 32, 33, 45-47, QC		EXTRACT TYPE	UW22
DATE/TIME IN	11/24/93			
DATE/TIME OUT	12-1-93			
FIELD GROUP AND SAMPLE SEQUENCE	RTOH 44-53		EXTRACT TYPE	UKOP
DATE/TIME IN	9/24/93			
DATE/TIME OUT	11-24-93			
FIELD GROUP AND SAMPLE SEQUENCE	RUSOA 99-175, plus QC		EXTRACT TYPE	PET500
DATE/TIME IN	DEC 11-24-93			
DATE/TIME OUT	11-30-93			
FIELD GROUP AND SAMPLE SEQUENCE	RUSOA 11-14, 32, 33, 41, 42, 51, 59, 62		EXTRACT TYPE	8440 500P
DATE/TIME IN	12/24-93			
DATE/TIME OUT				
FIELD GROUP AND SAMPLE SEQUENCE	XPMAX 122-5, QC		EXTRACT TYPE	UH13
DATE/TIME IN	12/24-93			
DATE/TIME OUT	11-24-93			
FIELD GROUP AND SAMPLE SEQUENCE	UW24 159-159, 217-221		EXTRACT TYPE	PET 150
DATE/TIME IN	DEC 11-24-93			
DATE/TIME OUT	11-24-93			

(ORGANLAB 07/91)

000059

003038

STANDARD LABELING CONVENTION AND ASSOCIATED
DILUTION CODES

All standard solutions used by the HPLC group have the following characteristic nomenclature:

First three digits - ESE laboratory notebook number

Next two digits - page number in the lab notebook
(pages 1-9 are recorded as 01-09)

Last digit - sequence number on the notebook page

The six digit code is followed by a hyphen and a dilution code and multiplier (if required). The dilution codes are based on factors of 10 as the alphabetic character advances. All "A" dilution codes designate a primary stock standard, or the most concentrated combined stock in a series. "B", "C", and "D" designate 1:10, 1:100, and 1:1000 dilutions of the "A" stock, respectively. The last character, a multiplier, is used to denote dilutions which are not a factor of 10 dilution of the primary solution.

EXAMPLE: STD# 888097-C5, preparation documented in lab notebook number 888 on page 9 as the seventh standard listed on the page. "C5" denotes a 1:20 dilution of the "A" stock (1:100 x 5)

003039

LABORATORY NOTEBOOK

Notebook No.: 00972Assigned to: Curtis Campbell, Ph.D.Date: 9/3/93

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Printed in U.S.A.

003040

2

PROJECT THIODIGLYCOL

Notebook No. 972

Continued From Page

TDG - CCN STOCK

0.2383 g $\rightarrow$ 25 mL HPLC H₂O $\rightarrow$ 9532 μ g/mLAldrich, 99+%, Lot # 076024N; B+S HPLC H₂O Lot # BF565
Balance: AFI 60 # 148266

Continued on Page


Signed

9-13-93

Date

Read and Understood By


Signed

9-20-93

Date

003041

PROJECT

OW22 CAL.

Notebook No. 972

Continued From Page

5

CURVE FROM CAL STOCK 899901-A 8804 μ /L

0.5 L 899901-A $\rightarrow$ 10 L H₂O $\rightarrow$ 899901-B 8804 μ /L
 0.1 L 899901-A $\rightarrow$ 10 L H₂O $\rightarrow$ 899901-C 8804 μ /L

WORKING LEVELS

0.5 L μ /L

0.5 L	899901-B	$\rightarrow$	10 L	H ₂ O	$\rightarrow$	899901-D5	44020
0.2	-B	$\rightarrow$	10 L	H ₂ O	$\rightarrow$	-D2	17608
1.0	-C	$\rightarrow$			$\rightarrow$	-D	8804
0.5	-C	$\rightarrow$			$\rightarrow$	-E5	4402
0.1	-C	$\rightarrow$			$\rightarrow$	-E	880.4
0.5	-D	$\rightarrow$			$\rightarrow$	-F5	440.2

F5 LEVEL RUN - NOT USED IN OW22 METHOD - FOR POSSIBLE LN 18 RUNS.

CCV FROM STOCK 972021-A 9532 μ /LRUN AT A "D-LEVEL" TARGET: 9532 μ /L

Continued on Page

[Signature]
 Signed

10-18-93

Date

Read and Understood By

[Signature]
 Signed

10-20-93

Date

003042

LABORATORY NOTEBOOK

Notebook No.: 00899
Assigned to: Bob Hemerick
Date: 7/23/72

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002043

PROJECT THIODIGLYCOL

Continued From Page

899871-CC LOW LOW SPIKE

$$0.4 \text{ mL of } 899871-A (819.2 \text{ ppm TDC}) \xrightarrow[\text{with HCl}]{10 \text{ mL}} 899871-CC (491.5 \text{ ppm TDC})$$

Spike 0.1 mL in 10 mL of sample

$$\text{Target: } \frac{(0.1 \text{ mL})(491.5 \text{ ppm TDC})}{(10 \text{ mL})((100 - 0.03)/100)} = 4.918 \text{ ppm TDC}$$

CALC 5-18-93

Prepared 9-18-93 by RLC Exam 3-18-94

899871-B LOW HIGH SPIKE THIODIGLYCOL

$$2.5 \text{ mL } 899871-A (819.2 \text{ ppm TDC}) \xrightarrow[\text{with HCl}]{25 \text{ mL}} 899871-B (819.2 \text{ ppm TDC})$$

Spike 0.4 mL in 200 mL of sample

$$\text{Target } (819.2 \text{ ppm TDC})(0.4 \text{ mL}) \times \frac{1000 \text{ mL}}{200 \text{ mL}} = 1638 \text{ ppm TDC}$$

Prep 9-20-93 Exam 3-20-94

899871-D7 LOW LO SPIKE THIODIGLYCOL

$$1.4 \text{ mL } 899871-B (819.2 \text{ ppm TDC}) \xrightarrow[\text{with HCl}]{0.2 \text{ mL}} 899871-D7 (114.7 \text{ ppm TDC})$$
52.34 ppm
9-23-93

Spike 0.4 mL in 200 mL of sample

$$\text{Target } \frac{(114.7 \text{ ppm TDC})(0.4 \text{ mL})}{200 \text{ mL}} \times \frac{1000 \text{ mL}}{1 \text{ mL}} = 229 \text{ ppm TDC}$$

Prepared 9-26-93 Exam 3-26-94

Continued on Page

Read and Understood By

Robert C. Kerner

Signed

9-26-93

Date

E. J. McNeill

Signed

9/27/93

Date

003044

90

Notebook No. 89

PROJECT THIODIGLYCOL

Continued From Page

899901-A THIODIGLYCOL CALIBRATION STOCK SOLUTION

g of 2,2'-THIODIETHANOL, 99+% pure (ALDRICH LOT 07502 HW)

was put into a 25 mL volumetric flask and was

brought to volume with HPLC water

$$\frac{0.22019}{25 \text{ mL}} \times \frac{1000 \text{ mL}}{1} \times \frac{1000 \text{ mg}}{1} = 8804 \text{ mg/L} = 8804 \text{ mg/mL}$$

2,2'-THIODIETHANOL was received 1-15-92 and opened 1-23-93

Calibration stock prepared 9-28-93

Calibration stock expires 9-28-94

Continued on Page

Read and Understood By

Robert C. Kenna

Signed

9-28-93

Date

Sgt. M. Hill

Signed

10/7/93

Date

003045

92

PROJECT THIODIGLYCOL

Notebook No. 849

Continued From Page

899921-B 6/11/22 High Spd. THIODIGLYCOL

2.5 mL 899791-A (819.2 ppm TOE) $\xrightarrow{\text{15 mL water}}$ 89992-B (819.2 ppm TOE)

SPIKE 0.4 mL in 200 mL of sample

TARGET $\frac{(819.2 \text{ ppm TOE})(0.4 \text{ mL})}{200 \text{ mL}} \times \frac{1000 \text{ mL}}{1} = 1638 \text{ mg/L}$

Prepared: 11-1-93 Exp. 5-1-94 RLL

Continued on Page

Robert C. Kennen
Signed11-1-93
Date

Read and Understood By

Dy O. Hall
Signed

11/5/13

003046

84

Notebook No. 899

PROJECT THIOGLYCOL

Continued From Page 81

THIOGLYCOL in 4.322 HIGH SPIKE 899941-B

2.5 ml 899931-A (847.2 μ S/ml) $\frac{2.5 \text{ ml}}{200 \text{ ml}} = 8999941$ (847.2 μ S/LTD)
 (4.322) μ S
 4.17-93

SPIKE 0.4 ml of 899941-B in 200 ml of sample

Target: $\frac{(847.2 \text{ } \mu\text{S/LTD})(0.4 \text{ ml})}{200 \text{ ml}} \times \frac{1000 \text{ ml}}{1} = 1694 \text{ } \mu\text{S/L}$

Prepared 11-17-93 RCK Exp 5-19-94

Continued on Page

Robert C. Kerner
 Signed

11-17-93
 Date

Read and Understood By

Al J. Evers
 Signed

11/17/93
 Date

003047

Calibration Curve for THIDDIGLYSOL (C₆H₅N₂)

Prepared 12-2-93 B. Kammak

mg/L
TOD

1.0 mL of 899901-A (8804 mg/mL) with 10 mL of HPLC H ₂ O	→ 899951-B 880400
0.5 mL ↓	→ 899951-C 88040
0.5 mL of 899951-B (88040 mg/L) with 10 mL of HPLC H ₂ O	→ 899951-D5 44030
0.2 mL ↓	→ 899951-D2 17608
0.1 mL ↓	→ 899951-D 8804
0.5 mL of 899951-C (88040 mg/L) with 10 mL of HPLC H ₂ O	→ 899951-E5 4402
0.1 mL ↓	→ 899951-E 880.4
0.5 mL of 899951-D (8804 mg/L) with 10 mL of HPLC H ₂ O	→ 899951-F5 440.2

STOCK STD 899901-A prepared 9-23-93 by B. Kammak

899952 - Continuing Calibration (multiples) STDs
prepared 12-2-93

1.0 mL 472021-A (9532 mg/mL) with 10 mL of HPLC H ₂ O	→ 899952-B 95320
0.1 mL 899952-B (95320 mg/L) ↓	→ 899952-D 9532

SEC 1 Stock prepared 9-13-93 by C. Campbell

Continued on Page

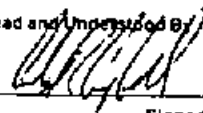
Robert C. Kammak

Signed

12/1/93

Date

Read and Understood By



Signed

12/2/93

Date

003048

B-0383

51 239

INSTRUMENT LOGBOOK
SYSTEM #5 ROOM 1800
PAGE 0

HP 1050 INSTRUMENT CONFIGURATION:

<u>MODULE</u>	<u>MODEL #</u>	<u>SERIAL #</u>
1 QUATERNARY PUMP	79852A	3225A01597
1 AUTOSAMPLER	79855A	3141A01577
1 V/W UV DETECTOR	79853C	3225J00998
1 SPARGING SYSTEM	79856A	3114A00694

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CHROMATOGRAPHIC ANALYSIS LOG

Date 12-7-93
 Analyst CRG
 Project C.D.E. HUNTSVILLE
 Case/Method UW22
 Instrument ID #5 R-1800
 Data System TE 2700
 Analysis Type TOX in H₂O

COLUMN
 Packing ULTRASORB
 Length x I.D. (mm) 250 x 4.6
 dp 5 Temp °C Ambient
 Serial No. 2UE 3279
 GUARD COLUMN
 Packing N/A
 Col # / Date 1A

INJECTOR
 Autosampler or Manual? Autosampler
 Inj Vol (μL) 100
 Sequence File COEHUNT

DETECTOR
 UV at 215 nm
 Other Output range: 0.1AU

Mobile Phase/Gradient Program Description Pump A - Phosphate Buffer Pump B - AcN

10-4 min @ 100% A

644757 1-27		644758 27-31	
FROM CDS			
Run No.	Sample No.	Run No.	Sample No.
1	MOBILE PHASE BLK	27	CLSA 120893*2
2	CLSA 120793*1	28	MBXGLX3
3	MBXGLX1	29	SP1 3
4	SP1 1	30	SP2 3
5	SP2 1	31	SP3 3
6	SP3 1	32	CDDMTW*48
7	CDDMTW*3	33	49
8	4	34	50
9	5	35	51
10	7	36	CLSA 120893*3
11	13	37	MBXGLX4
12	35	38	SP1 4
13	38	39	SP2 4
14	39	40	SP3 4
15	41	41	CDDMTW*8
16	42	42	14
17	44	43	15
18	CLSA 120893*1	44	29
19	MBXGLX2	45	32
20	SP1 2	46	37
21	SP2 2	47	45
22	SP3 2	48	46
23	CDDMTW*9	49	47
24	10	50	CLSA 120993*1
25	11	51	CLSA 120993*2
26	12		

F266250

11/11/96

BOOK NO: B-0383 003050

Environmental
Science &
Engineering, Inc.

CHROMATOGRAPHIC ANALYSIS LOG

Date 12-2-93
 Analyst ERC
 Project THRE/ CARROLL IS.
 Case/Method UW22
 Instrument ID #5 R-1800
 Data System TL 2700 III
 Analysis Type TH in H₂O

COLUMN
 Packing ULTRASPHERE ODS
 Length x I.D. (mm) 250 x 4.6
 dp 5 Temp °C 6.1
 Serial No. 2UE3279
 GUARD COLUMN
 Packing M
 Col # / Date 12

INJECTOR
 Autosampler or Manual? Autosampler
 Inj Vol (μL) 100
 Sequence File PHCA
 DETECTOR
 UV at 215 nm
 Other QUANT RANGE: 0.1

Mobile Phase/Gradient Program Description Pump A = PHOSPHATE BUFFER Pump B = A/W

10-μL @ 100% A

PHCA 643728

PHBA 643727

PHCA 644138

PREFIX: UW22

Run No.	Sample No.	Run No.	Sample No.	Run No.	Sample No.
1	MOBILE PHASE BCK	27	SPM2XCIH2W2X60	53	CCS#120393X4
2	B99901-D5	28	CIH2W2X5	54	UW22 A1 SP2 VER
3	F5	29	32	55	UW22 L0
4	E	30	41	56	LW18 H1
5	E5	31	60	57	LW18 L0
6	D	32	61		
7	D2	33	66		
8	D5	34	73		
9	CCS#120393X1	35	CCS#120393X2		
10	MBXTHAMA-PHCA#1	36	MBXTHAMA-PHCA#1		
11	SR1	37	SR1		
12	SR2	38	SR2		
13	SR3	39	SR3		
14	SPM1XEBTSW2X20	40	SPM1XCIH2W2X36		
15	SPM2	41	SPM2		
16	EBTSSLX21	42	CIH2W2X1		
17	EBTSW2X12	43	3		
18	13	44	36		
19	14	45	42		
20	20	46	43		
21	CCS#120393X1	47	53		
22	MBXTHAMA-PHCA#1	48	54		
23	SR1	49	56		
24	SR2	50	67		
25	SR3	51	74		
26	SPM1XCIH2W2X60	52	CCS#120393X3		

F28250

BOOK NO: B-0383

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EXAMPLE CALCULATION

For Method UW 22

Calculated by: *Curtis R. Campbell*Lot No. *G44759*Date: *12-15-93*Sample No. *SP1*QC#4*Response for Thiodiglycol (TDG) = *594156* (area units)

The concentration (ug/L) of TDG calculated from the calibration curve equation ($y = mx + b$) where x = response for TDG and m and b are from the curve data.

$$\begin{aligned}\text{Conc. of TDG} &= 1917.7 \mu\text{g/L (1L/1000mL)} \\ &= 1.918 \mu\text{g/mL}\end{aligned}$$

Total μg extracted = final extract volume /0 mL x extract

$$\text{concentration } 1.918 \mu\text{g/mL} = 19.18 \mu\text{g}$$

Amount of TDG spiked (target) = 0.4 mL of 57.3 $\mu\text{g/mL}$ standard,

$$= 22.92 \mu\text{g}$$

% Recovery = [(amt. in extract - amt. in blank) + target conc.] x 100

$$= [(19.18 - 0) + 22.92] \times 100$$

$$= 83.7 \%$$

ERROR CORRECTION CODES

CODE	EXPLANATION
WP	Entry Made In Wrong Place
WI	Wrong Information Recorded
CE	Calculation Error
SE	Spelling Error
IW	Illegible Writing Error
FO	Data Changed Upon Further Observation
TE	Transcription Error
FE	Further Explanation Provided

FINAL PAGE

ADMINISTRATIVE RECORD

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ADMINISTRATIVE RECORD

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