TRIMATRIX LABORATORIES

SECTION - E

GC SEMI-VOLATILE ORGANICS

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Individual sample results relate only to the sample tested.

5560 Corporate Exchange Court SE ♦ Grand Rapids, MI 49512 ♦ Phone: 616.975.4500 ♦ Fax: 616.942.7463 ♦ www.trimatrixlabs.com

STATEMENT OF DATA QUALIFICATIONS

EDB and DBCP by EPA Method 8011

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%. The lower concentration result has been reported. The higher concentration result was: 0.140.

Analysis: USEPA-8011

Sample/Analyte: 1205072-01 106092 1,2-Dibromoethane

TriMatrix Laboratories, Inc.

TechLaw

Project: KNM

SDG: KNM050112

USEPA-8011

SAMPLE ID SUMMARY

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

SDG: KNM050112

Project: KNM

Client Sample Id:	Lab Sample Id:
106092	1205072-01
106093	1205073-01
106036	1205085-01
106037	1205085-02

ANALYSIS BATCH (SEQUENCE) SUMMARY

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2E07013

SDG: KNM050112

Project: KNM

Calibration: 2D17008

Instrument: 158

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2E07013-CCV1	AMAY027-0	05/04/12 10:03
Blank	1205560-BLK1	AMAY028-0	05/04/12 10:31
LCS	1205560-BS1	AMAY029-0	05/04/12 10:59
106092	1205072-01	AMAY032-0	05/04/12 12:23
106093	1205073-01	AMAY033-0	05/04/12 12:51
106036	1205085-01	AMAY034-0	05/04/12 13:19
106037	1205085-02	AMAY035-0	05/04/12 13:47
106037	1205560-MS1	AMAY036-0	05/04/12 14:15
106037	1205560-MSD1	AMAY037-0	05/04/12 14:43
Calibration Check	2E07013-CCV2	AMAY038-0	05/04/12 15:11

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106037

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM050112

Client: TechLaw

Project: KNM

Matrix: Water

Laboratory ID: 1205560-MS1

Preparation: Method-Specific Extraction

QC Batch: 1205560

Initial/Final: 34.9 mL / 2 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
1,2-Dibromoethane	0.321	0.168	0.430	82	60 - 140	ug/L

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

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106037

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM050112

Client: TechLaw

Project: KNM

Matrix: Water

Laboratory ID: 1205560-MSD1

Preparation: Method-Specific Extraction

QC Batch: 1205560

Initial/Final: 35 mL / 2 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
1,2-Dibromoethane	0.320	0.434	83	1	20	60 - 140	ug/L

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

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM050112

Client: TechLaw

Project: KNM

Matrix: Water

Laboratory ID: 1205560-BS1

Preparation: Method-Specific Extraction

Initial/Final: 35 mL / 2 mL

QC Batch: 1205560

Sequence: 2E07013

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
1,2-Dibromoethane	0.320	0.263	82	60 - 140	ug/L

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

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-8011

Laboratory: TriMatrix Laboratories, Inc. SDG: KNM050112

Client: TechLaw Project: KNM

Matrix: Water Laboratory ID: 1205560-BLK1 File ID: AMAY028-0

Prepared: 05/04/12 08:27 Analyzed: 05/04/12 10:31

Preparation: Method-Specific Extracti Initial/Final: 35 mL / 2 mL

QC Batch: 1205560 Sequence: 2E07013 Calibration: 2D17008 Instrument: 158

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
106-93-4	1,2-Dibromoethane	0.050	ug/L	0.0078	0.050	U

QC BATCH SUMMARY

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM050112

Client: TechLaw

Project: KNM

QC Batch: 1205560 QC Batch Matrix: Water

Preparation: Method-Specific Extraction

Sample Name	Lab Sample ID	Date Prepared	Observations
106092	1205072-01	05/04/12 08:27	EDB only
106093	1205073-01	05/04/12 08:27	EDB only
106036	1205085-01	05/04/12 08:27	EDB only
106037	1205085-02	05/04/12 08:27	EDB only
Blank	1205560-BLK1	05/04/12 08:27	
LCS	1205560-BS1	05/04/12 08:27	
106037	1205560-MS1	05/04/12 08:27	
106037	1205560-MSD1	05/04/12 08:27	

HOLDING TIME SUMMARY

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

SDG: KNM050112

Client: TechLaw

Project: KNM

Method: EDB and DBCP by EPA Method 8011

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
106092	05/01/12	05/02/12		05/04/12	3	14	05/04/12	0	2	
106093	05/01/12	05/02/12		05/04/12	3	14	05/04/12	0	2	
106036	05/02/12	05/03/12		05/04/12	2	14	05/04/12	0	2	
106037	05/02/12	05/03/12		05/04/12	2	14	05/04/12	0	2	

00260

ORGANIC ANALYSIS DATA SHEET
USEPA-8011

106092

Laboratory: TriMatrix Laboratories, Inc. SDG: KNM050112

Client: TechLaw Project: KNM

Matrix: Water Laboratory ID: 1205072-01 File ID: AMAY032-0

Sampled: 05/01/12 15:22 Prepared: 05/04/12 08:27 Analyzed: 05/04/12 12:23

Solids: Preparation: Method-Specific Extracti Initial/Final: 34.4 mL / 2 mL

QC Batch: 1205560 Sequence: 2E07013 Calibration: 2D17008 Instrument: 158

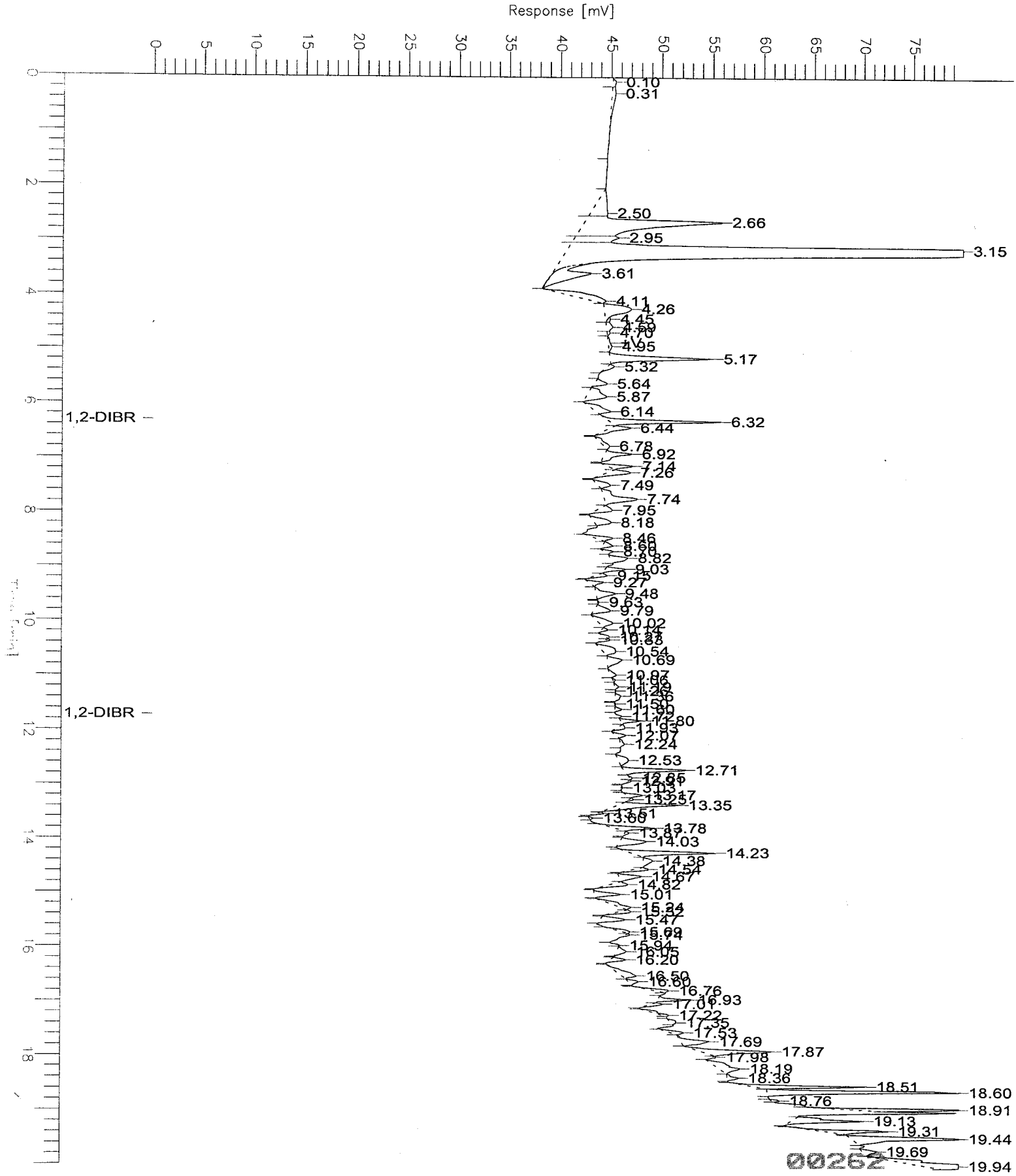
CAS No.	Analyte	Dilution	CONC. (ug/L)	MDL	MRL	Q
106-93-4	1,2-Dibromoethane	1	0.099	0.0078	0.050	

* Values outside of QC limits

Chromatogram

Sample Name : 1205072-01
FileName : C:\TC4\158\MAY2012\AMAY032.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #:
Date : 5/7/12 09:22
Time of Injection: 5/4/12 12:23
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



00262

Software Version: 4.1<2F12>
Sample Name : 1205072-01
Sample Number:
Operator : BJH

Time : 5/7/12 09:22
Study : 8011

Instrument : 158
AutoSampler :
Rack/Vial : 0/0

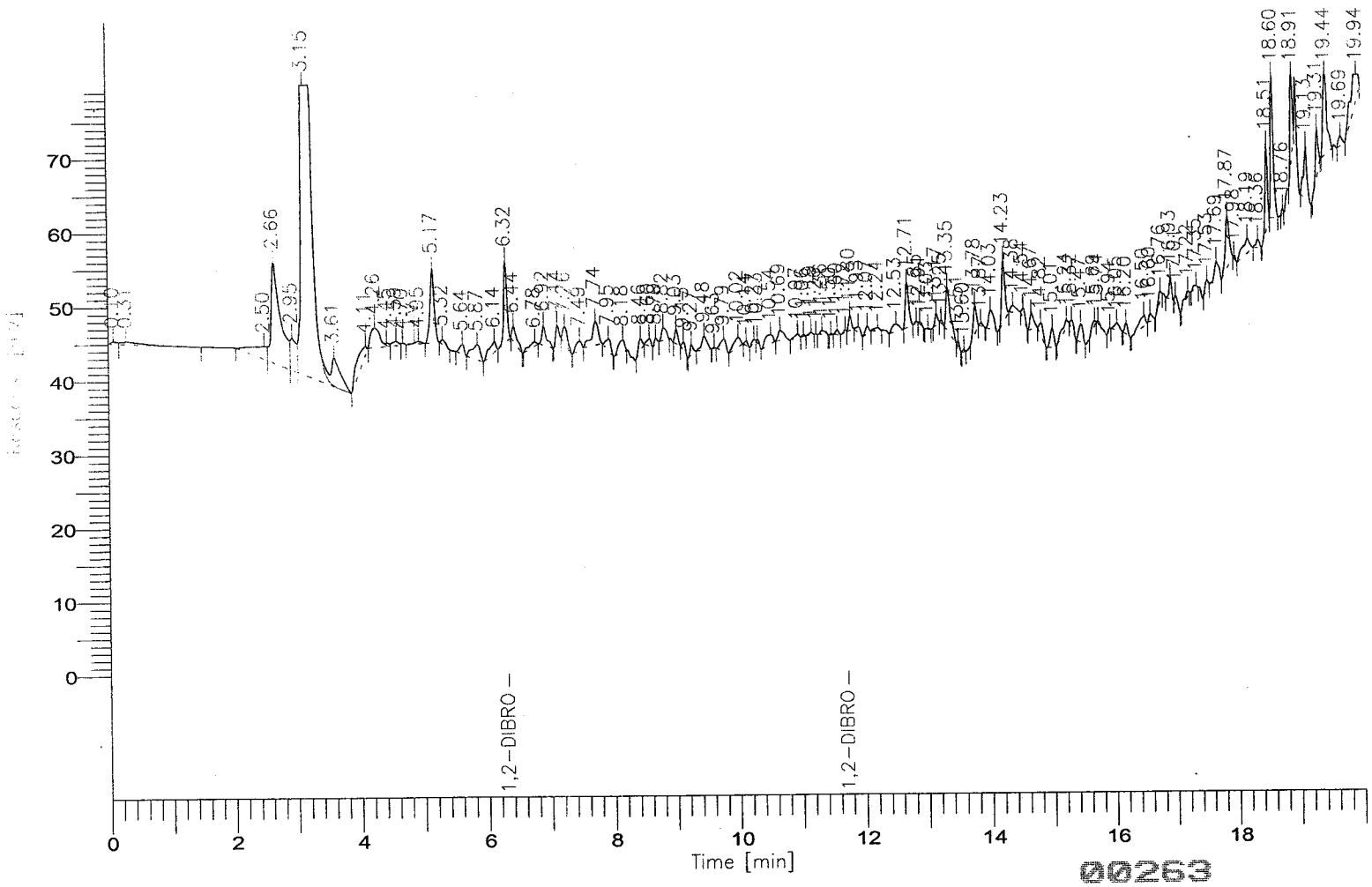
Channel : A A/D mV Range : 1000

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 12:23
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\AMAY032.RAW
Result File : C:\TC4\158\MAY2012\AMAY032.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\AMAY032.RS
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul
Sample Amount : 1.0000

Area Reject : 0.000000
Dilution Factor : 1.00



00263

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

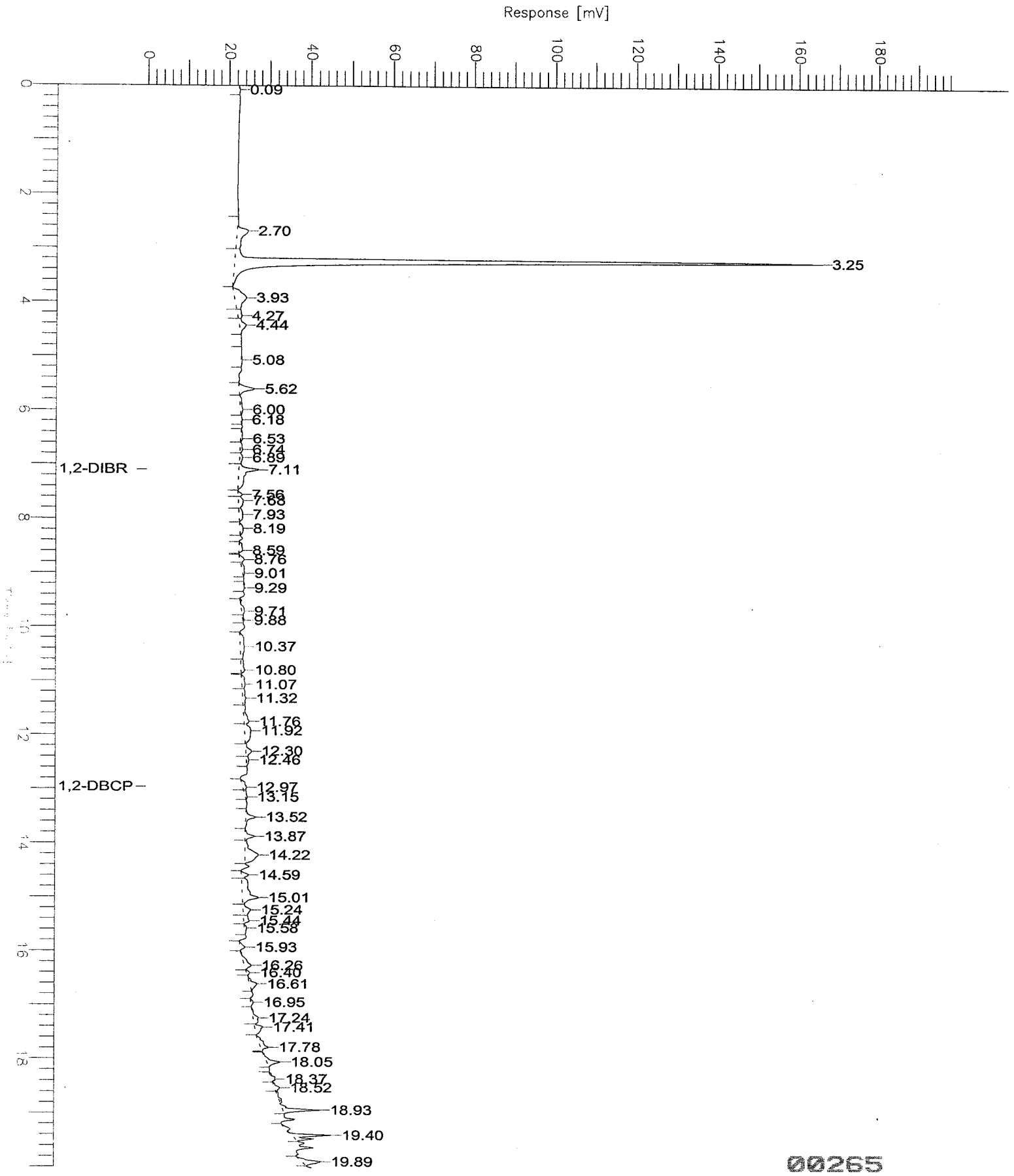
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.32	1,2-DIBROMOETHANE	0.0017	11180.75	39177.00	34	2	0.09620
11.72	1,2-DIBROMO3CHLOROPR	-0.0002	389.15	1141.00	34	2	-0.01228
			11569.90	40318.00			

Report stored in ASCII file: C:\TC4\158\MAY2012\AMAY032.TX0

Chromatogram

Sample Name : 1205072-01
FileName : C:\TC4\158\MAY2012\BMAY032.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #:
Date : 5/7/12 09:23
Time of Injection: 5/4/12 12:23
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



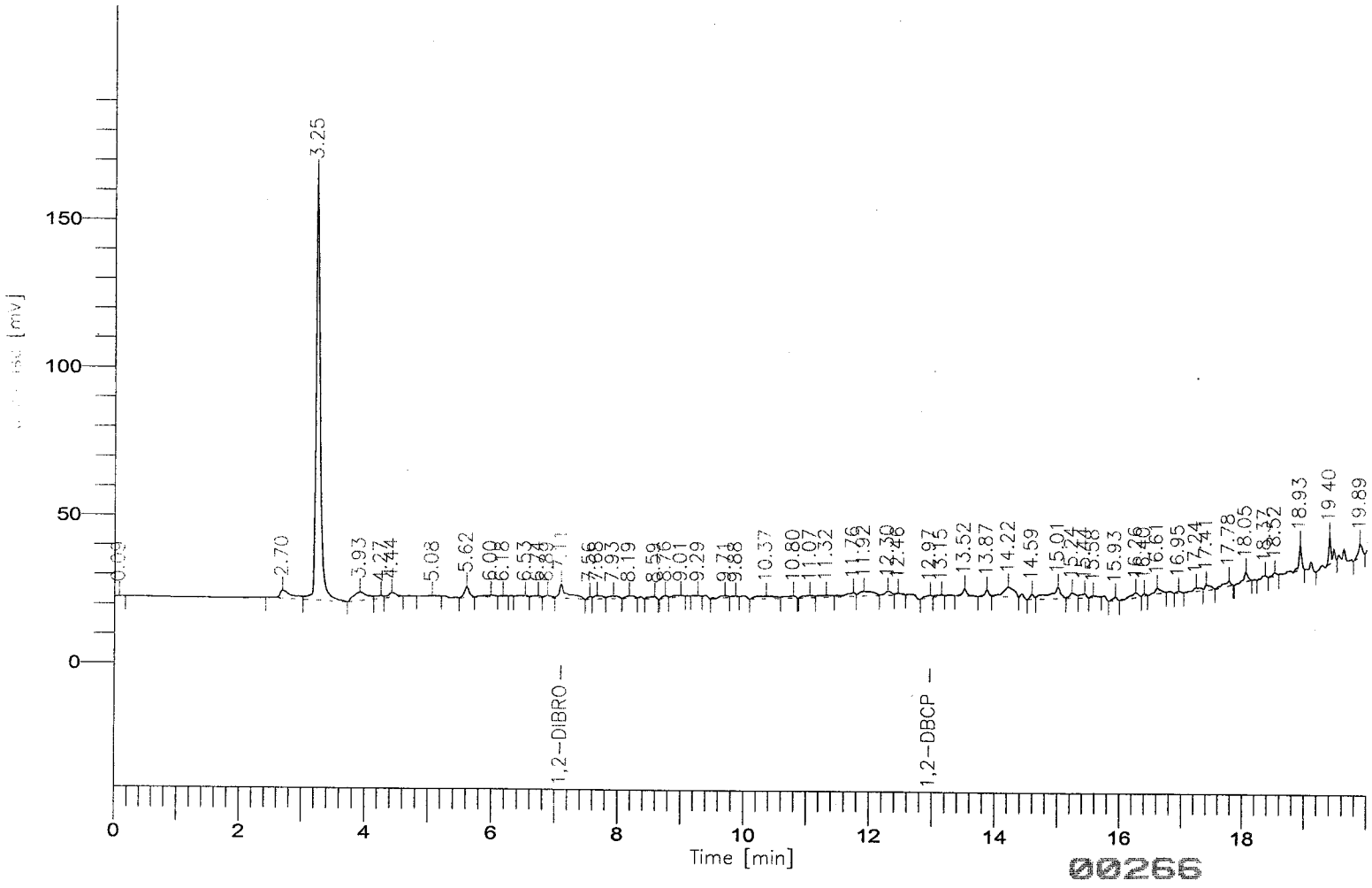
Software Version: 4.1<2F12>
Sample Name : 1205072-01 Time : 5/7/12 09:23
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 12:23
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\BMAY032.RAW
Result File : C:\TC4\158\MAY2012\BMAY032.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\BMAY032.RS
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
7.11	1,2-DIBROMOETHANE (2	0.0024	4893.68	42548.48	34	2	0.14044
12.97	1,2-DBCP (2C)	0.0005	850.63	8444.65	34	2	0.02896
			5744.31	50993.13			

Report stored in ASCII file: C:\TC4\158\MAY2012\BMAY032.TX0

ORGANIC ANALYSIS DATA SHEET
USEPA-8011

106093

Laboratory: TriMatrix Laboratories, Inc. SDG: KNM050112

Client: TechLaw Project: KNM

Matrix: Water Laboratory ID: 1205073-01 File ID: AMAY033-0

Sampled: 05/01/12 11:16 Prepared: 05/04/12 08:27 Analyzed: 05/04/12 12:51

Solids: Preparation: Method-Specific Extracti Initial/Final: 34.7 mL / 2 mL

QC Batch: 1205560 Sequence: 2E07013 Calibration: 2D17008 Instrument: 158

CAS No.	Analyte	Dilution	CONC. (ug/L)	MDL	MRL	Q
106-93-4	1,2-Dibromoethane	1	0.050	0.0078	0.050	U

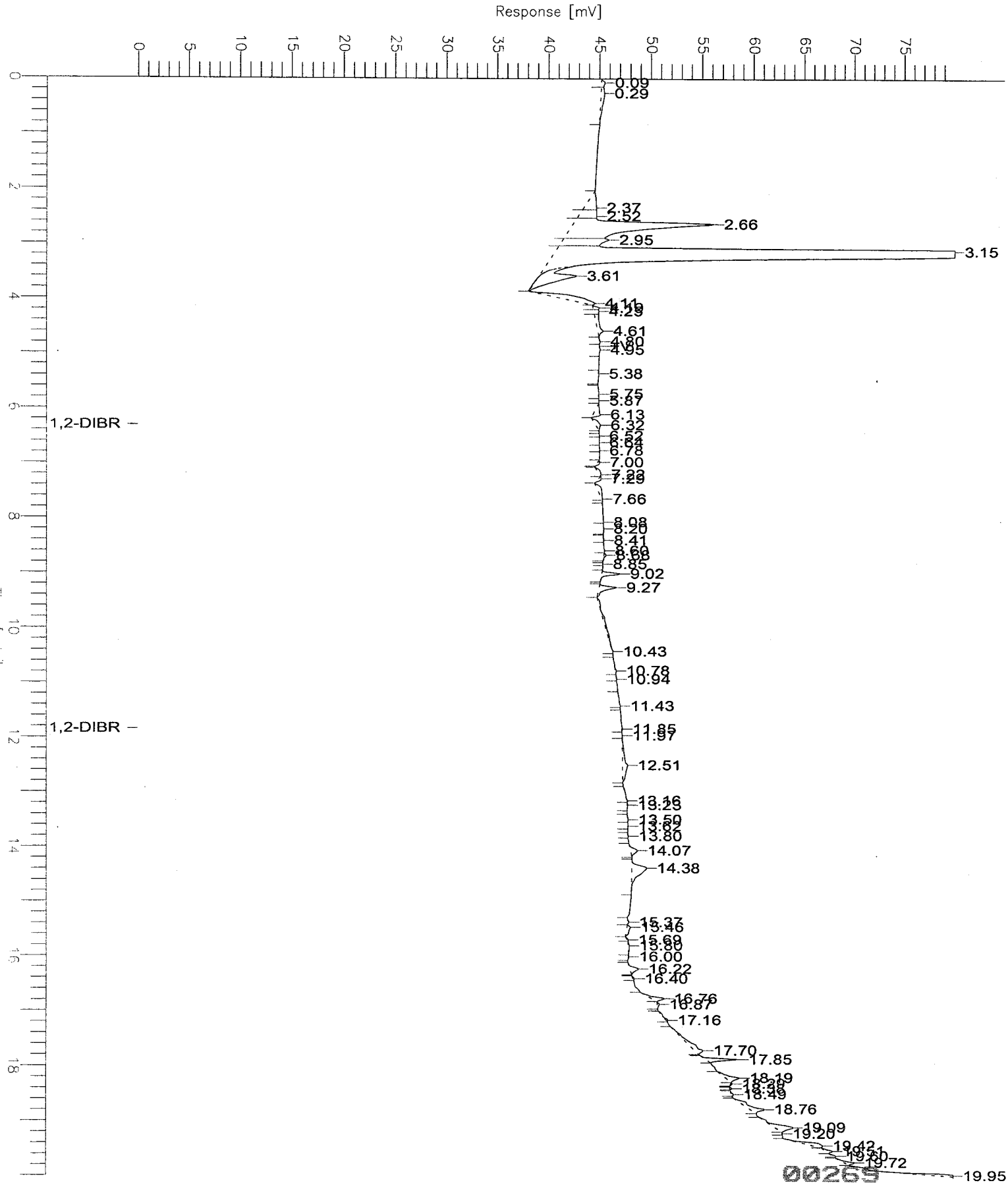
* Values outside of QC limits

00268

Chromatogram

Sample Name : 1205073-01
FileName : C:\TC4\158\MAY2012\AMAY033.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/7/12 09:23
Time of Injection: 5/4/12 12:51
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



00269

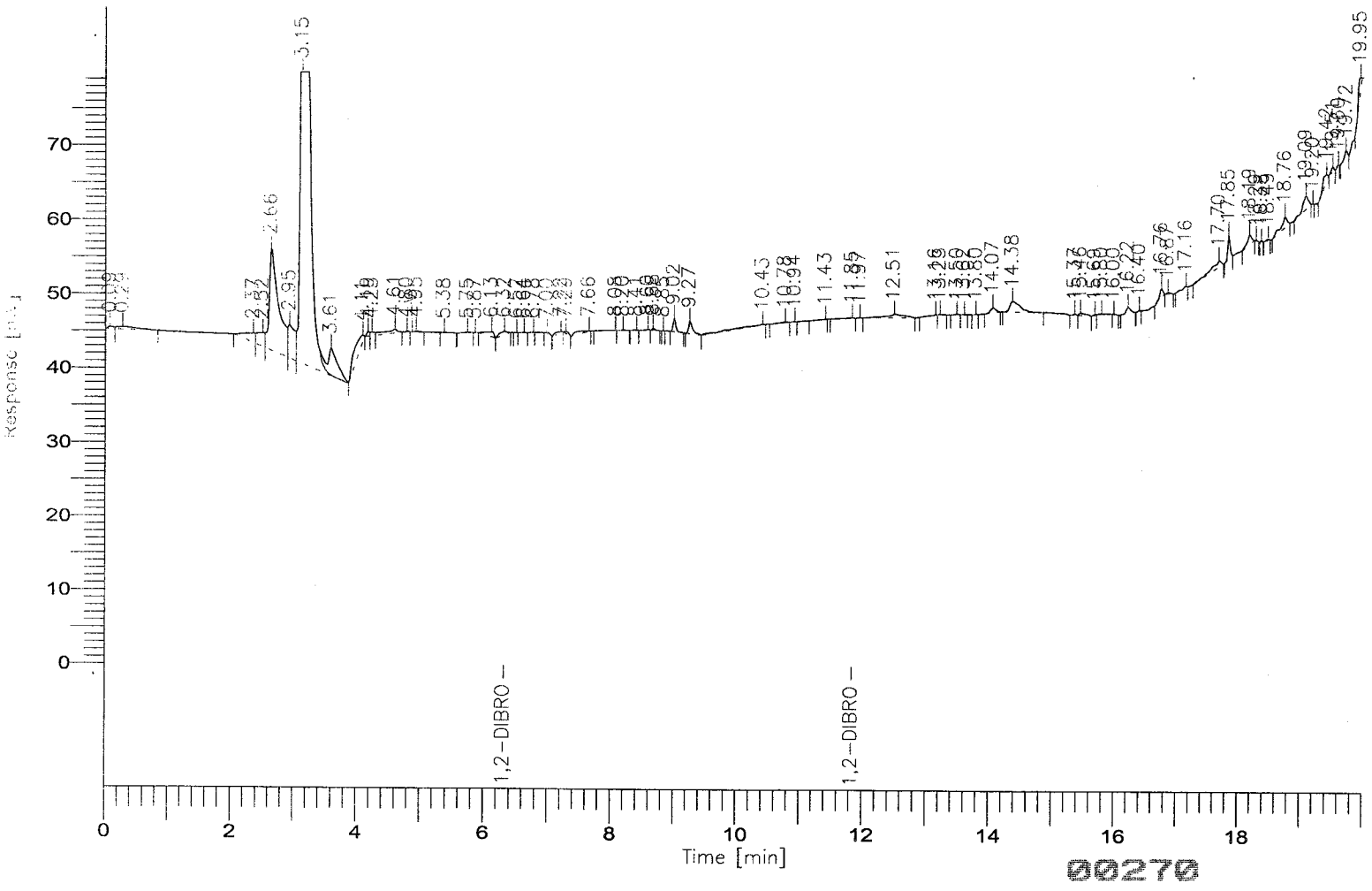
Software Version: 4.1<2F12>
Sample Name : 1205073-01 Time : 5/7/12 09:23
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 12:51
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\AMAY033.RAW
Result File : C:\TC4\158\MAY2012\AMAY033.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\AMAY033.RS
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00270

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

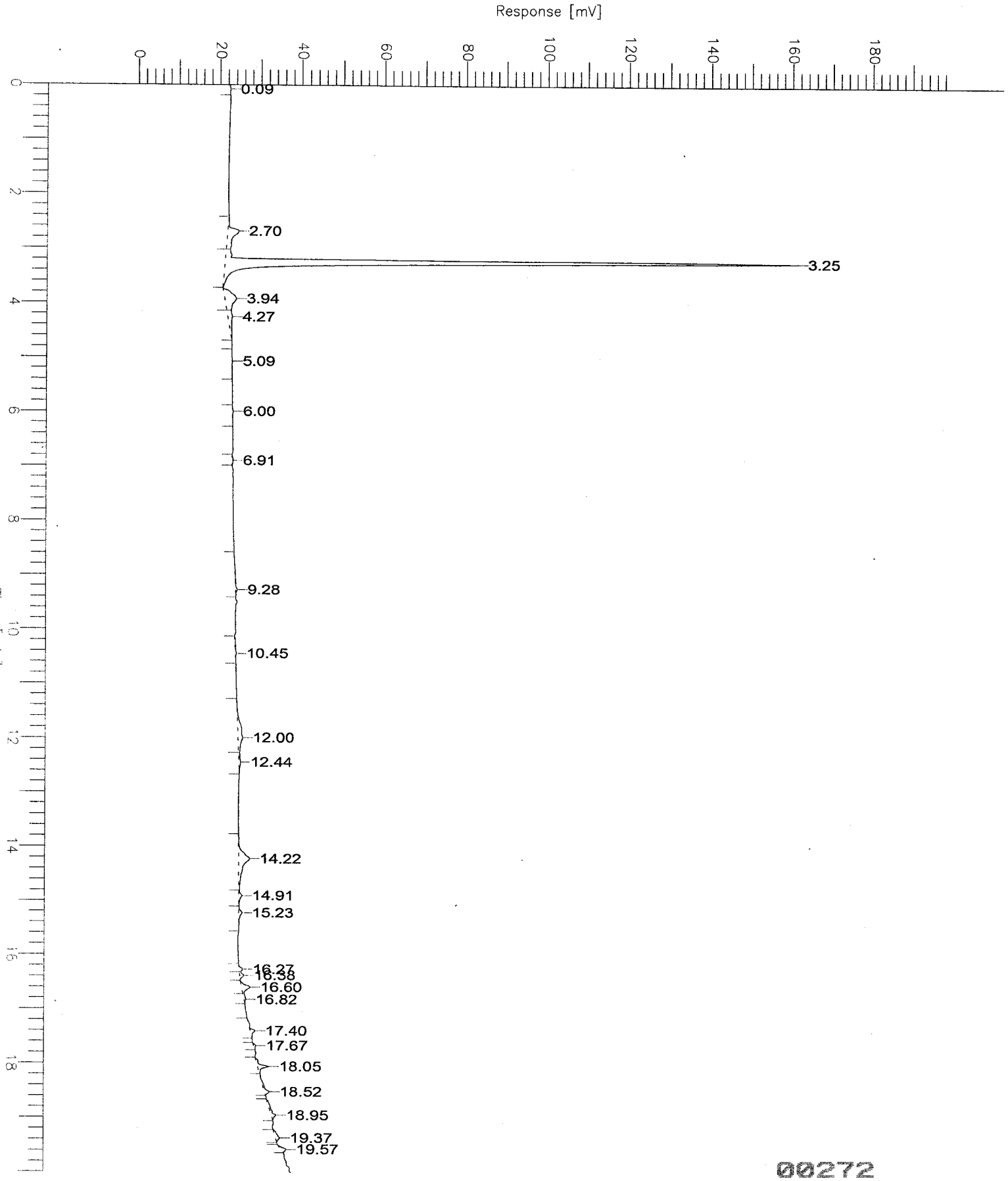
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)	
6.32	1,2-DIBROMOETHANE	-0.0005	448.98	4316.00	35	2	-0.02828	<MDL
11.85	1,2-DIBROMO3CHLOROPR	-0.0003	73.13	793.00	35	2	-0.01448	
			522.11	5109.00				

Report stored in ASCII file: C:\TC4\158\MAY2012\AMAY033.TX0

Chromatogram

Sample Name : 1205073-01
FileName : C:\TC4\158\MAY2012\BMAY033.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/7/12 09:23
Time of Injection: 5/4/12 12:51
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00272

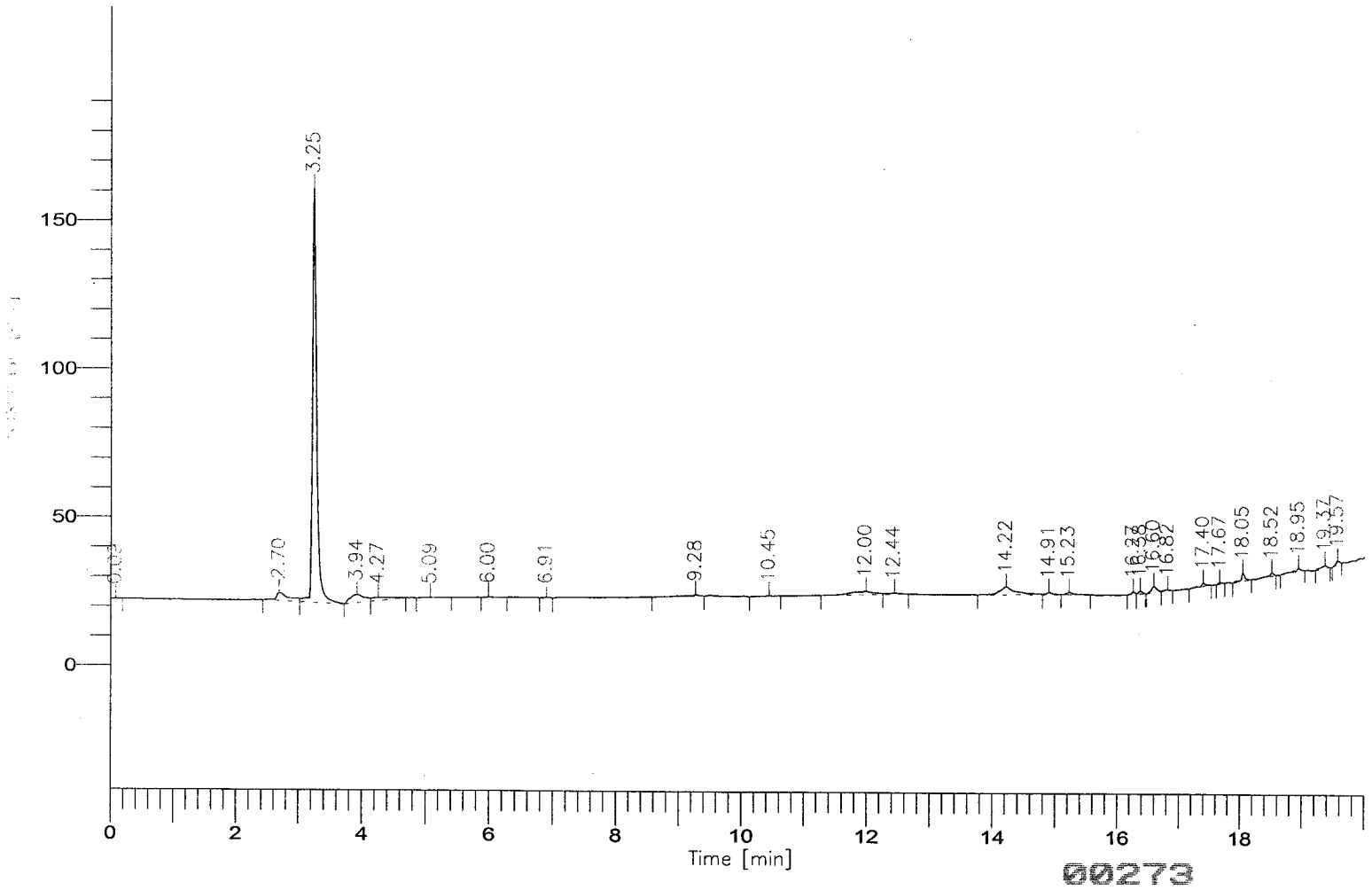
Software Version: 4.1<2F12>
Sample Name : 1205073-01 Time : 5/7/12 09:23
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 12:51
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\BMAY033.RAW
Result File : C:\TC4\158\MAY2012\BMAY033.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\BMAY033.RS
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00273

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)	
7.11	1,2-DIBROMOETHANE (2	0.0000	0.00	0.00	35	2	0.00000	<MDL
12.98	1,2-DBCP (2C)	0.0000	0.00	0.00	35	2	0.00000	
			0.00	0.00				

Report stored in ASCII file: C:\TC4\158\MAY2012\BMAY033.TX0

ORGANIC ANALYSIS DATA SHEET
USEPA-8011

106036

Laboratory: TriMatrix Laboratories, Inc. SDG: KNM050112

Client: TechLaw Project: KNM

Matrix: Water Laboratory ID: 1205085-01 File ID: AMAY034-0

Sampled: 05/02/12 13:18 Prepared: 05/04/12 08:27 Analyzed: 05/04/12 13:19

Solids: Preparation: Method-Specific Extracti Initial/Final: 34.7 mL / 2 mL

QC Batch: 1205560 Sequence: 2E07013 Calibration: 2D17008 Instrument: 158

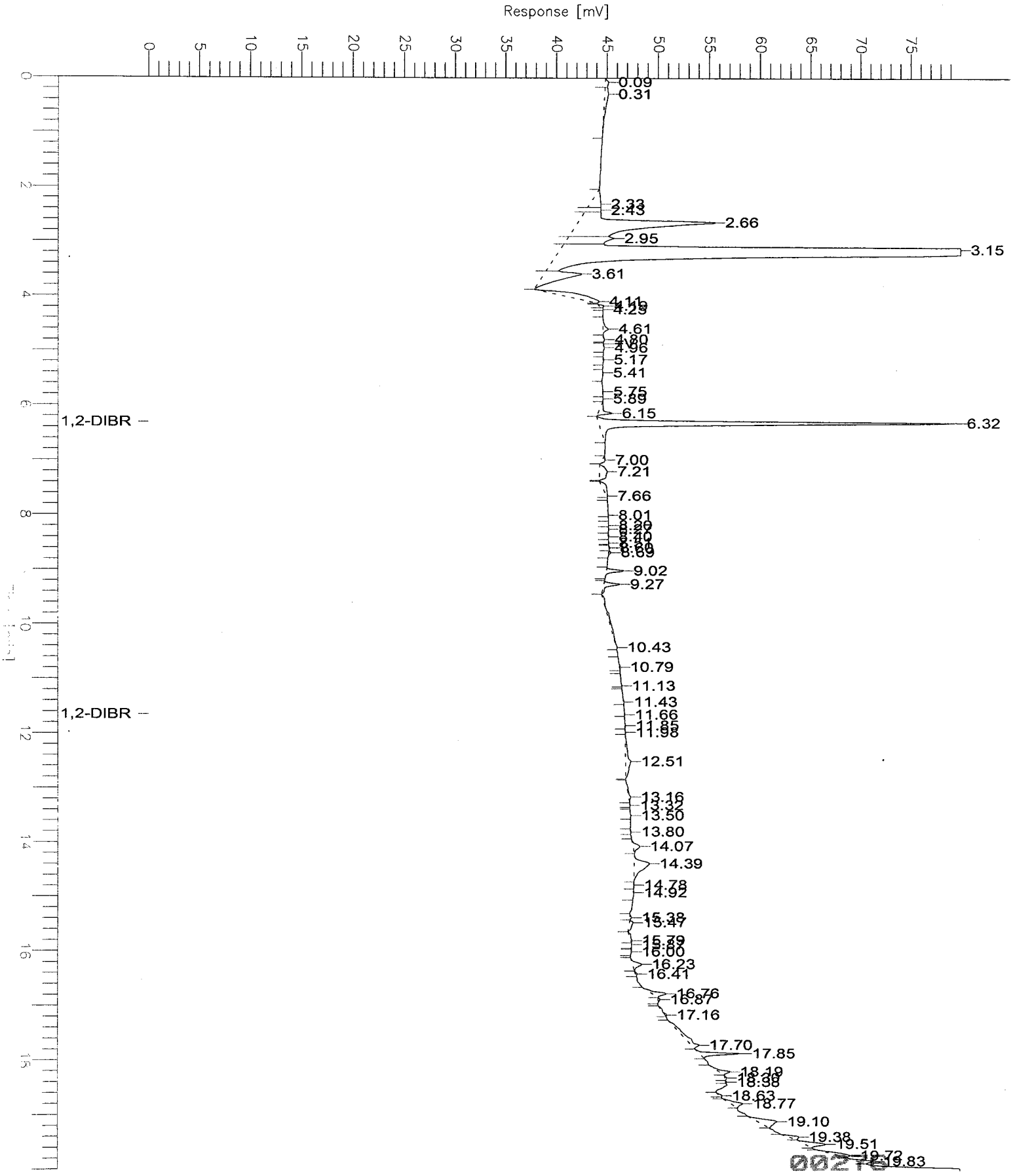
CAS No.	Analyte	Dilution	CONC. (ug/L)	MDL	MRL	Q
106-93-4	1,2-Dibromoethane	1	0.39	0.0078	0.050	

* Values outside of QC limits

Chromatogram

Sample Name : 1205085-01
FileName : C:\TC4\158\MAY2012\AMAY034.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/7/12 09:23
Time of Injection: 5/4/12 13:19
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



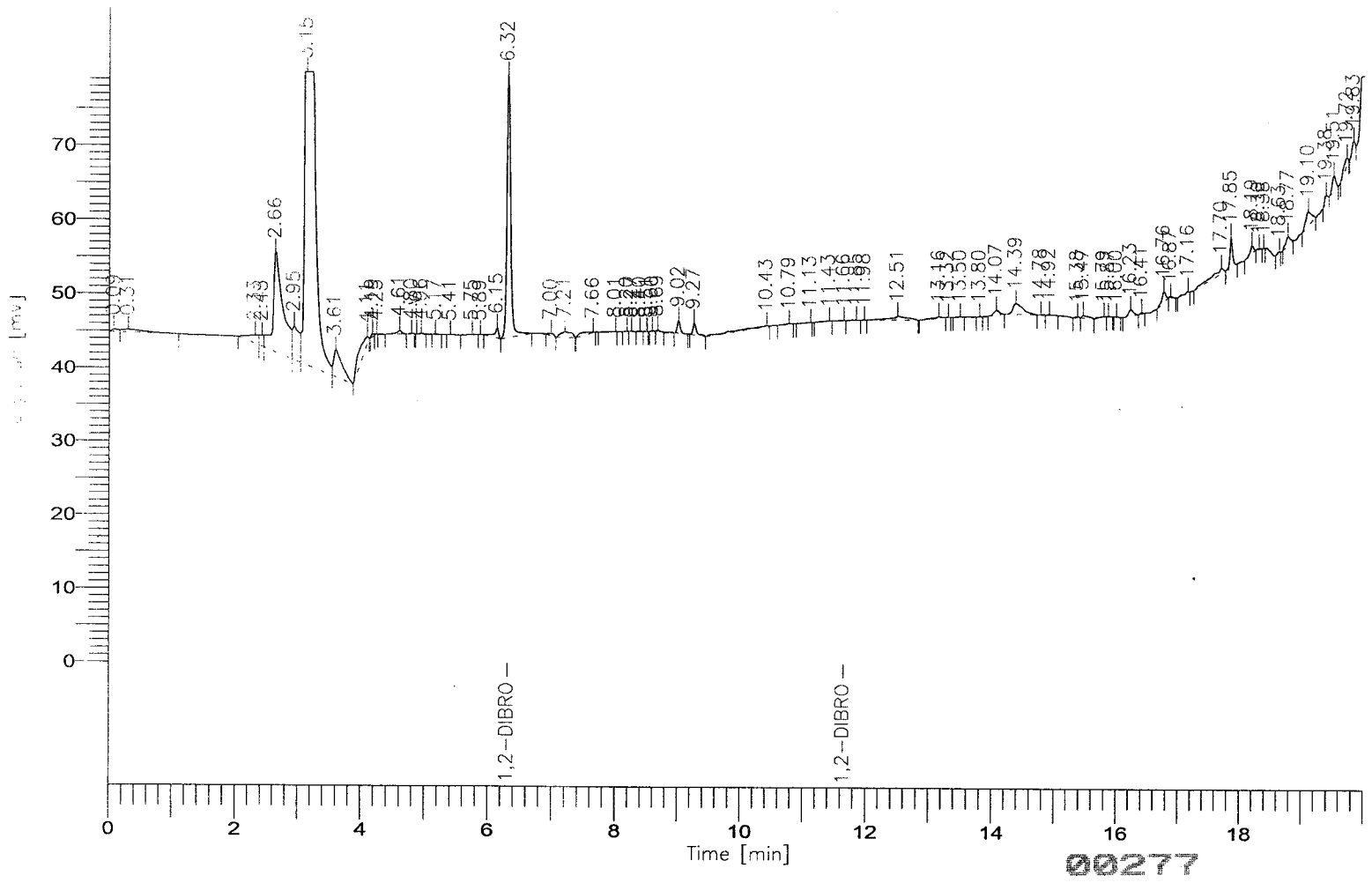
Software Version: 4.1<2F12>
Sample Name : 1205085-01 Time : 5/7/12 09:23
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 13:19
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\AMAY034.RAW
Result File : C:\TC4\158\MAY2012\AMAY034.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\AMAY034.RS
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00277

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

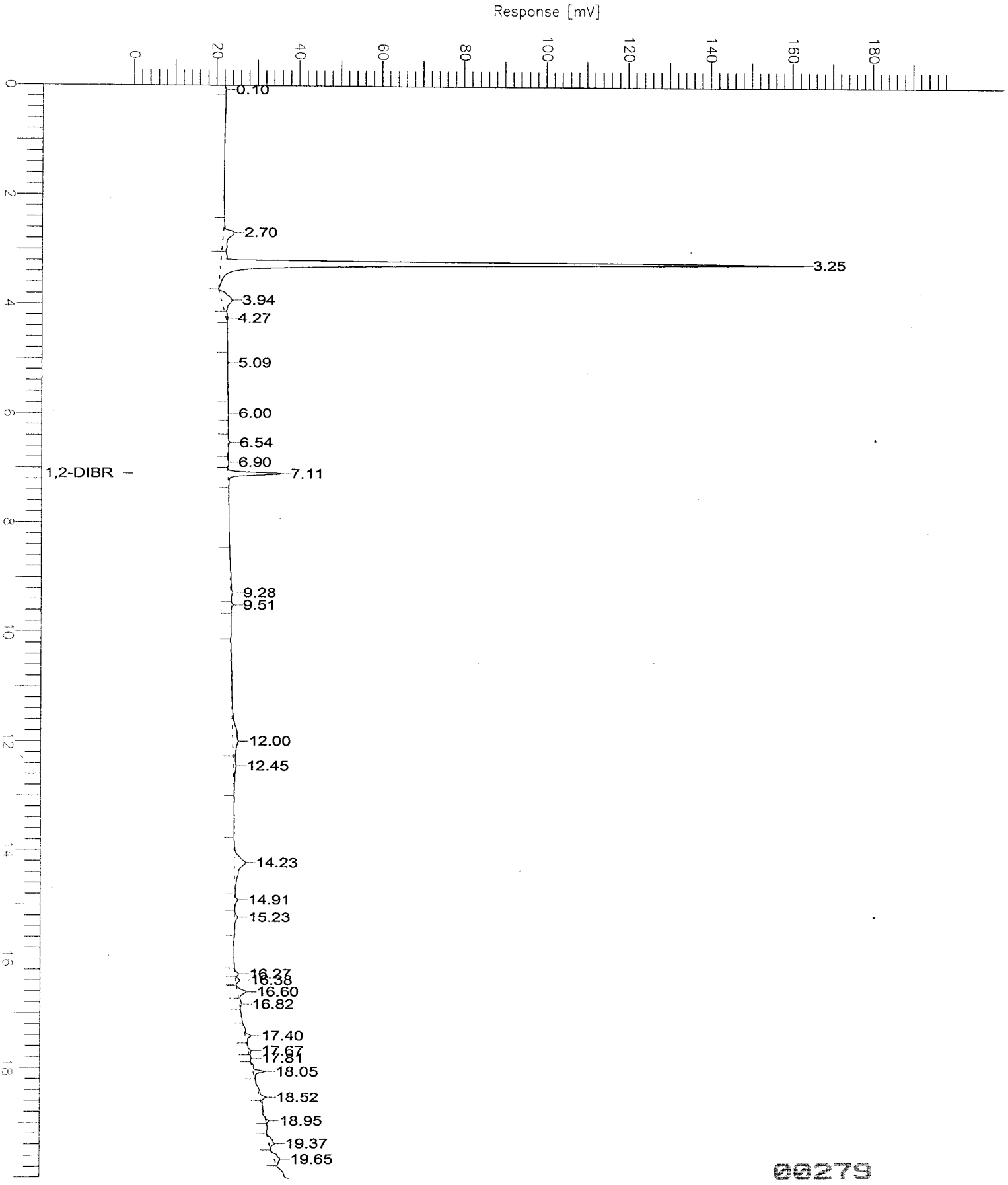
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.32	1,2-DIBROMOETHANE	0.0067	36486.28	145466.50	35	2	0.38692
11.66	1,2-DIBROMO3CHLOROPR	-0.0003	20.94	192.50	35	2	-0.01486
			36507.21	145659.00			

Report stored in ASCII file: C:\TC4\158\MAY2012\AMAY034.TX0

Chromatogram

Sample Name : 1205085-01
FileName : C:\TC4\158\MAY2012\BMAY034.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/7/12 09:23
Time of Injection: 5/4/12 13:19
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00279

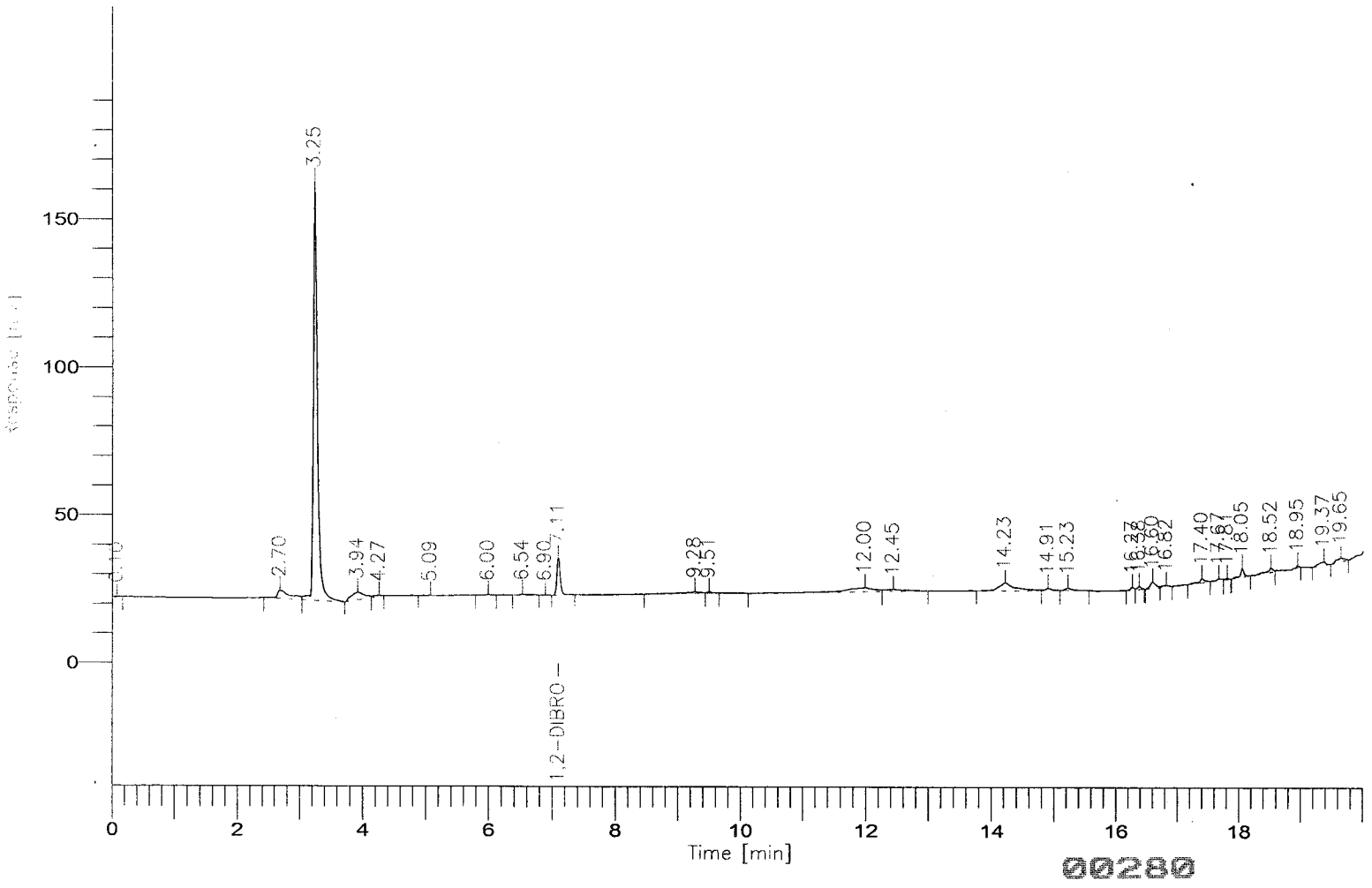
Software Version: 4.1<2F12>
Sample Name : 1205085-01 Time : 5/7/12 09:23
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 13:19
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\BMAY034.RAW
Result File : C:\TC4\158\MAY2012\BMAY034.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\BMAY034.RS
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00280

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
7.11	1,2-DIBROMOETHANE (2	0.0068	13260.43	48505.00	35	2	0.39407
12.98	1,2-DBCP (2C)	0.0000	0.00	0.00	35	2	0.00000
			13260.43	48505.00			

Report stored in ASCII file: C:\TC4\158\MAY2012\BMAY034.TX0

ORGANIC ANALYSIS DATA SHEET
USEPA-8011

106037

Laboratory: TriMatrix Laboratories, Inc. SDG: KNM050112

Client: TechLaw Project: KNM

Matrix: Water Laboratory ID: 1205085-02 File ID: AMAY035-0

Sampled: 05/02/12 10:44 Prepared: 05/04/12 08:27 Analyzed: 05/04/12 13:47

Solids: Preparation: Method-Specific Extracti Initial/Final: 34.6 mL / 2 mL

QC Batch: 1205560 Sequence: 2E07013 Calibration: 2D17008 Instrument: 158

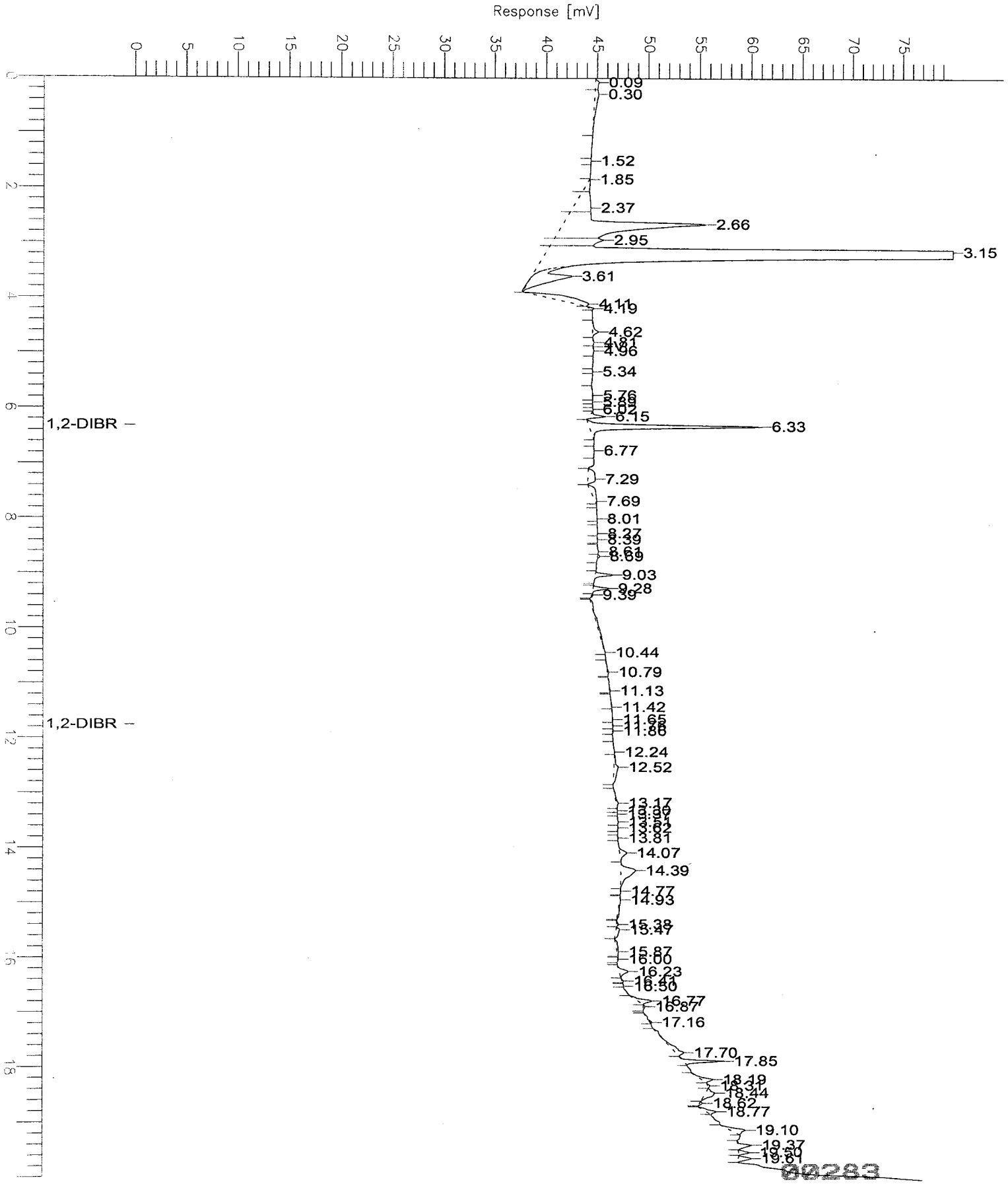
CAS No.	Analyte	Dilution	CONC. (ug/L)	MDL	MRL	Q
106-93-4	1,2-Dibromoethane	1	0.17	0.0078	0.050	

* Values outside of QC limits

Chromatogram

Sample Name : 1205085-02
FileName : C:\TC4\158\MAY2012\AMAY035.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/7/12 09:23
Time of Injection: 5/4/12 13:47
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



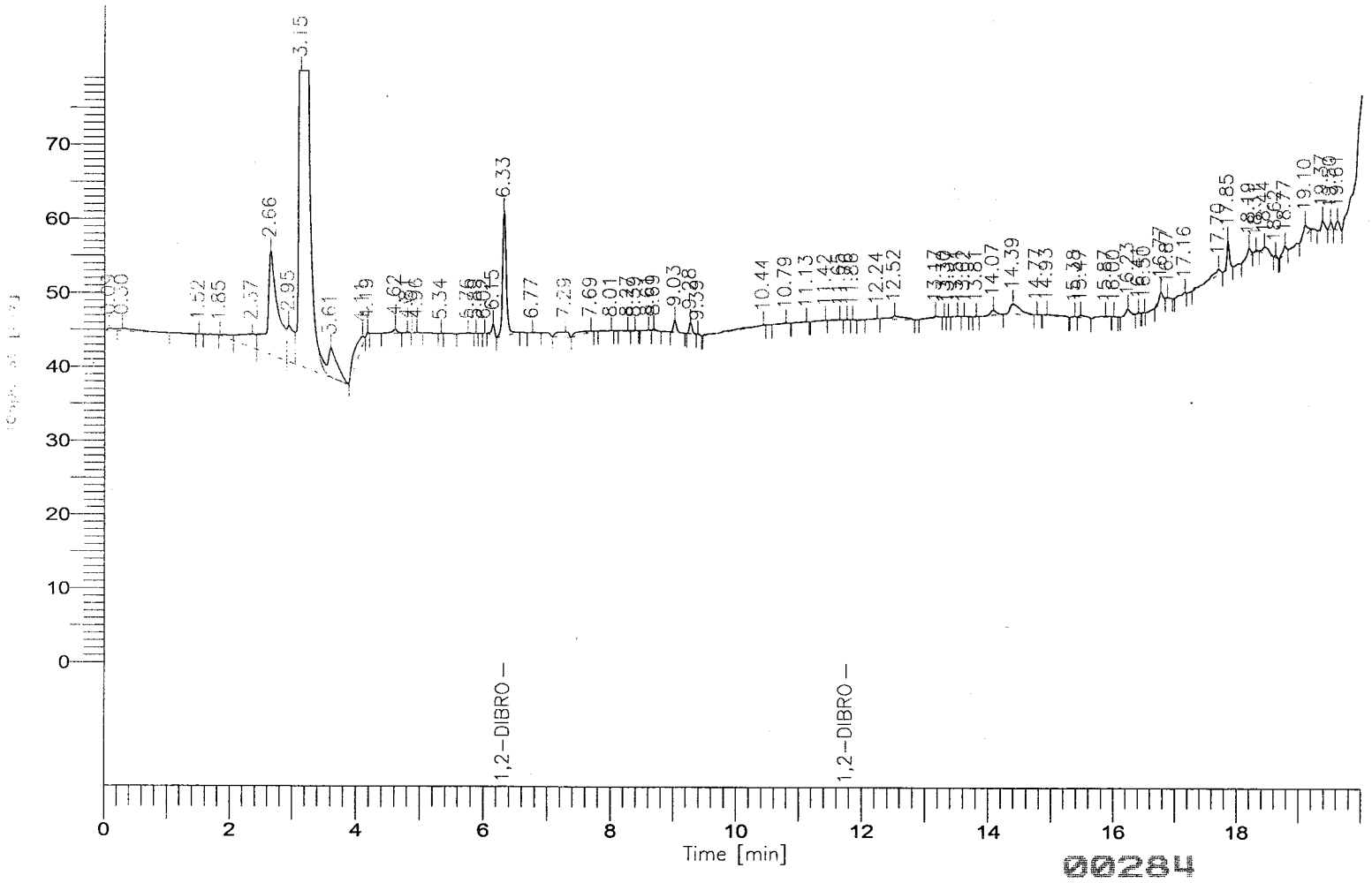
Software Version: 4.1<2F12>
Sample Name : 1205085-02 Time : 5/7/12 09:23
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 13:47
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\AMAY035.RAW
Result File : C:\TC4\158\MAY2012\AMAY035.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\AMAY035.RS
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00284

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

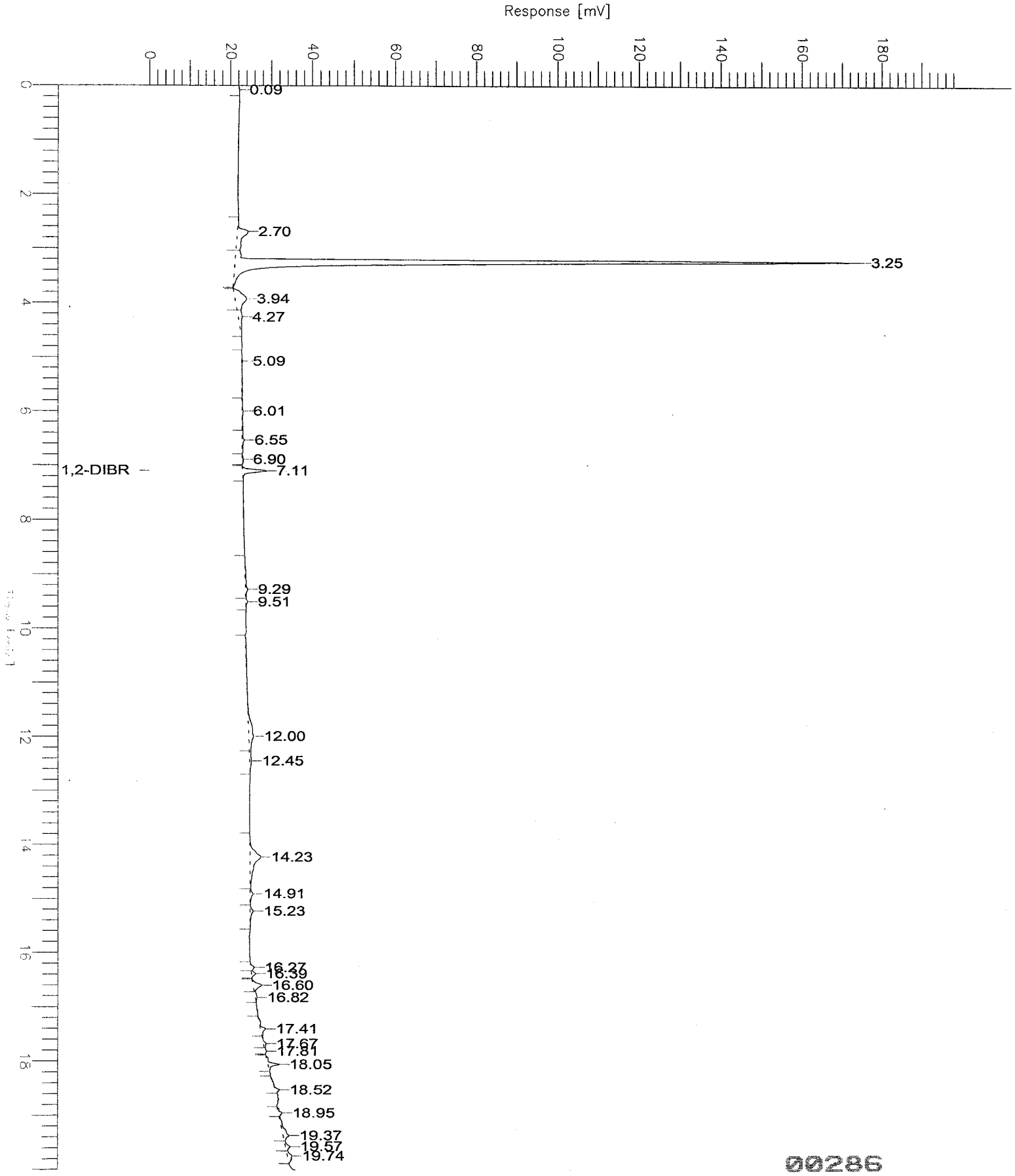
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.33	1,2-DIBROMOETHANE	0.0029	17204.46	67907.00	35	2	0.16524
11.76	1,2-DIBROMO3CHLOROPR	-0.0003	40.35	145.00	35	2	-0.01476
			17244.82	68052.00			

Report stored in ASCII file: C:\TC4\158\MAY2012\AMAY035.TX0

Chromatogram

Sample Name : 1205085-02
FileName : C:\TC4\158\MAY2012\BMAY035.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/7/12 09:23
Time of Injection: 5/4/12 13:47
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00286

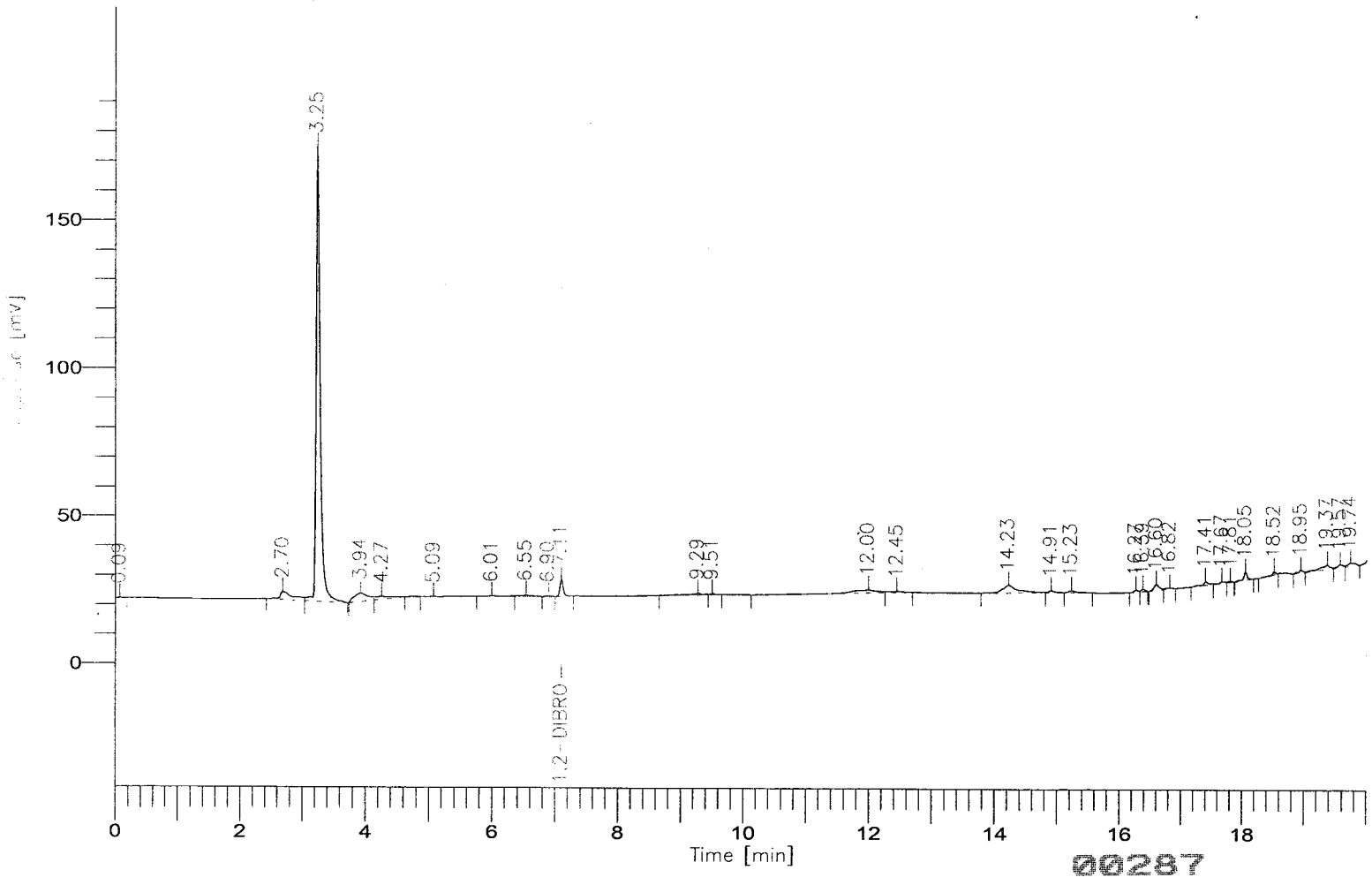
Software Version: 4.1<2F12>
Sample Name : 1205085-02 Time : 5/7/12 09:23
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 13:47
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\BMAY035.RAW
Result File : C:\TC4\158\MAY2012\BMAY035.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\BMAY035.RS
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00287

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
7.11	1,2-DIBROMOETHANE (2	0.0030	5908.29	21720.50	35	2	0.17063
12.98	1,2-DBCP (2C)	0.0000	0.00	0.00	35	2	0.00000
			5908.29	21720.50			

Report stored in ASCII file: C:\TC4\158\MAY2012\BMAY035.TX0

INITIAL CALIBRATION STANDARDS

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Sequence: 2D17019

SDG: KNM050112

Project: KNM

Calibration: 2D17008

Instrument: 158

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
2040791	8011 L1	2D17019-CAL1	AAPR291-0	04/16/12 13:12
2040792	8011 L2	2D17019-CAL2	AAPR292-0	04/16/12 13:40
2040793	8011 L3	2D17019-CAL3	AAPR293-0	04/16/12 14:08
2040794	8011 L4	2D17019-CAL4	AAPR294-0	04/16/12 14:36
2040795	8011 L5	2D17019-CAL5	AAPR295-0	04/16/12 15:04
2040796	8011 L6	2D17019-CAL6	AAPR296-0	04/16/12 15:32
2040798	8011 SCV	2D17019-SCV1	AAPR297-0	04/16/12 16:01

INITIAL CALIBRATION DATA

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Calibration: 2D17008

SDG: KNM050112

Project: KNM

Calibration Date: 04/16/12 08:55

Instrument: 158

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
1,2-Dibromoethane	0.00035	9095629	0.0007	8244758	0.0014	6952743	0.0028	6480425	0.0056	5881224	0.0112	5152579
1,2-Dibromo-3-chloropropane	0.00035	1.003277E+07	0.0007	1.003157E+07	0.0014	8983372	0.0028	8939493	0.0056	8746040	0.0112	7970801

INITIAL CALIBRATION DATA (Continued)

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Calibration: 2D17008

SDG: KNM050112

Project: KNM

Calibration Date: 04/16/12 08:55

Instrument: 158

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
1,2-Dibromoethane	6967893	21.16229	6.338333	0.1182205	0.99555		0.99	
1,2-Dibromo-3-chloropropane	9117342	8.741286	11.73333	0.0468301	0.99783		0.99	

Turbochrom Method File : C:\TC4\158\8011ME~1\041612A.MTH
Created by : JDM on : 4/16/12 12:24
Edited by : BJH on : 4/16/12 15:57
Description :

Number of Times Edited : 3
Number of Times Calibrated : 177

Instrument Conditions :

Instrument Control Method:
Instrument name : 158

Interface Parameters :
Delay Time : 0.00 min.
Run Time : 20.00 min.
Sampling Rate : 1.0000 pts/s
Interface Type : 900
Analog Voltage Input : 1000 mV
Data will be collected from both channels

Timed Events:
There are no timed events in the method

Real Time Plot Parameters :
Channel A -- Pages: 1 Offset: 0.000 mV Scale: 1000.000 mV
Channel B -- Pages: 1 Offset: 0.000 mV Scale: 1000.000 mV

Processing Parameters :
Bunch Factor : 1 points
Noise Threshold : 2 µV
Area Threshold : 11.00 µV

Peak Separation Criteria
Width Ratio : 0.200
Valley-to-Peak Ratio : 0.010

Exponential Skim Criteria
Peak Height Ratio : 5.000
Adjusted Height Ratio : 4.000
Valley Height Ratio : 3.000

Baseline Timed Events :
Event #1 - +V at 4.885

Annotated Replot Parameters :
Offset & Scale set to absolute values
Plot Offset : 0.000 mV
Plot Scale : 80.000 mV

Number of Pages : 1

4/18/12

Plot Title : Chromatogram
X-Axis Label : Time [min]
Y-Axis Label : Response [mV]
Orientation : Landscape
Retention Labels : Peak Crests
Component Labels : Actual Time
Start Time : 0.00
End Time : 20.00

Report Format files :
No report format files given

User Programs :
No user programs will be executed

Global Information :
Default Sample Volume : 1.000 ul
Quantitation Units : ng
Void Time : 0.000 min
Correct amounts during calibration : YES
Reject outliers during calibration : NO
An External Standard calibration will be used
Unknown peaks will be quantitated using a response factor of 1.000000e+06

Component Information :
1,2-DIBROMOETHANE
Component Type : Single Peak Component
Retention Time : 6.337 min Search Window: 3.00 s, 1.70 %
Reference Component:
Find peak closest to expected RT in window
Calibrating Height versus Amount using a 1st Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: None
User Values:
Label :
Value 1: 0.000000
Value 2: 0.000000
Value 3: 0.000000
Value 4: 0.000000
Value 5: 0.000000
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	0.0003	17327.50	3183.47	----------	----------	1
2	0.0007	26708.50	5771.33	----------	----------	1
3	0.0014	40757.00	9733.84	----------	----------	1
4	0.0028	72337.00	18145.19	----------	----------	1
5	0.0056	129453.00	32934.85	----------	----------	1
6	0.0112	230082.00	57708.88	----------	----------	1

Calibration Curve : y = (2903.637087) + (5002533.024348)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.995855

1,2-DIBROMO3CHLOROPROPANE
Component Type : Single Peak Component
Retention Time : 11.732 min Search Window: 3.00 s, 1.70 %

Reference Component:
Find peak closest to expected RT in window
Calibrating Height versus Amount using a 1st Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: None
User Values:
Label :
Value 1: 0.000000
Value 2: 0.000000
Value 3: 0.000000
Value 4: 0.000000
Value 5: 0.000000
Calibration Levels:

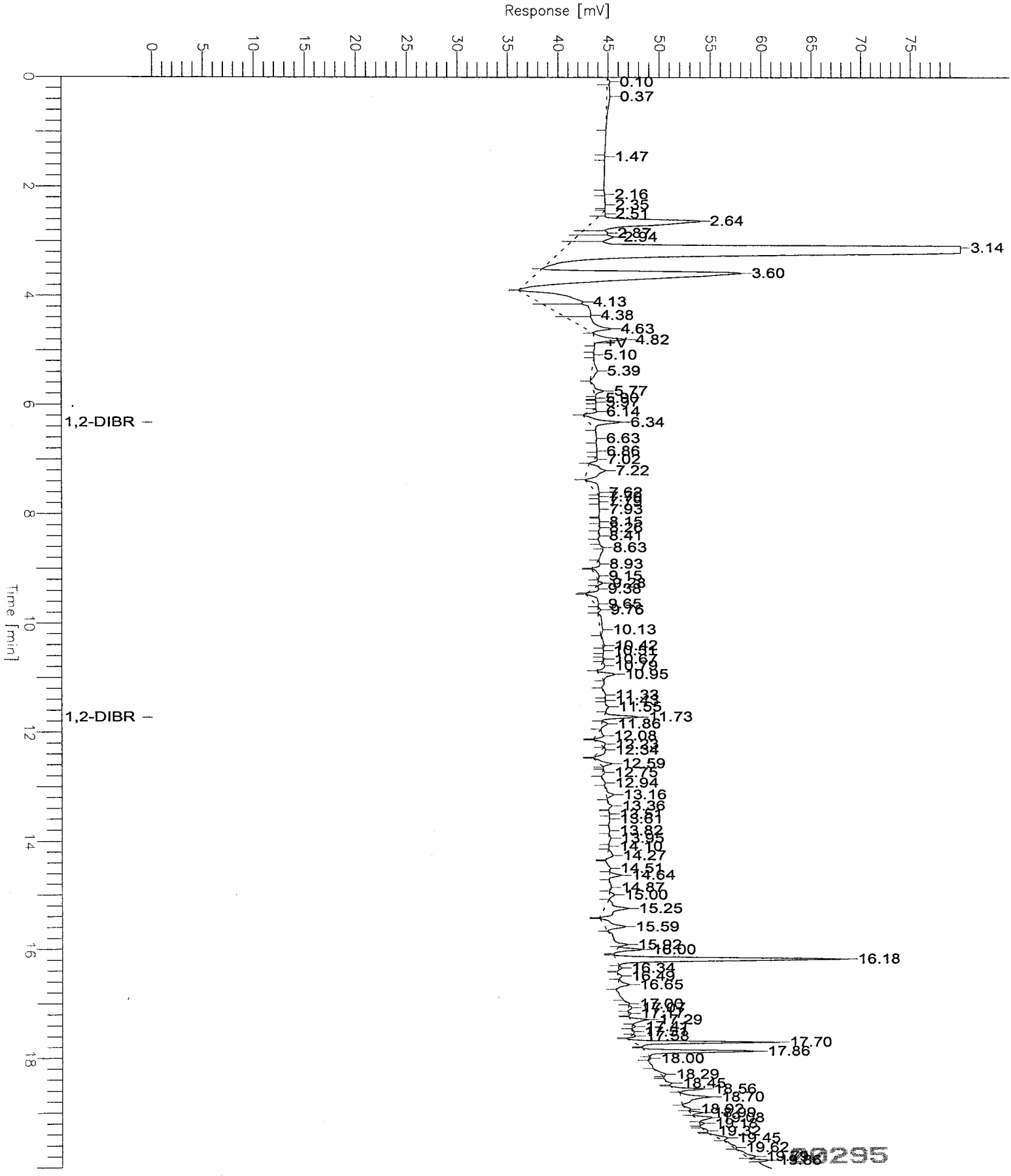
Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	0.0003	11022.00	3511.47	----------	----------	1
2	0.0007	25505.00	7022.10	----------	----------	1
3	0.0014	45554.00	12576.72	----------	----------	1
4	0.0028	88903.00	25030.58	----------	----------	1
5	0.0056	175196.50	48977.82	----------	----------	1
6	0.0112	326154.00	89272.96	----------	----------	1

Calibration Curve : y = (2060.313583) + (7910443.782468)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997983

Chromatogram

Sample Name : L1
FileName : C:\TC4\158\APRIL2~1\AAPR291.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 13:12
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



00295

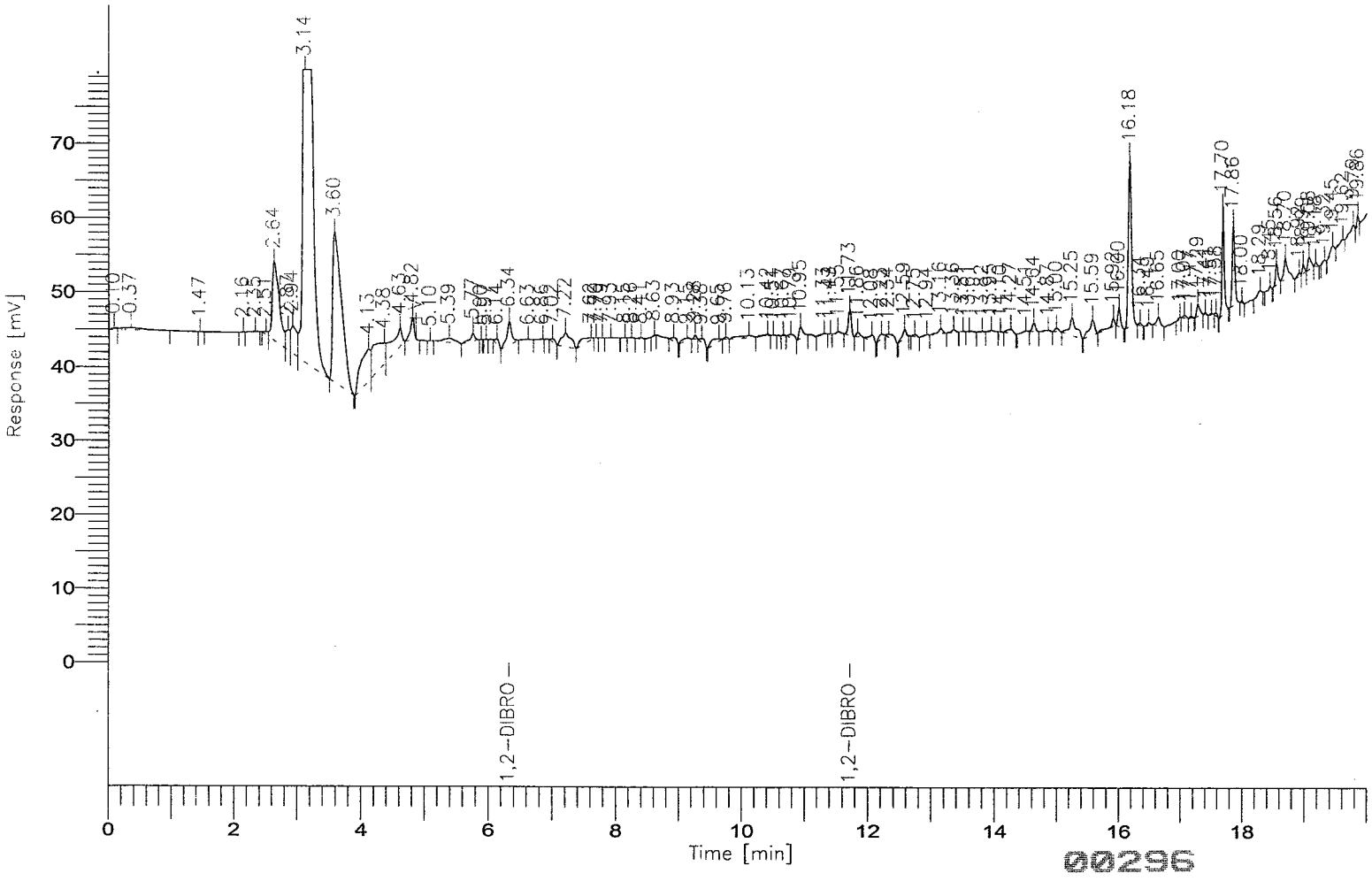
Software Version: 4.1<2F12>
Sample Name : L1 Time : 4/16/12 16:03
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 13:12
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\AAPR291.RAW
Result File : C:\TC4\158\APRIL2~1\AAPR291.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\AAPR291.R
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

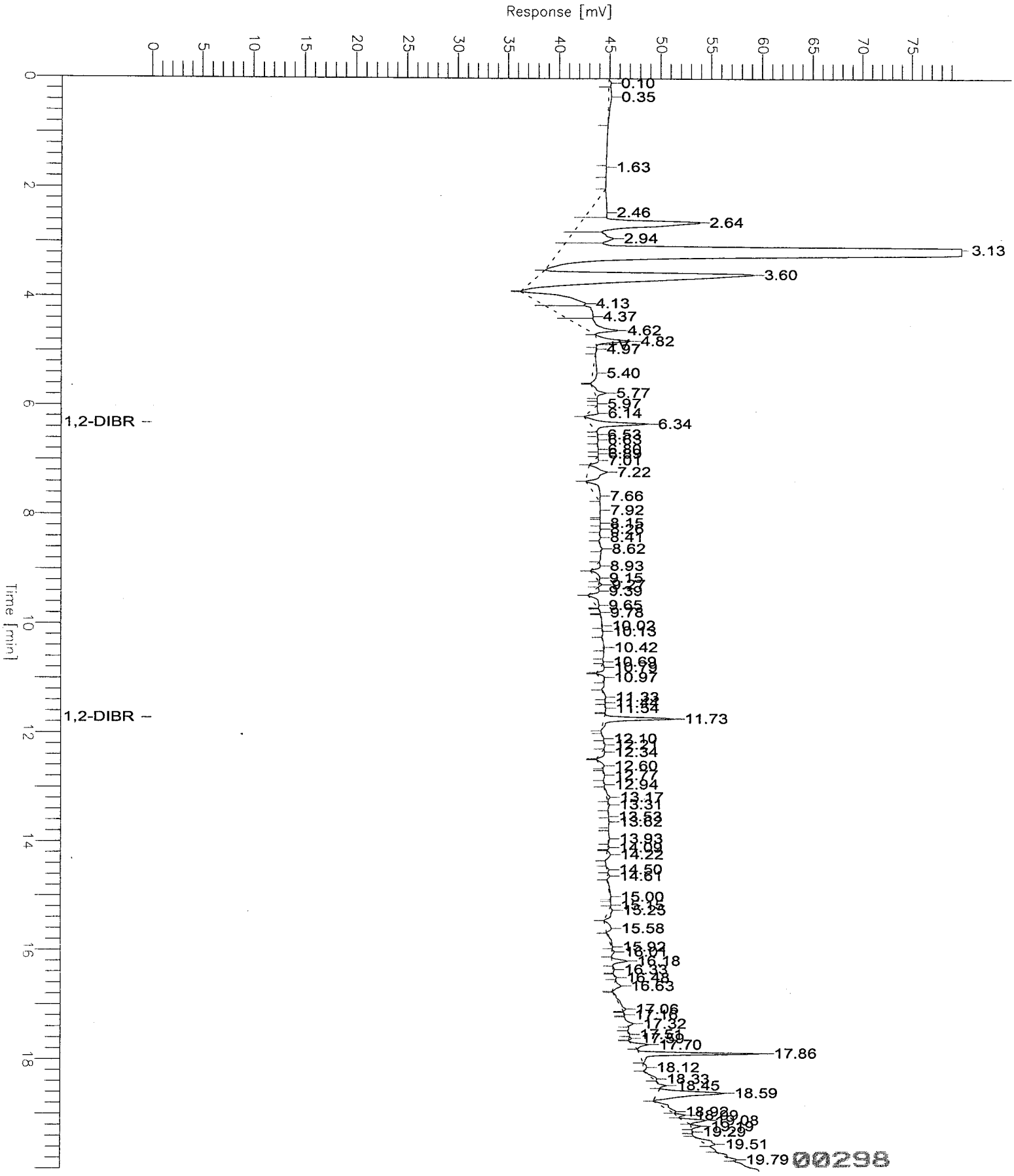
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.34	1,2-DIBROMOETHANE	0.0001	3183.47	17327.50	35	2	0.00320
11.73	1,2-DIBROMO3CHLOROPR	0.0002	3511.47	11022.00	35	2	0.01048
			6694.93	28349.50			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\AAPR291.TX0

Chromatogram

Sample Name : L2
FileName : C:\TC4\158\APRIL2~1\AAPR292.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 13:40
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



00298

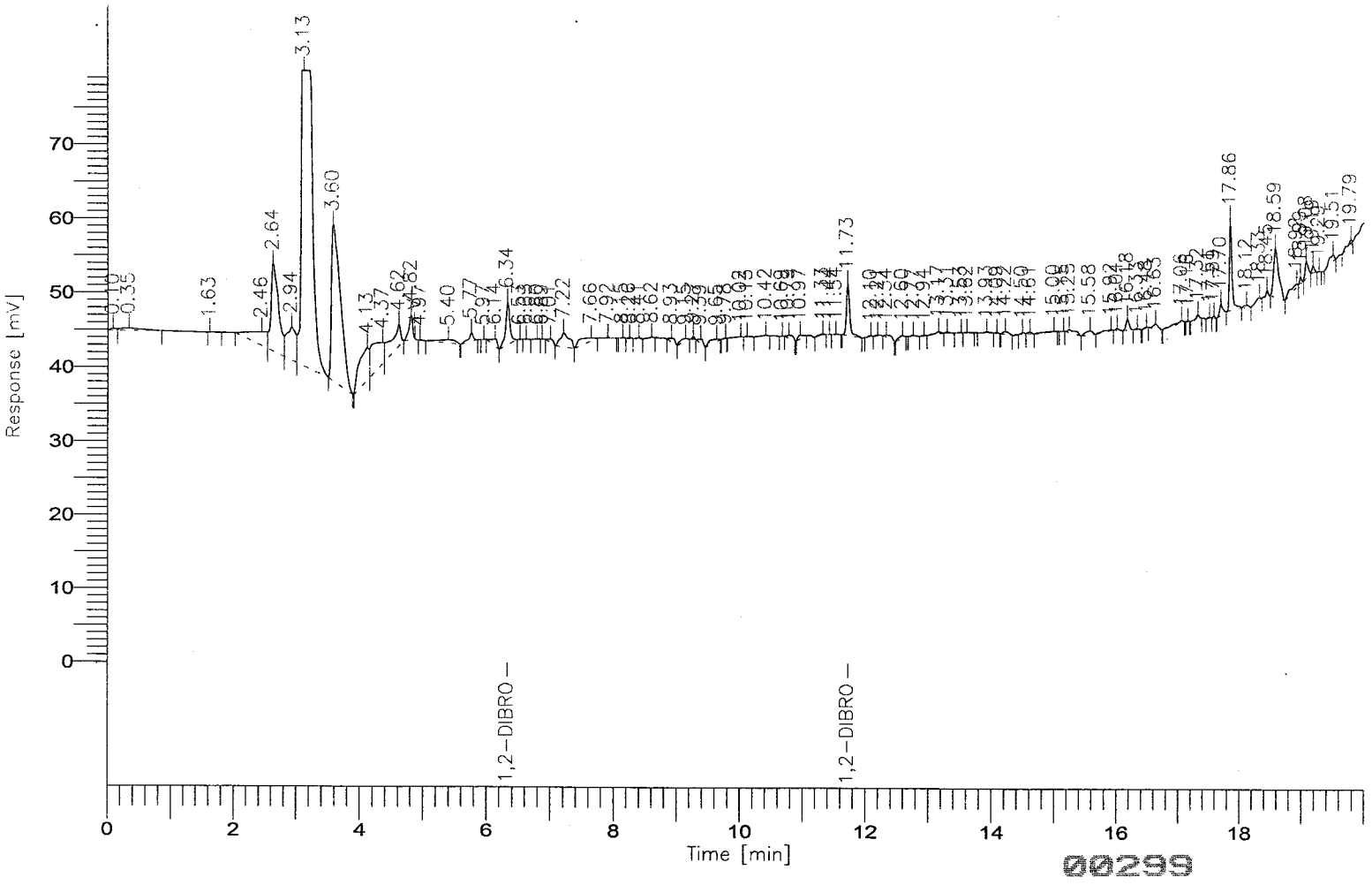
Software Version: 4.1<2F12>
Sample Name : L2 Time : 4/16/12 16:03
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 13:40
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\AAPR292.RAW
Result File : C:\TC4\158\APRIL2~1\AAPR292.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\AAPR292.R
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

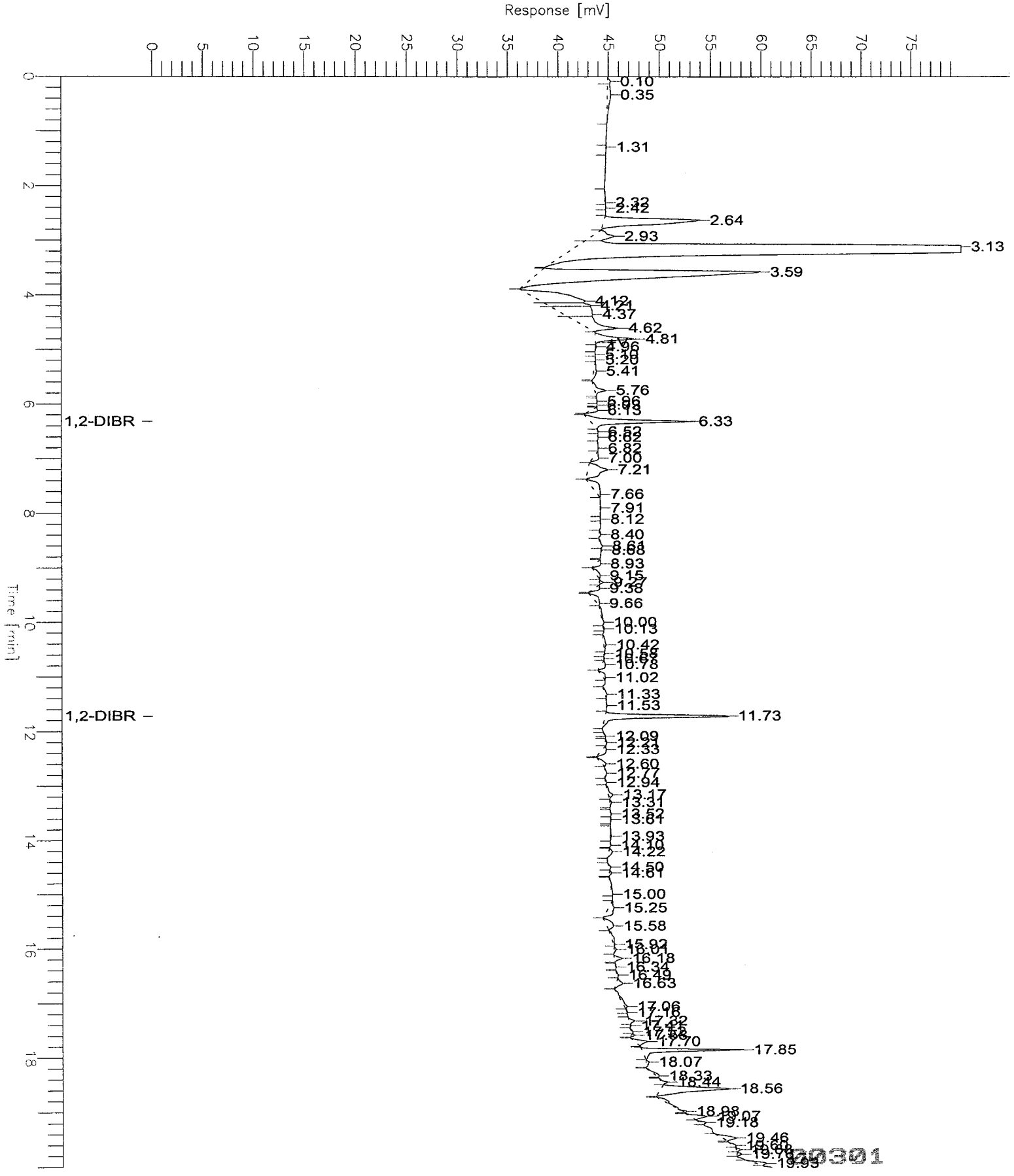
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.34	1,2-DIBROMOETHANE	0.0006	5771.33	26708.50	35	2	0.03276
11.73	1,2-DIBROMO3CHLOROPR	0.0006	7022.10	25505.00	35	2	0.03584
			12793.43	52213.50			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\AAPR292.TX0

Chromatogram

Sample Name : L3
FileName : C:\TC4\158\APRIL2~1\AAPR293.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 14:08
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



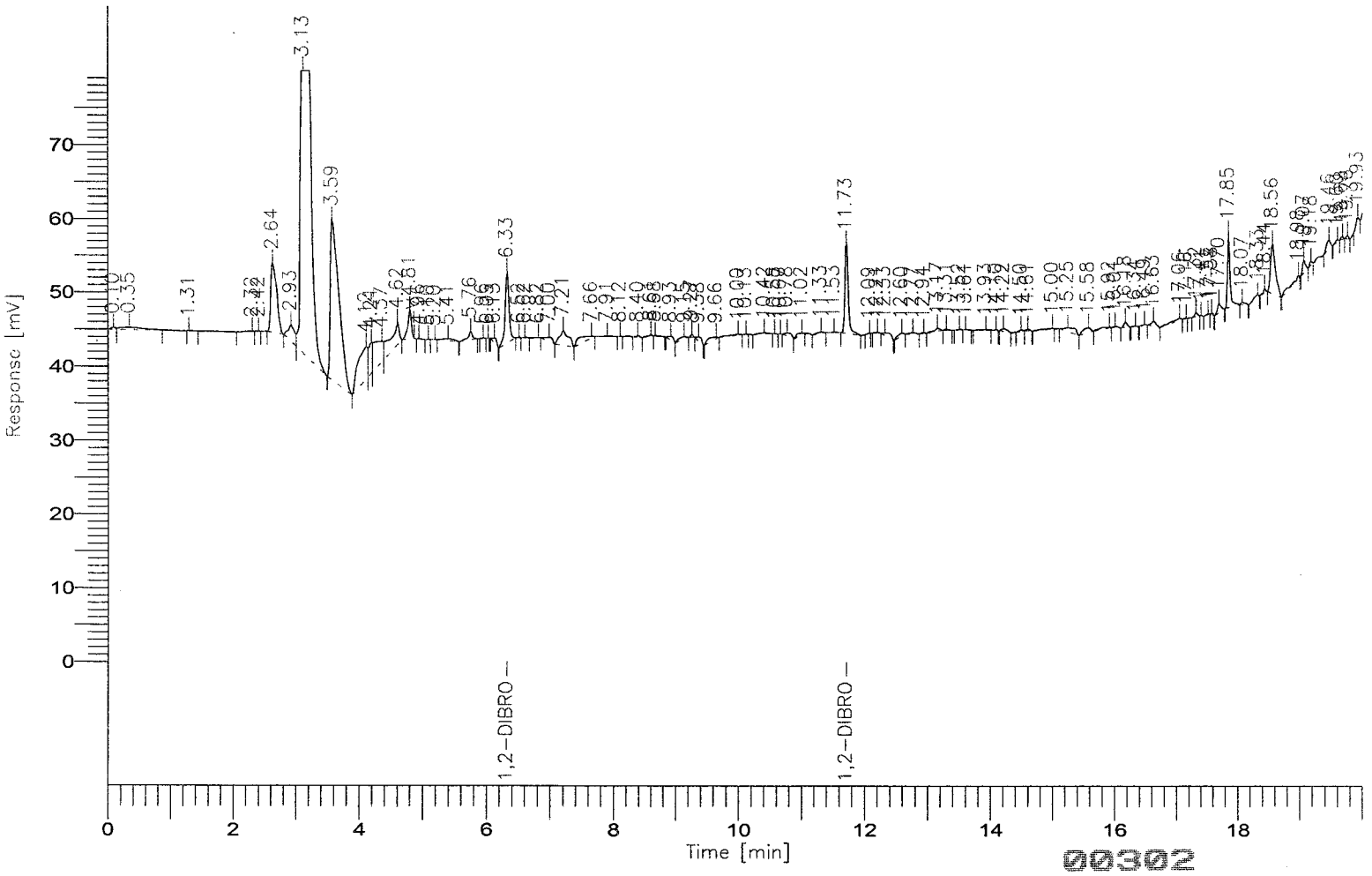
Software Version: 4.1<2F12>
Sample Name : L3 Time : 4/16/12 16:03
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 14:08
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\AAPR293.RAW
Result File : C:\TC4\158\APRIL2~1\AAPR293.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\AAPR293.R
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

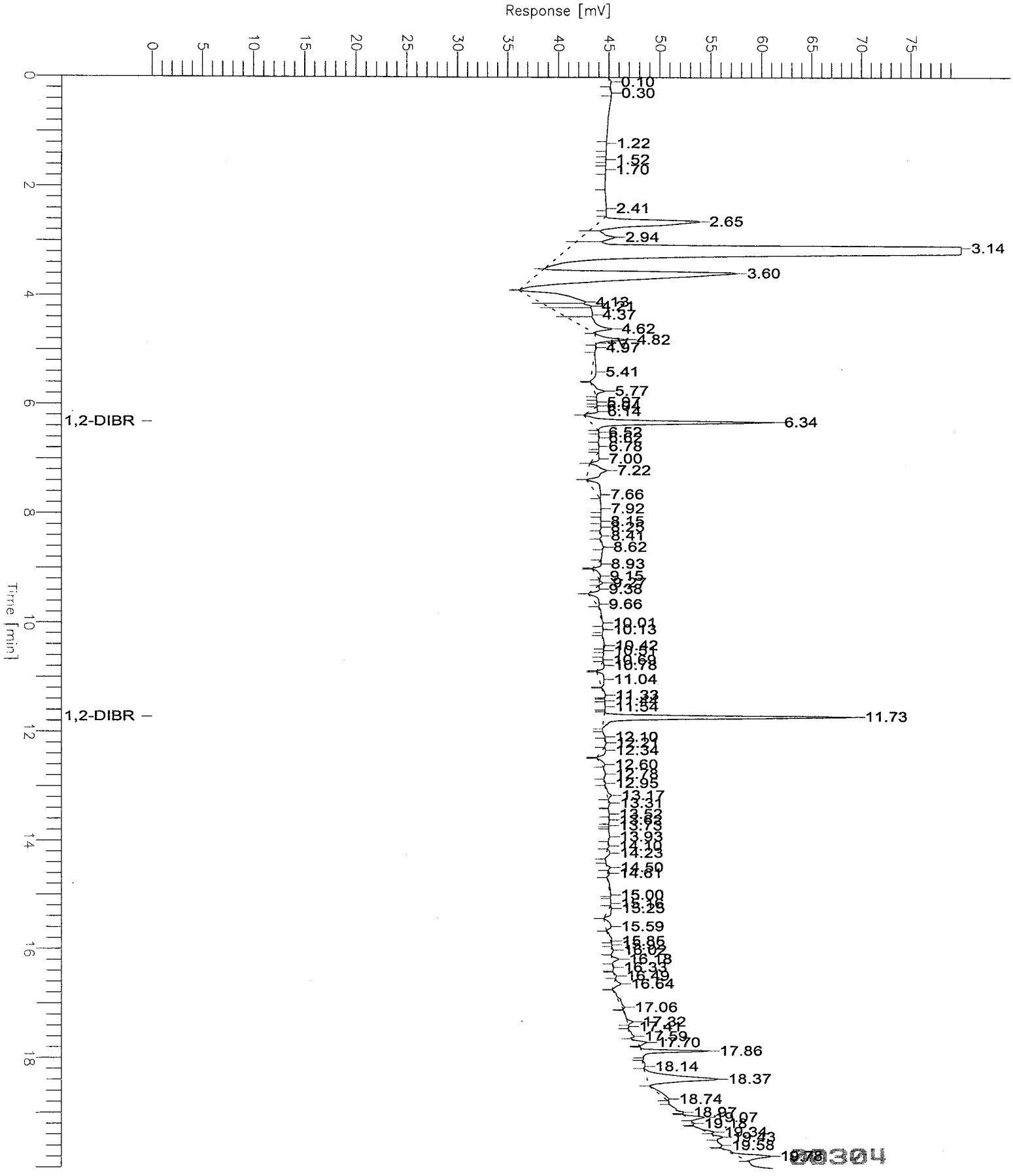
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.33	1,2-DIBROMOETHANE	0.0014	9733.84	40757.00	35	2	0.07802
11.73	1,2-DIBROMO3CHLOROPR	0.0013	12576.72	45554.00	35	2	0.07597
			22310.56	86311.00			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\AAPR293.TX0

Chromatogram

Sample Name : L4
FileName : C:\TC4\158\APRIL2~1\AAPR294.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 14:36
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



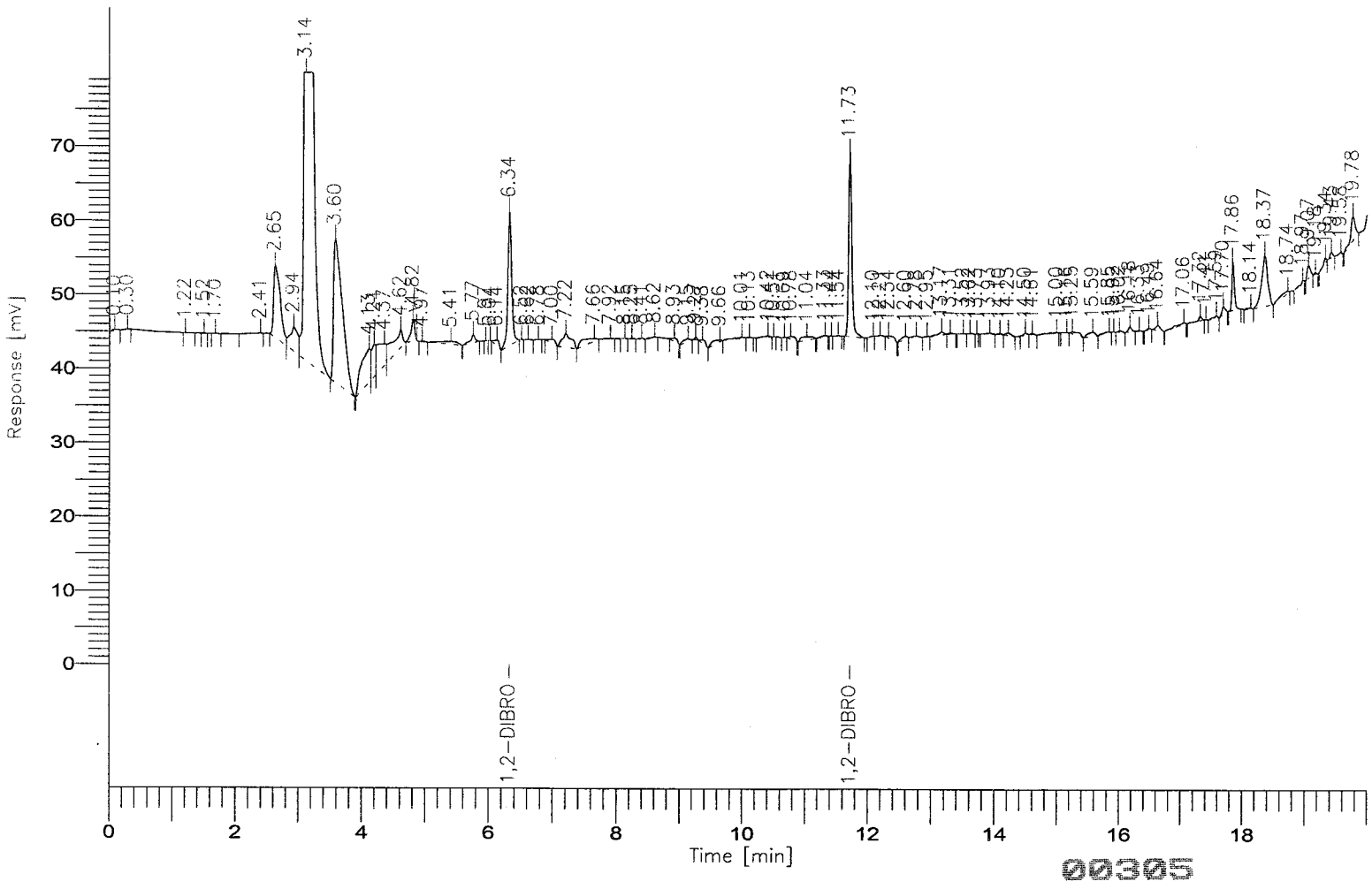
Software Version: 4.1<2F12>
Sample Name : L4 Time : 4/16/12 16:03
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 14:36
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\AAPR294.RAW
Result File : C:\TC4\158\APRIL2~1\AAPR294.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\AAPR294.R
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00305

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

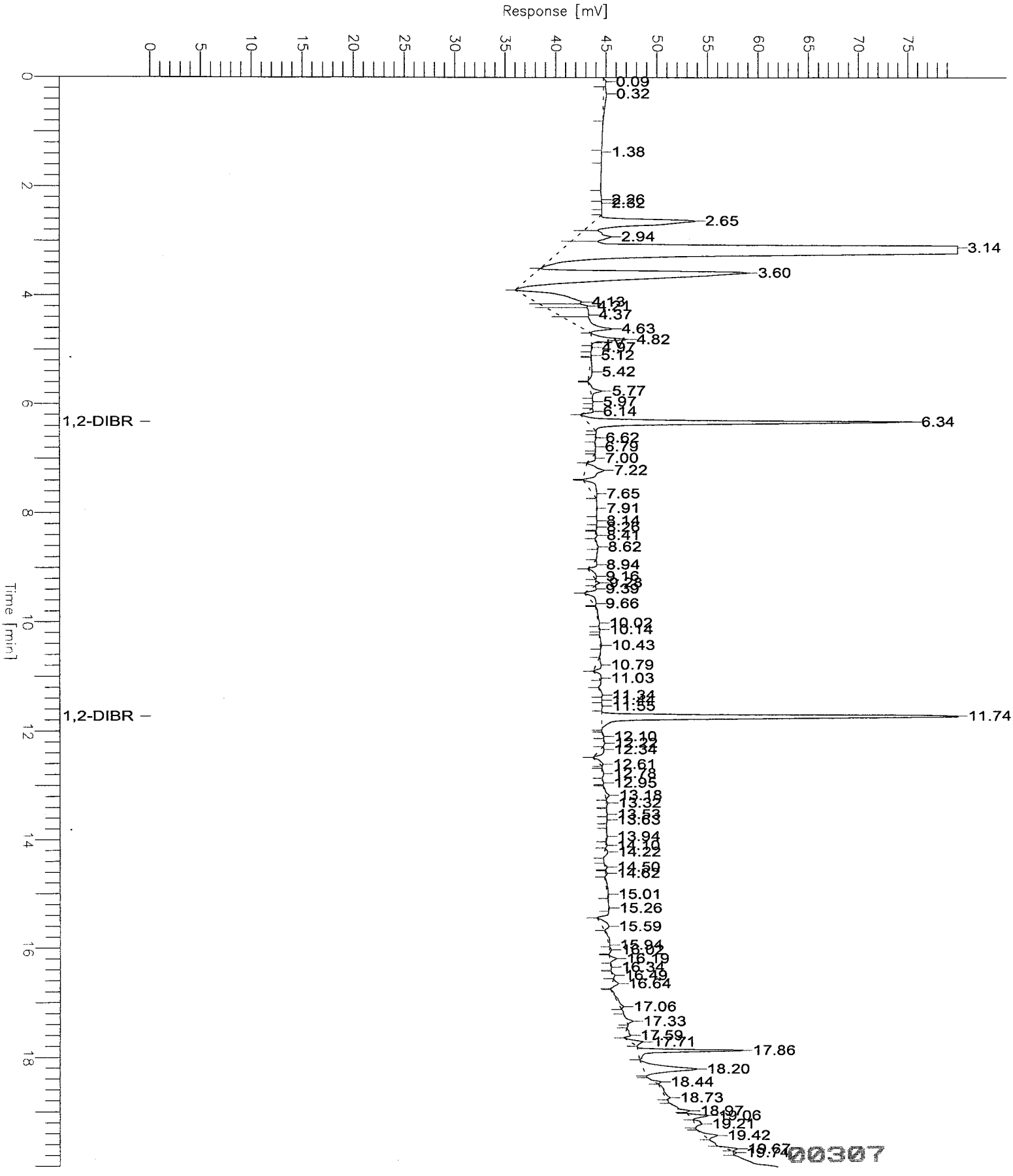
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.33	1,2-DIBROMOETHANE	0.0030	18145.19	72337.00	35	2	0.17410
11.73	1,2-DIBROMO3CHLOROPR	0.0029	25030.58	88903.00	35	2	0.16593
			43175.77	161240.00			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\AAPR294.TX0

Chromatogram

Sample Name : L5
FileName : C:\TC4\158\APRIL2~1\AAPR295.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 15:04
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



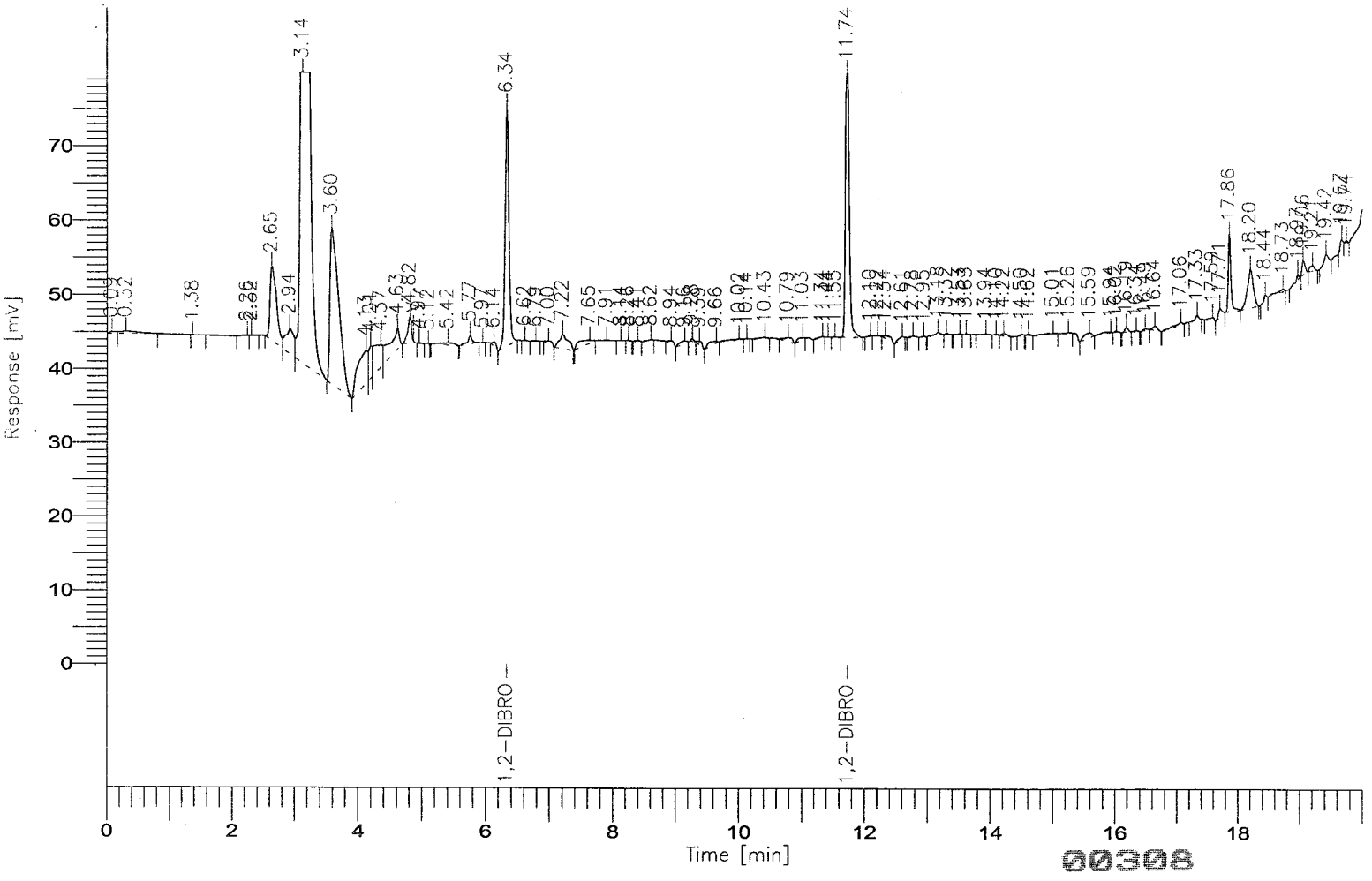
Software Version: 4.1<2F12>
Sample Name : L5 Time : 4/16/12 16:03
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 15:04
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\AAPR295.RAW
Result File : C:\TC4\158\APRIL2~1\AAPR295.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\AAPR295.R
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00308

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

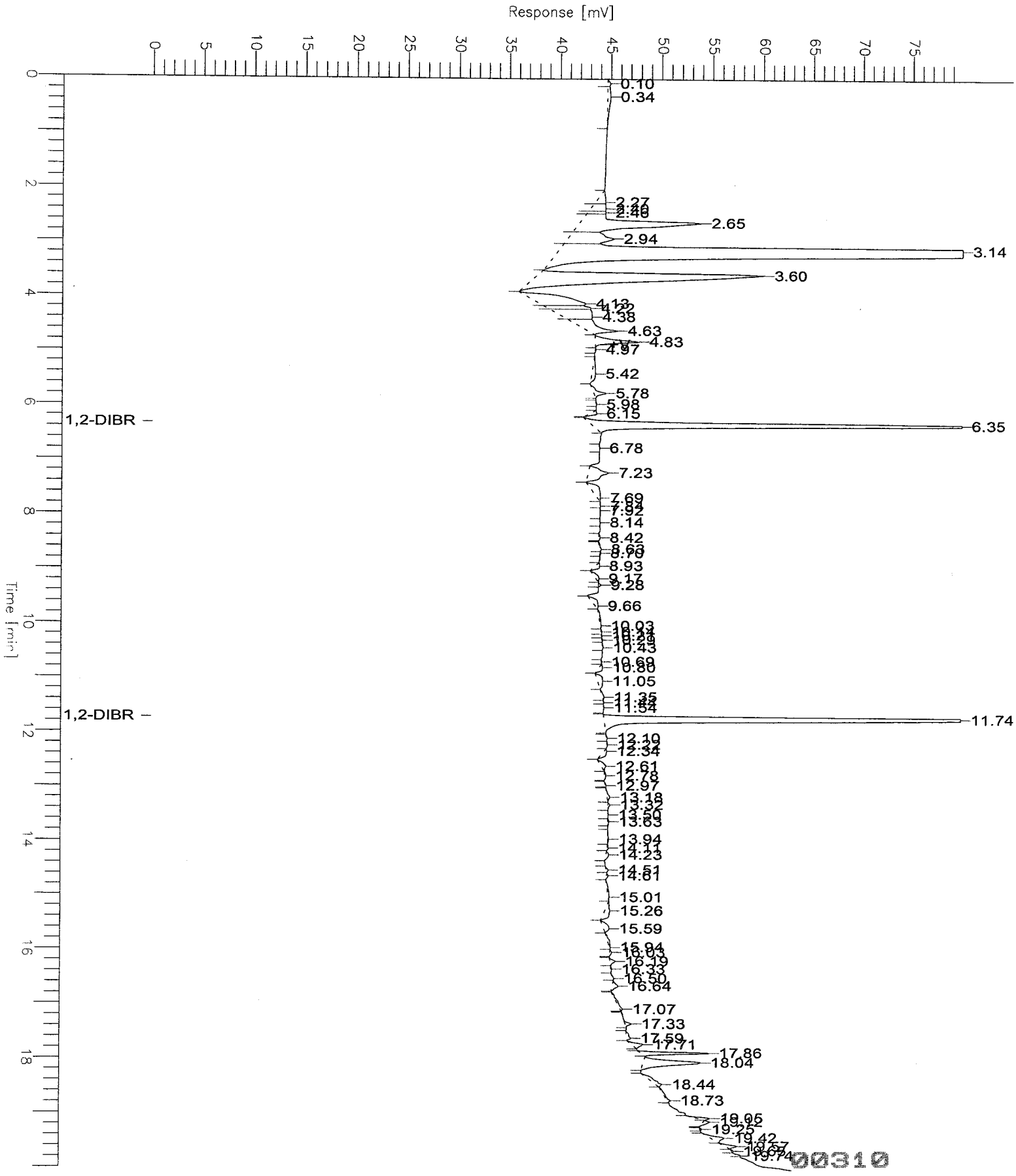
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.34	1,2-DIBROMOETHANE	0.0060	32934.85	129453.00	35	2	0.34304
11.74	1,2-DIBROMO3CHLOROPR	0.0059	48977.82	175196.50	35	2	0.33892
			81912.67	304649.50			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\AAPR295.TX0

Chromatogram

Sample Name : L6
FileName : C:\TC4\158\APRIL2~1\AAPR296.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 15:32
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



00310

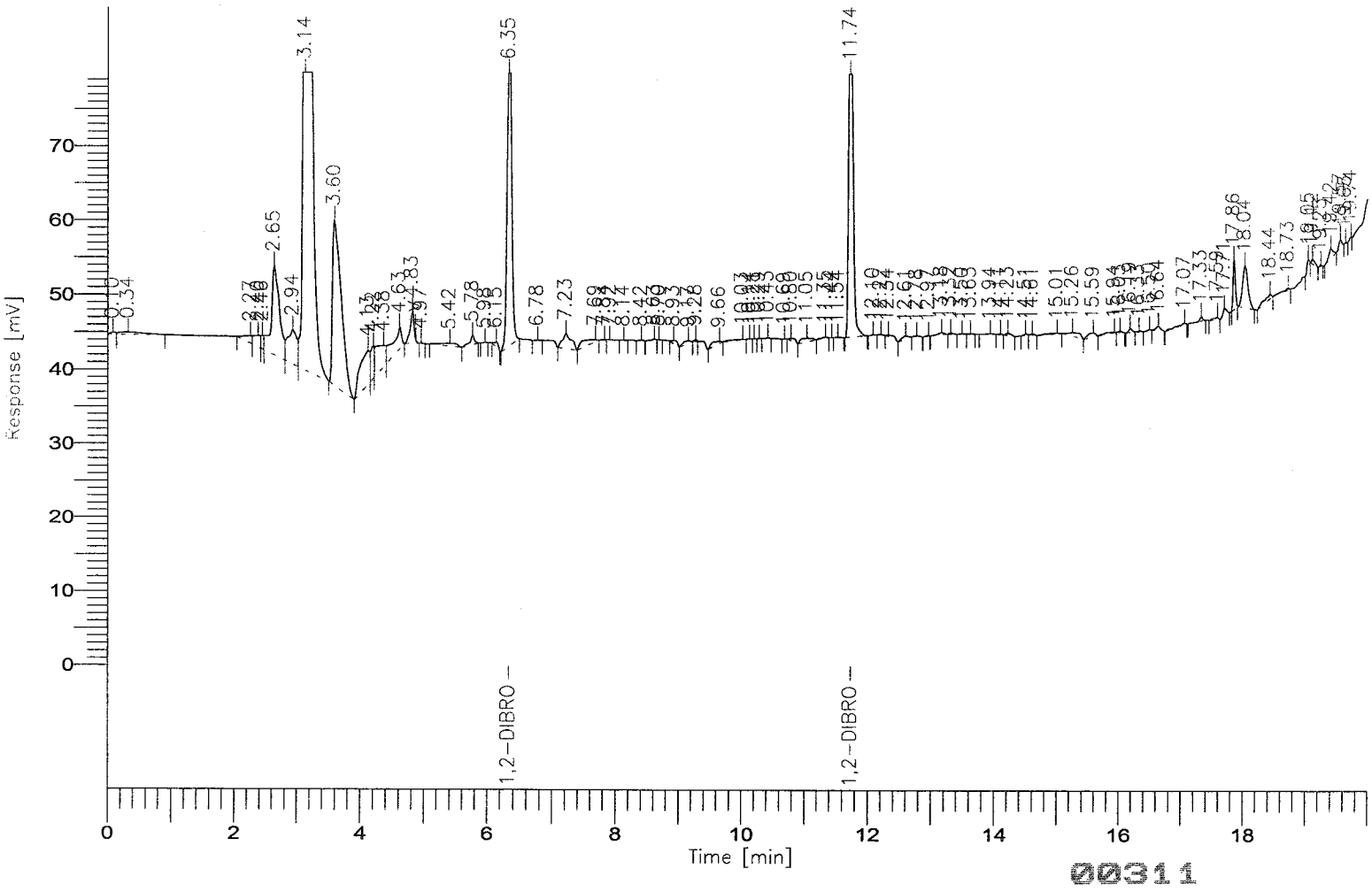
Software Version: 4.1<2F12>
Sample Name : L6 Time : 4/16/12 16:03
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 15:32
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\AAPR296.RAW
Result File : C:\TC4\158\APRIL2~1\AAPR296.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\AAPR296.R
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.35	1,2-DIBROMOETHANE	0.0110	57708.88	230082.00	35	2	0.62603
11.74	1,2-DIBROMO3CHLOROPR	0.0110	89272.96	326154.00	35	2	0.63000
			146981.84	556236.00			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\AAPR296.TX0

Turbochrom Method File : C:\TC4\158\8011ME~1\041612B.MTH
Created by : JDM on : 4/16/12 12:25
Edited by : BJH on : 4/16/12 16:01
Description :

Number of Times Edited : 1
Number of Times Calibrated : 193

Instrument Conditions :

Instrument Control Method:
Instrument name : 158

Interface Parameters :
Delay Time : 0.00 min.
Run Time : 29.50 min.
Sampling Rate : 1.0000 pts/s
Interface Type : 900
Analog Voltage Input : 1000 mV
Data will be collected from both channels

Timed Events:
There are no timed events in the method

Real Time Plot Parameters :
Channel A -- Pages: 1 Offset: 0.000 mV Scale: 1000.000 mV
Channel B -- Pages: 1 Offset: 0.000 mV Scale: 1000.000 mV

Processing Parameters :
Bunch Factor : 2 points
Noise Threshold : 24 µV
Area Threshold : 119.00 µV

Peak Separation Criteria
Width Ratio : 0.200
Valley-to-Peak Ratio : 0.010

Exponential Skim Criteria
Peak Height Ratio : 5.000
Adjusted Height Ratio : 4.000
Valley Height Ratio : 3.000

Baseline Timed Events :
No baseline timed events

Annotated Replot Parameters :
Offset & Scale set to absolute values
Plot Offset : 0.000 mV
Plot Scale : 200.000 mV

Number of Pages : 1

Plot Title : Chromatogram
X-Axis Label : Time [min]
Y-Axis Label : Response [mV]
Orientation : Landscape
Retention Labels : Peak Crests
Component Labels : Actual Time
Start Time : 0.00
End Time : 20.00

Report Format files :
No report format files given

User Programs :
No user programs will be executed

Global Information :
Default Sample Volume : 1.000 ul
Quantitation Units : ng
Void Time : 0.000 min
Correct amounts during calibration : YES
Reject outliers during calibration : NO
An External Standard calibration will be used
Unknown peaks will be quantitated using a response factor of 1.000000e+06

Component Information :
1,2-DIBROMOETHANE (2C)
Component Type : Single Peak Component
Retention Time : 7.108 min Search Window: 3.00 s, 1.70 %
Reference Component:
Find peak closest to expected RT in window
Calibrating Height versus Amount using a 1st Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: None
User Values:
Label :
Value 1: 0.000000
Value 2: 0.000000
Value 3: 0.000000
Value 4: 0.000000
Value 5: 0.000000
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	0.0003	3418.00	487.79	----------	----------	1
2	0.0007	4471.00	720.93	----------	----------	1
3	0.0014	22413.00	3623.67	----------	----------	1
4	0.0028	31799.50	6369.07	----------	----------	1
5	0.0056	45306.00	11176.39	----------	----------	1
6	0.0112	84652.00	21188.26	----------	----------	1

Calibration Curve : y = (322.490765) + (1892325.678532)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.993018

1,2-DBCP (2C)
Component Type : Single Peak Component
Retention Time : 12.978 min Search Window: 3.00 s, 1.70 %

Reference Component:
Find peak closest to expected RT in window
Calibrating Height versus Amount using a 1st Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: None
User Values:
Label :
Value 1: 0.000000
Value 2: 0.000000
Value 3: 0.000000
Value 4: 0.000000
Value 5: 0.000000
Calibration Levels:

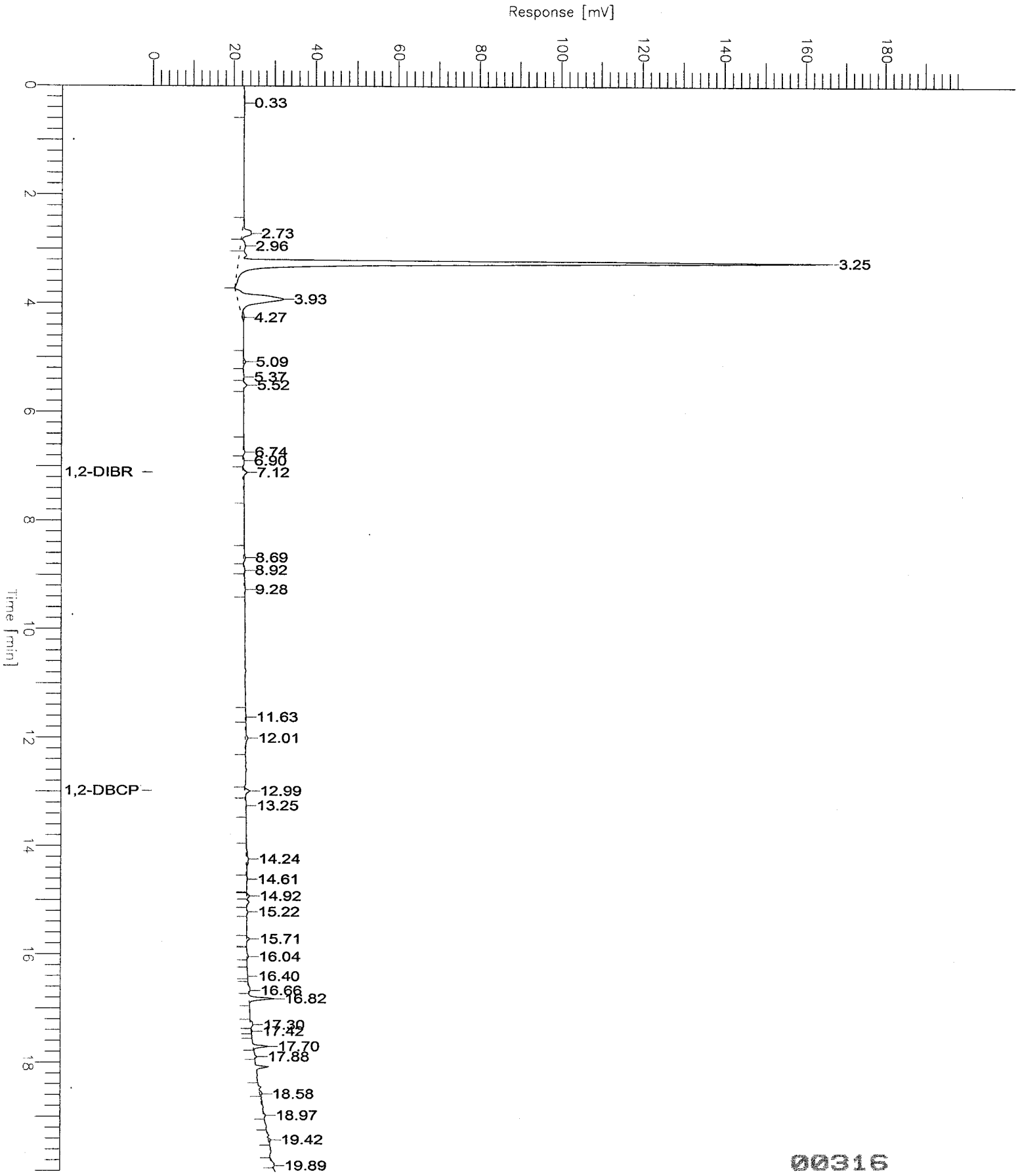
Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	0.0003	1039.87	282.39	----------	----------	1
2	0.0007	1787.20	500.38	----------	----------	1
3	0.0014	12372.00	3752.30	----------	----------	1
4	0.0028	24478.00	7290.01	----------	----------	1
5	0.0056	48136.00	14557.88	----------	----------	1
6	0.0112	96438.00	28813.54	----------	----------	1

Calibration Curve : y = (-461.663143) + (2634840.443746)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997804

Chromatogram

Sample Name : L1
FileName : C:\TC4\158\APRIL2~1\BAPR291.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 13:12
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00316

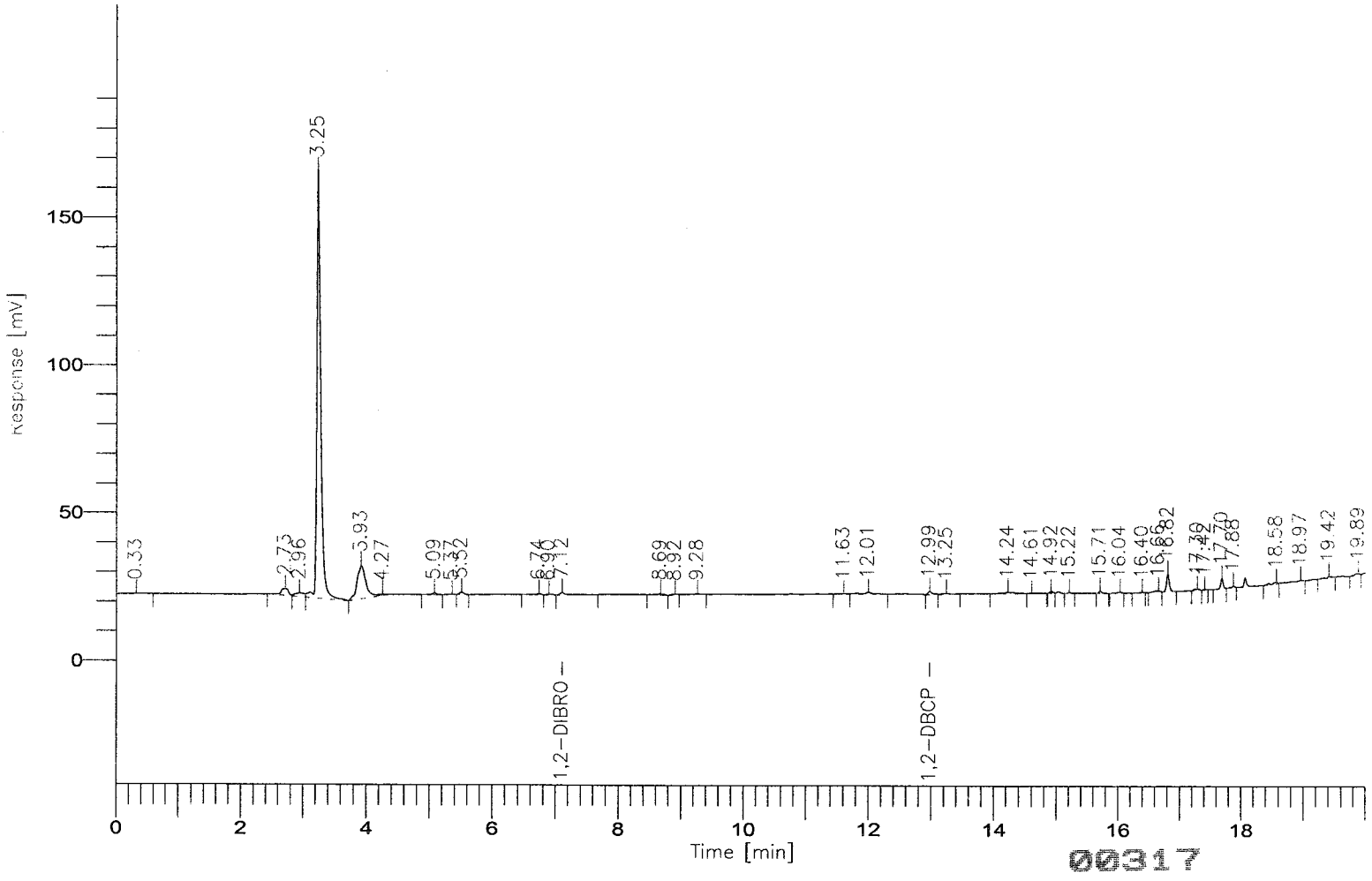
Software Version: 4.1<2F12>
Sample Name : L1 Time : 4/16/12 16:03
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 13:12
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\BAPR291.RAW
Result File : C:\TC4\158\APRIL2~1\BAPR291.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\BAPR291.R
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00317

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

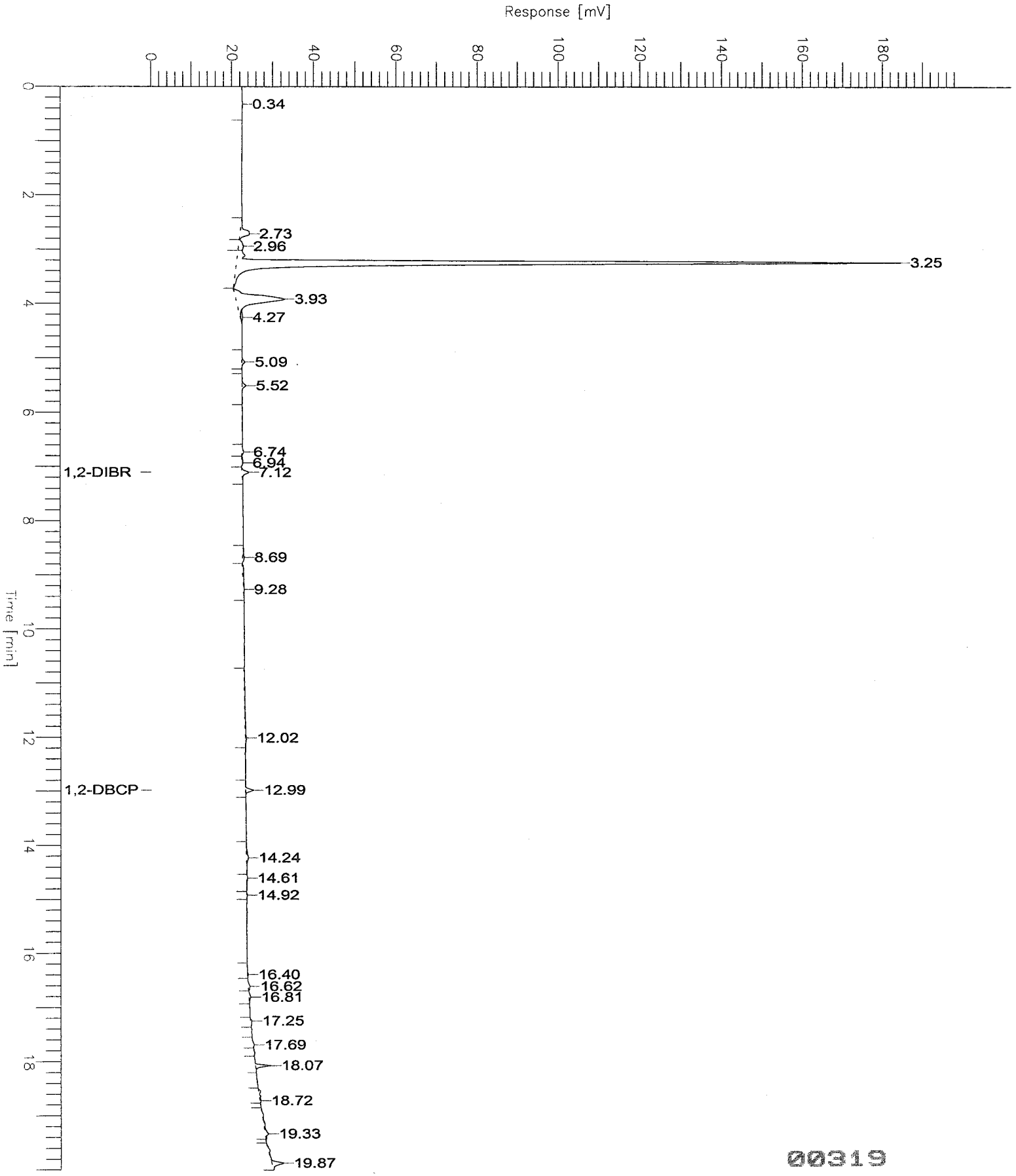
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
7.12	1,2-DIBROMOETHANE (2	0.0004	990.96	8504.00	35	2	0.02019
12.99	1,2-DBCP (2C)	0.0006	1212.26	5629.36	35	2	0.03630
			2203.22	14133.36			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\BAPR291.TX0

Chromatogram

Sample Name : L2
FileName : C:\TC4\158\APRIL2~1\BAPR292.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 13:40
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00319

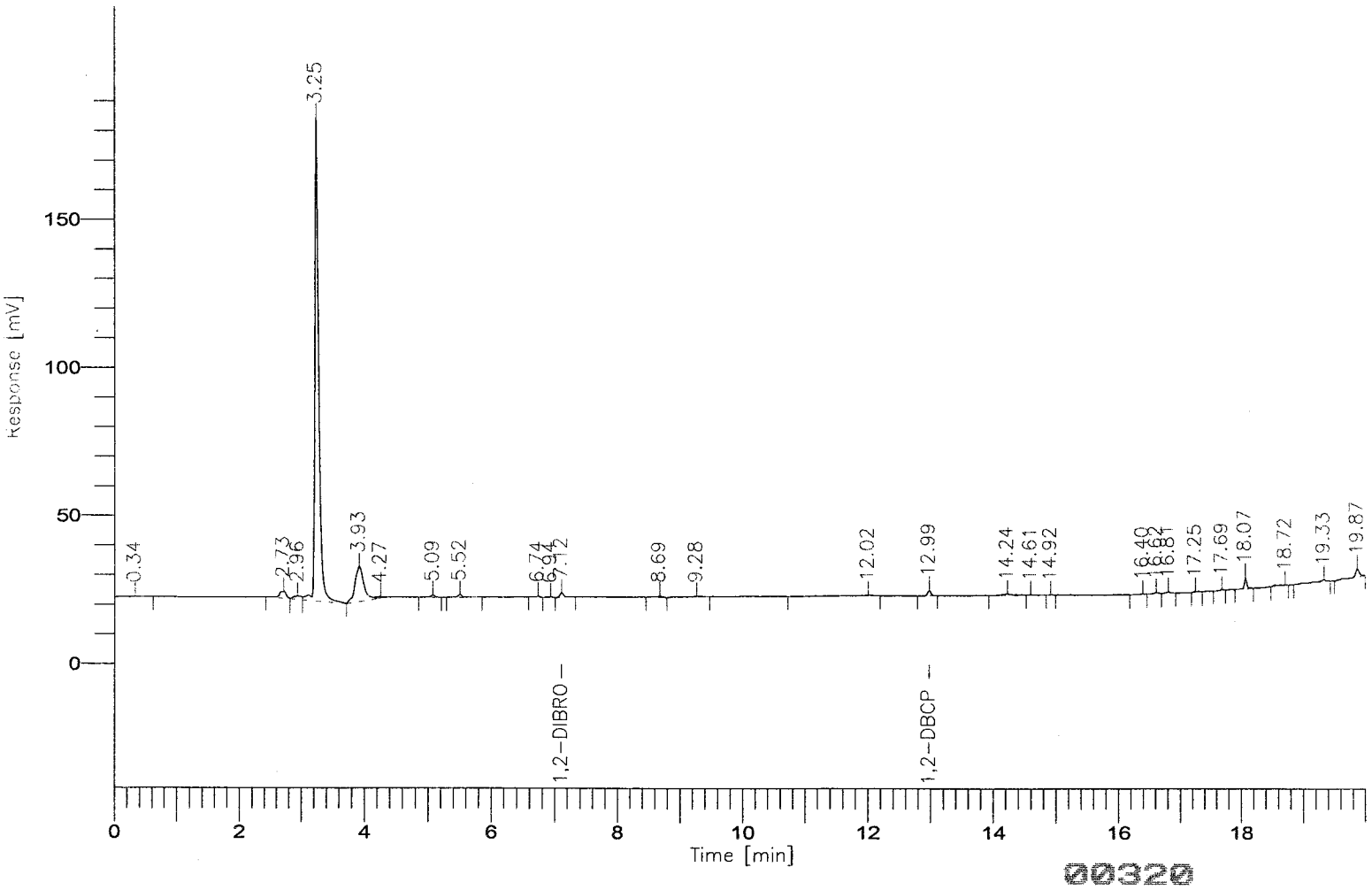
Software Version: 4.1<2F12>
Sample Name : L2 Time : 4/16/12 16:03
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 13:40
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\BAPR292.RAW
Result File : C:\TC4\158\APRIL2~1\BAPR292.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\BAPR292.R
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00320

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

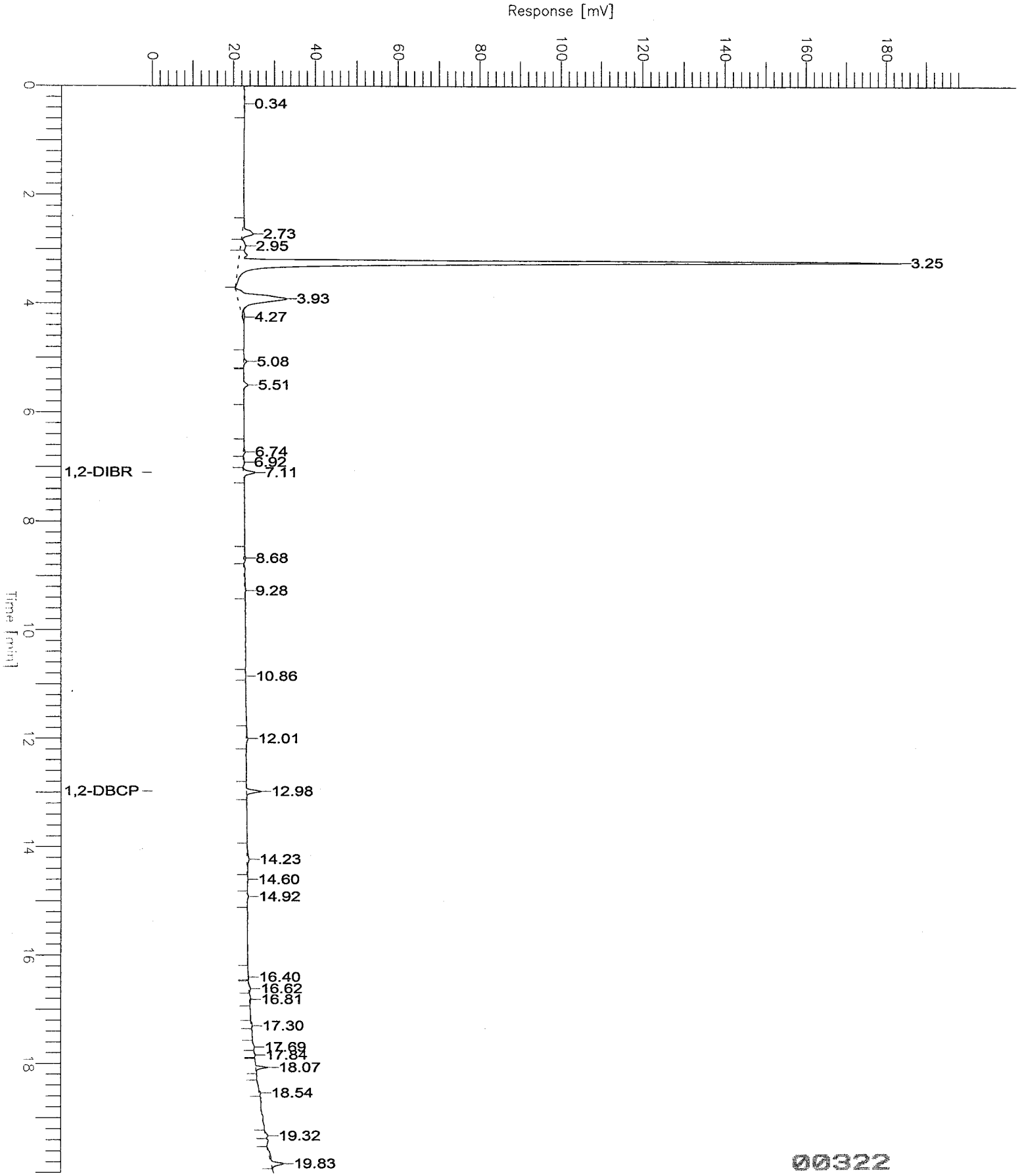
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
7.12	1,2-DIBROMOETHANE (2	0.0007	1721.79	7858.50	35	2	0.04225
12.99	1,2-DBCP (2C)	0.0009	1956.85	6371.00	35	2	0.05245
			3678.64	14229.50			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\BAPR292.TX0

Chromatogram

Sample Name : L3
FileName : C:\TC4\158\APRIL2~1\BAPR293.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 14:08
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00322

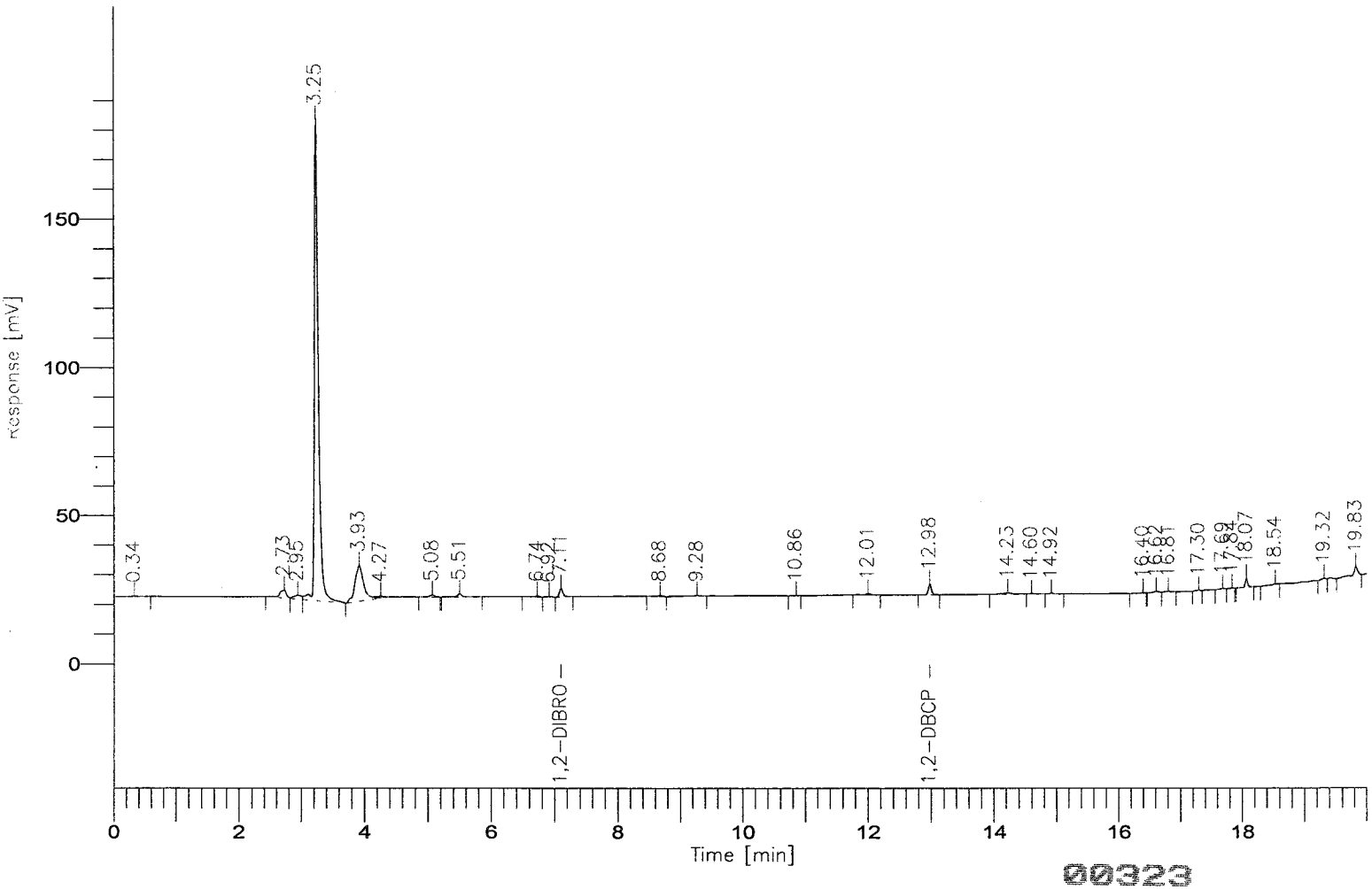
Software Version: 4.1<2F12>
Sample Name : L3 Time : 4/16/12 16:03
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 14:08
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\BAPR293.RAW
Result File : C:\TC4\158\APRIL2~1\BAPR293.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\BAPR293.R
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

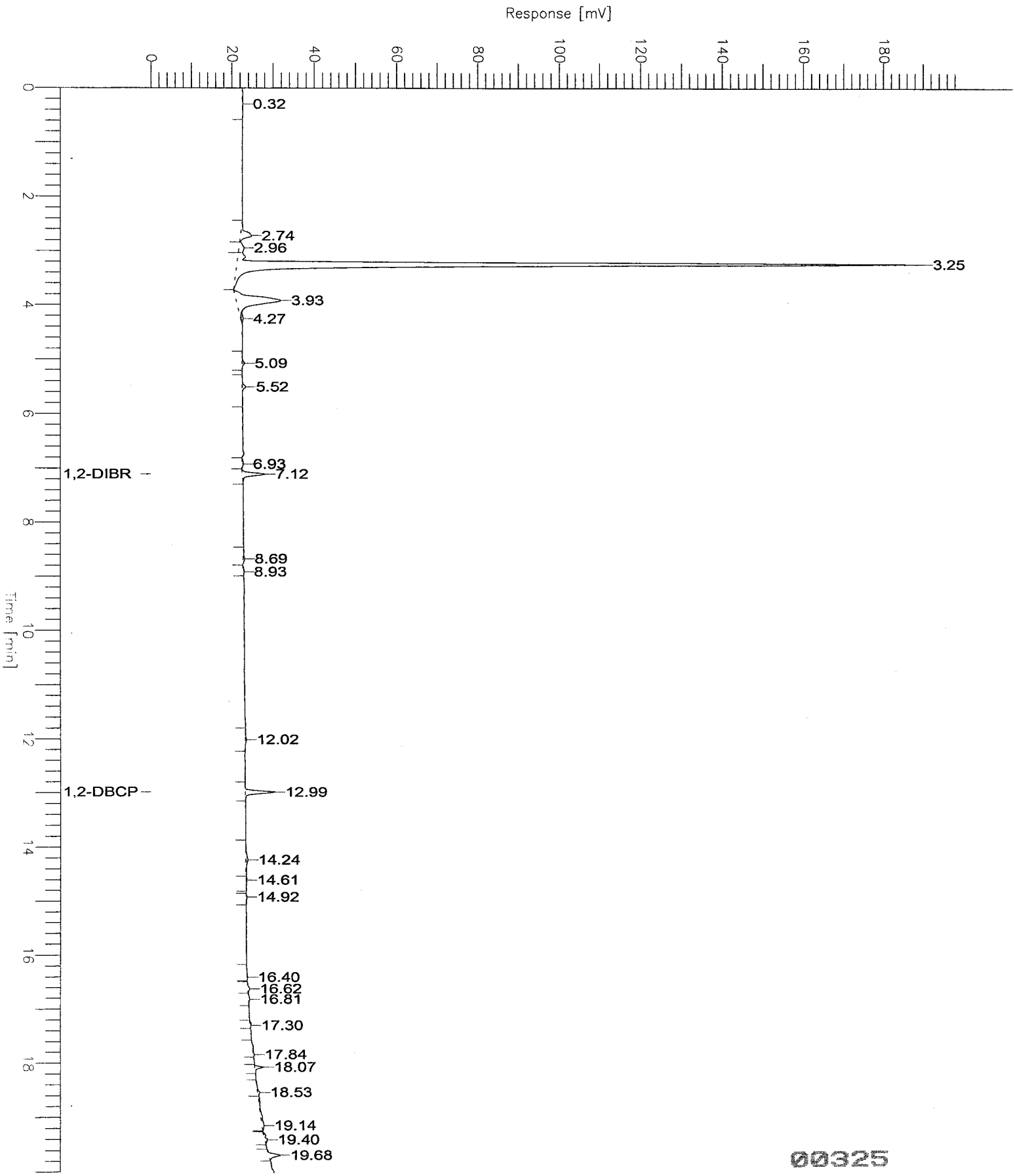
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
7.11	1,2-DIBROMOETHANE (2	0.0014	2941.79	11890.00	35	2	0.07910
12.98	1,2-DBCP (2C)	0.0016	3660.54	12215.00	35	2	0.08940
			6602.34	24105.00			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\BAPR293.TX0

Chromatogram

Sample Name : L4
FileName : C:\TC4\158\APRIL2~1\BAPR294.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 14:36
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00325

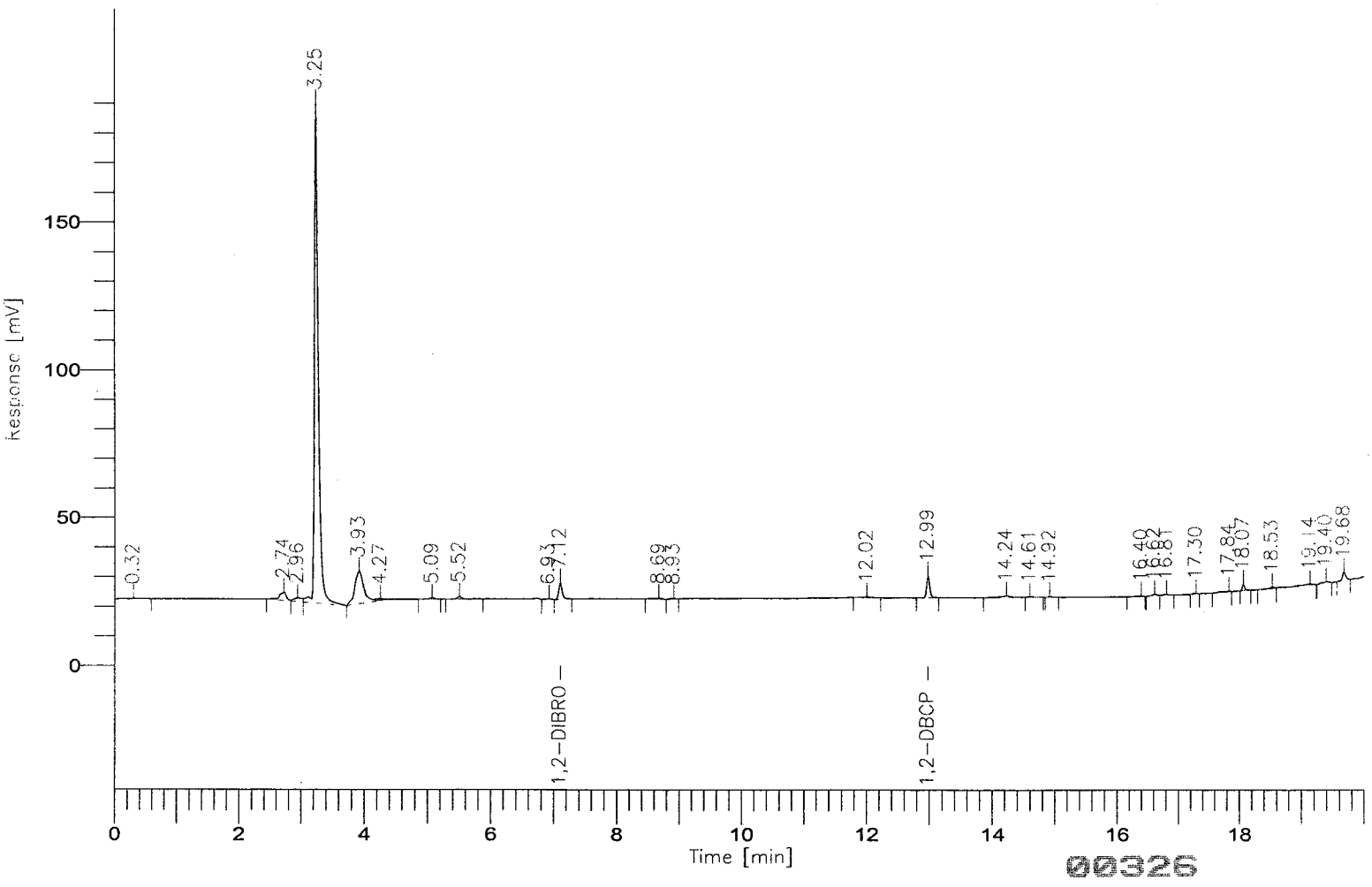
Software Version: 4.1<2F12>
Sample Name : L4 Time : 4/16/12 16:03
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 14:36
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\BAPR294.RAW
Result File : C:\TC4\158\APRIL2~1\BAPR294.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\BAPR294.R
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00326

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

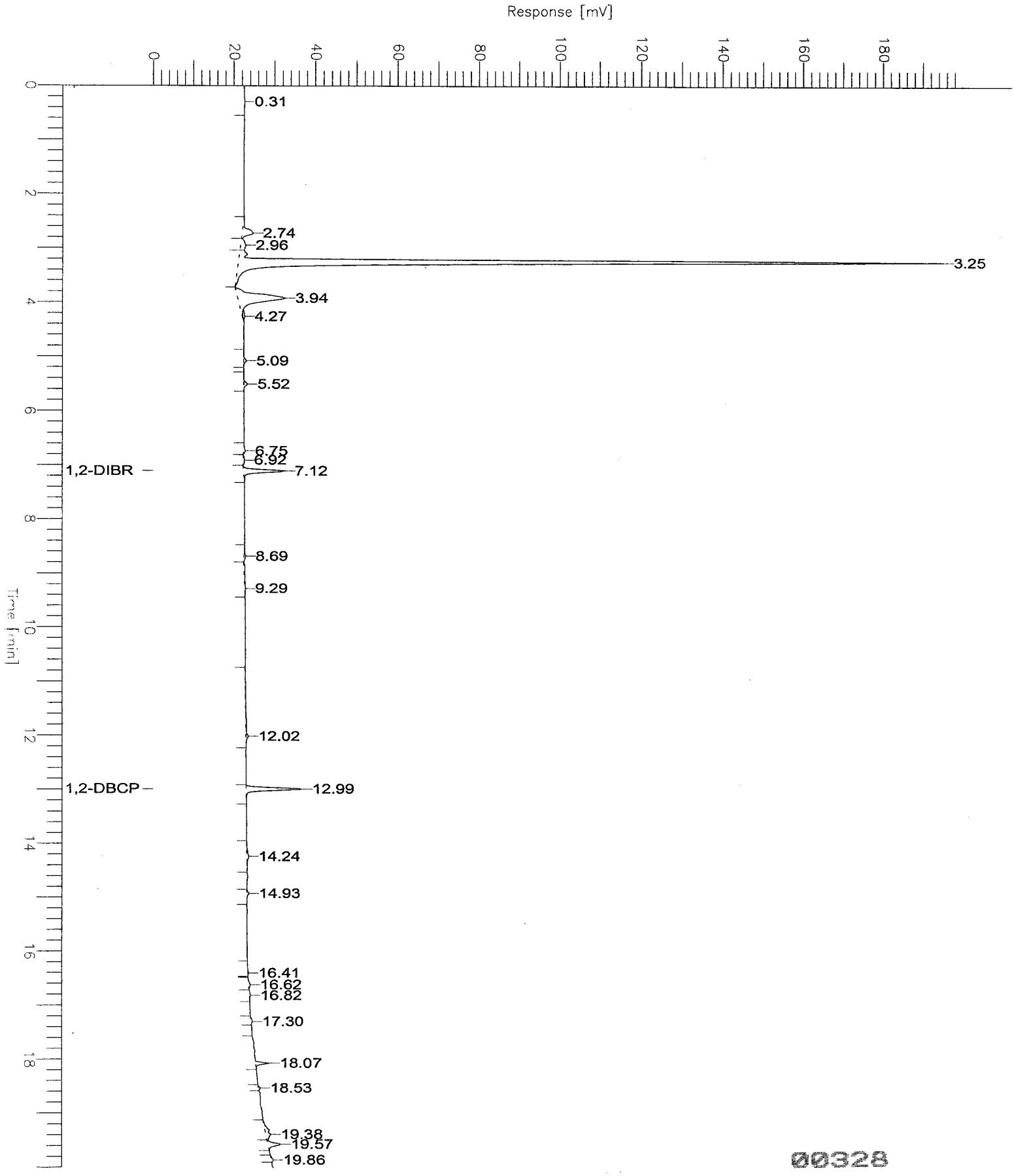
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
7.12	1,2-DIBROMOETHANE (2	0.0028	5629.48	20997.50	35	2	0.16026
12.99	1,2-DBCP (2C)	0.0030	7349.34	24273.00	35	2	0.16940
			12978.82	45270.50			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\BAPR294.TX0

Chromatogram

Sample Name : L5
FileName : C:\TC4\158\APRIL2~1\BAPR295.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 15:04
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



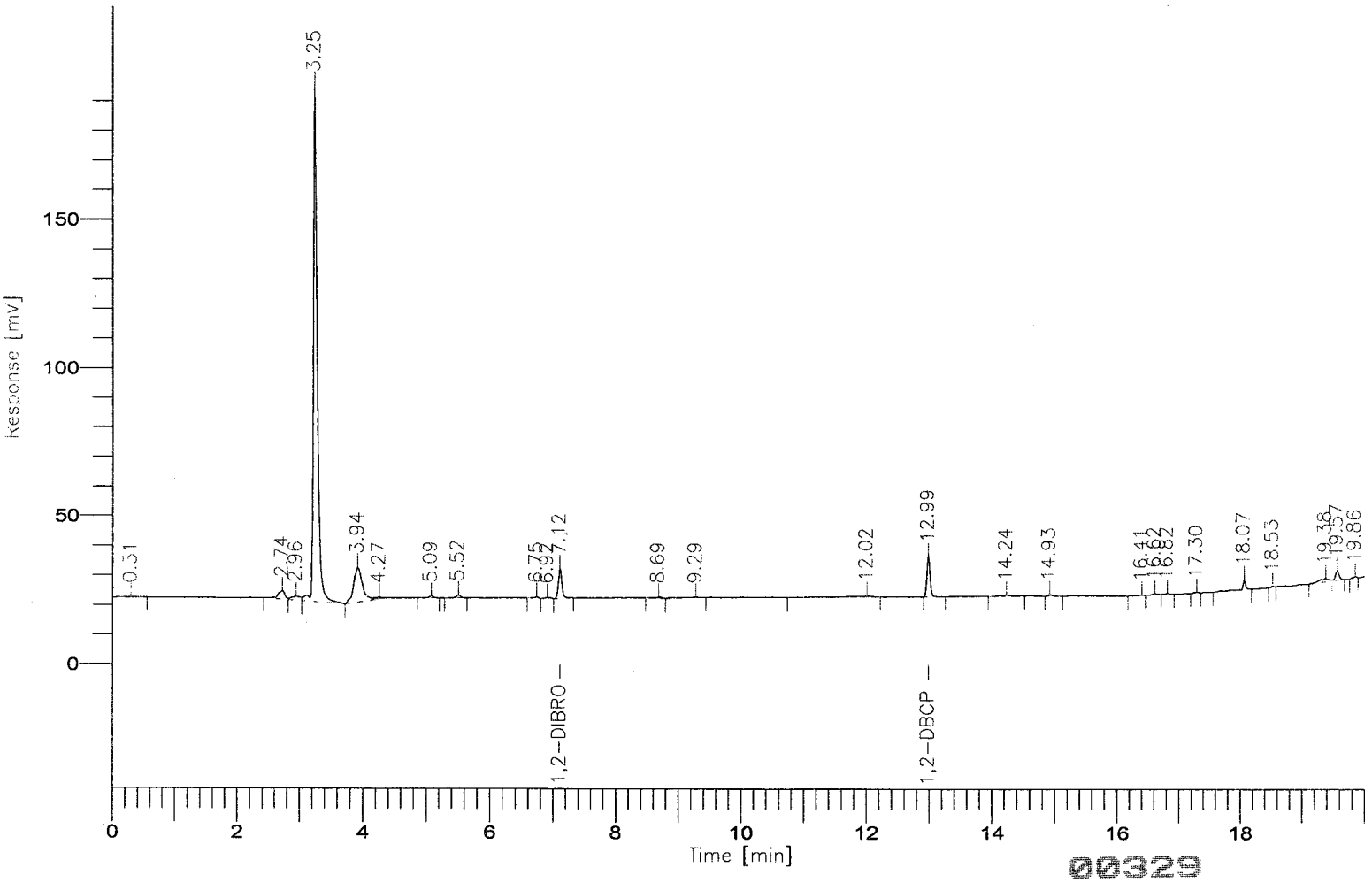
Software Version: 4.1<2F12>
Sample Name : L5 Time : 4/16/12 16:03
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 15:04
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\BAPR295.RAW
Result File : C:\TC4\158\APRIL2~1\BAPR295.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\BAPR295.R
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00329

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

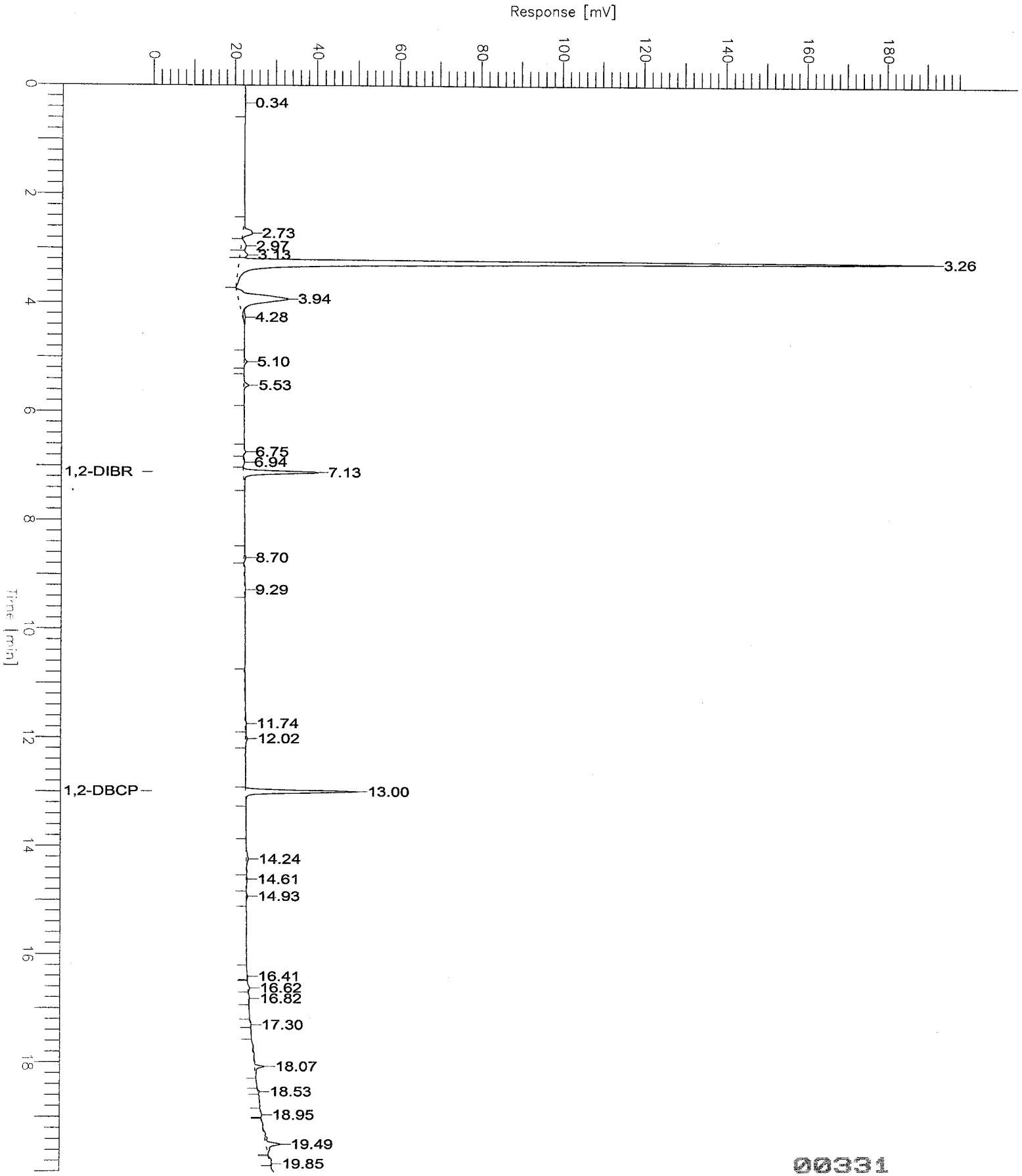
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
7.12	1,2-DIBROMOETHANE (2	0.0053	10320.04	37914.50	35	2	0.30190
12.99	1,2-DBCP (2C)	0.0056	14209.62	48190.00	35	2	0.31818
			24529.67	86104.50			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\BAPR295.TX0

Chromatogram

Sample Name : L6
FileName : C:\TC4\158\APRIL2~1\BAPR296.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 15:32
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00331

Software Version: 4.1<2F12>
Sample Name : L6
Sample Number:
Operator : BJH

Time : 4/16/12 16:03
Study : 8011

Instrument : 158
AutoSampler :
Rack/Vial : 0/0

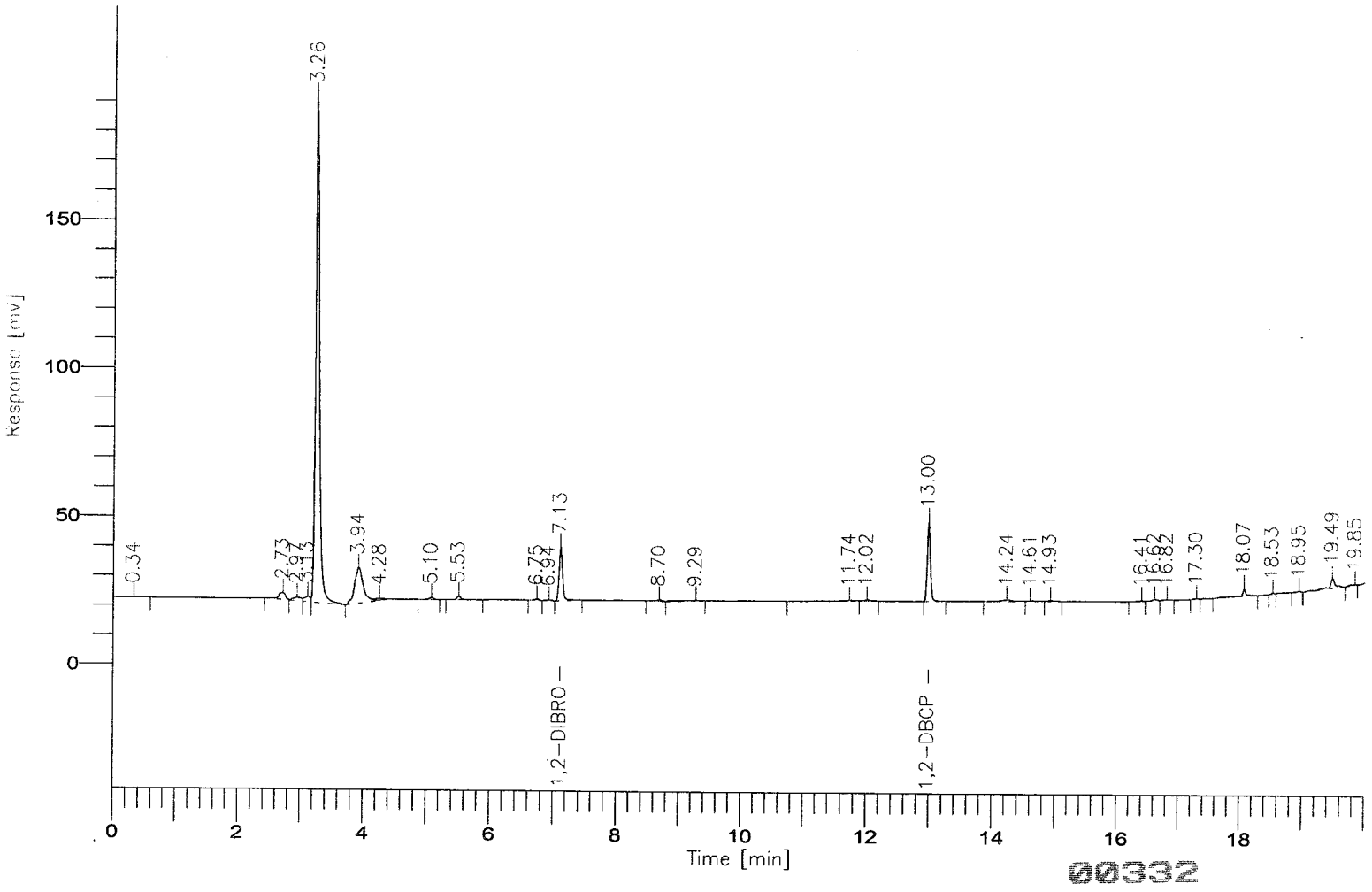
Channel : B A/D mV Range : 1000

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 15:32
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\BAPR296.RAW
Result File : C:\TC4\158\APRIL2~1\BAPR296.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\BAPR296.R
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul
Sample Amount : 1.0000

Area Reject : 0.000000
Dilution Factor : 1.00



00332

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
7.13	1,2-DIBROMOETHANE (2	0.0097	18734.15	70555.00	35	2	0.55598
13.00	1,2-DBCP (2C)	0.0106	27500.26	92198.50	35	2	0.60642
			46234.41	162753.50			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\BAPR296.TX0

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Laboratory ID: 2D17019-SCV1

Sequence: 2D17019

SDG: KNM050112

Project: KNM

Standard ID: 2040798

Calibration: 2D17008

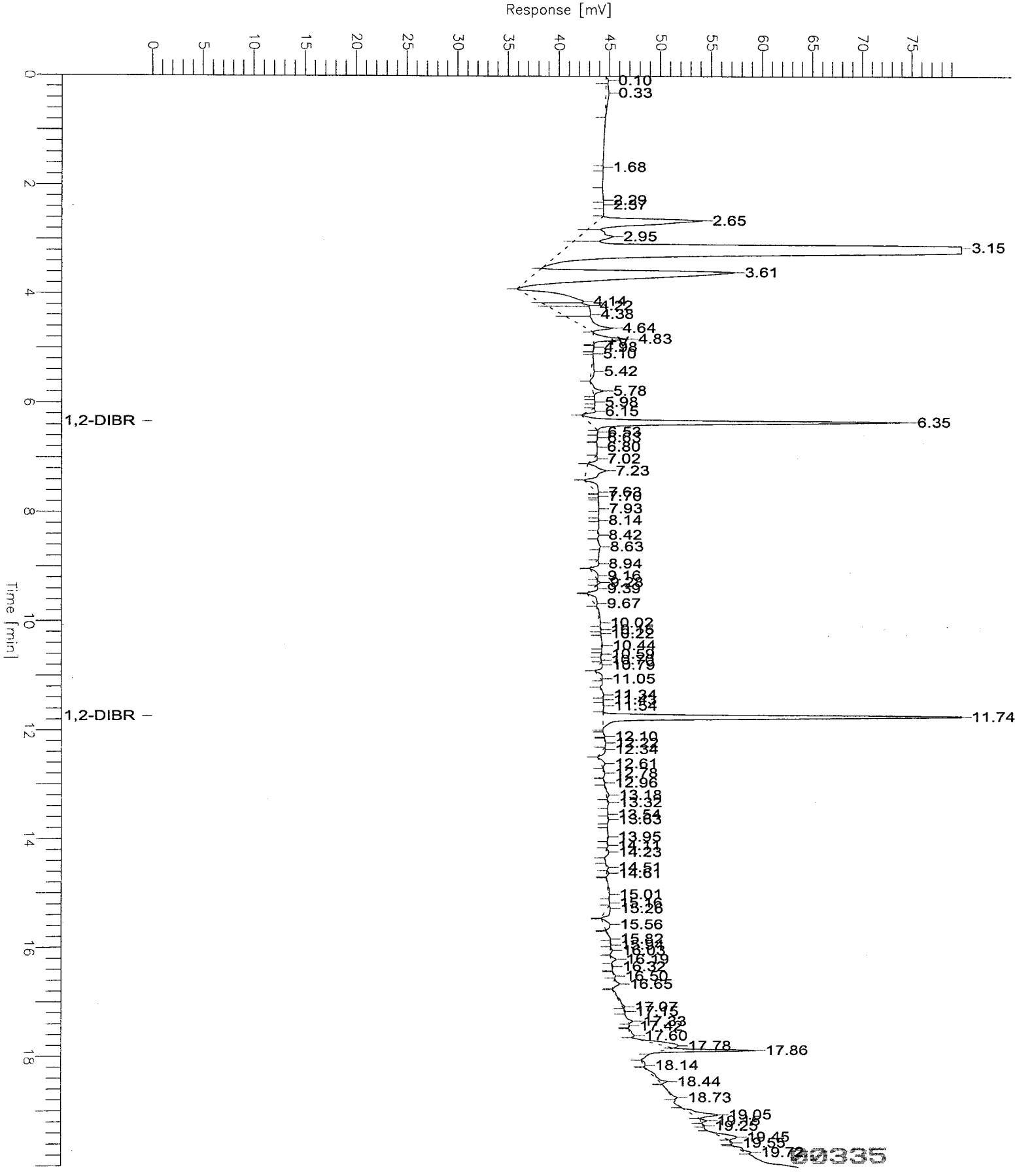
Analyte	Expected (ug/mL)	Found (ug/mL)	% Rec.	QC Limit
1,2-Dibromoethane	0.00560	0.00570	102	75-125
1,2-Dibromo-3-chloropropane	0.00560	0.00540	96	75-125

* Values outside of QC limits

Chromatogram

Sample Name : SCV
FileName : C:\TC4\158\APRIL2~1\AAPR297.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/17/12 08:38
Time of Injection: 4/16/12 16:01
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



00335

Software Version: 4.1<2F12>
Sample Name : SCV
Sample Number:
Operator : BJH

Time : 4/17/12 08:38
Study : 8011

Instrument : 158
AutoSampler :
Rack/Vial : 0/0

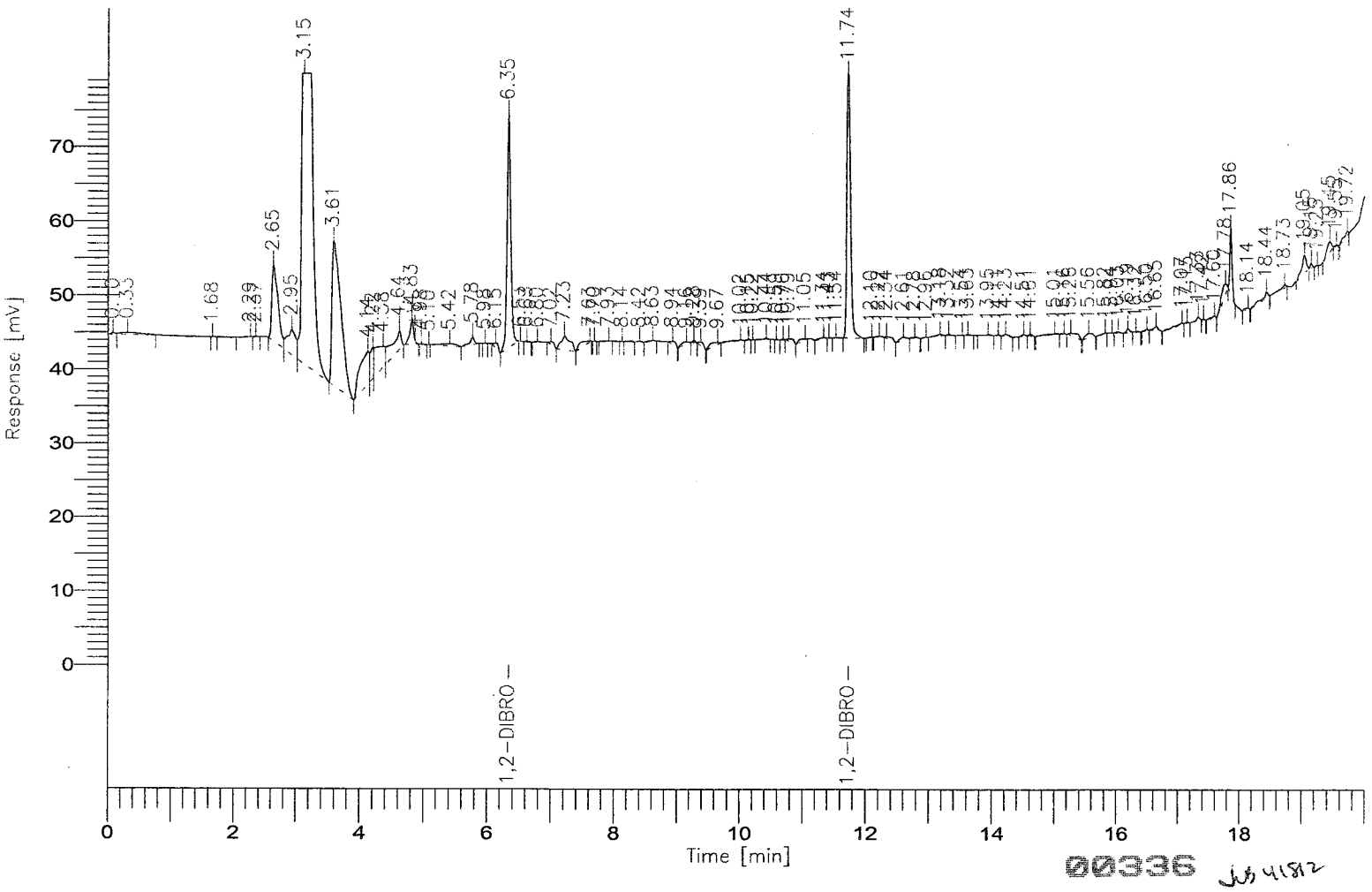
Channel : A A/D mV Range : 1000

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 16:01
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\AAPR297.RAW
Result File : C:\TC4\158\APRIL2~1\AAPR297.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\AAPR297.R
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul
Sample Amount : 1.0000

Area Reject : 0.000000
Dilution Factor : 1.00



00336 JB 41812

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

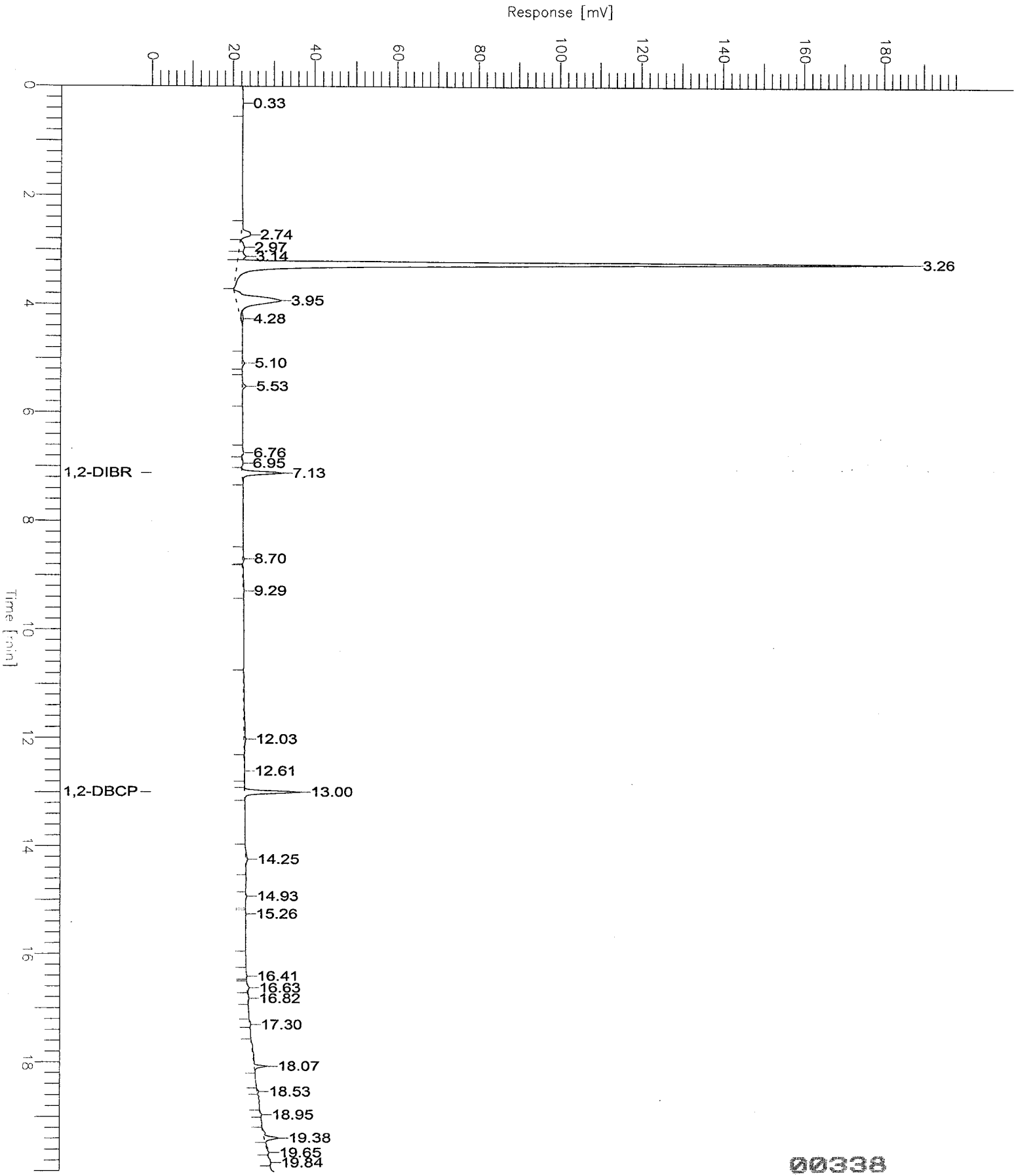
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)	
6.35	1,2-DIBROMOETHANE	0.0057	31667.60	124986.50	35	2	0.32856	Pass
11.74	1,2-DIBROMO3CHLOROPR	0.0054	44798.47	162796.00	35	2	0.30873	↓
			76466.07	287782.50				

Report stored in ASCII file: C:\TC4\158\APRIL2~1\AAPR297.TX0

Chromatogram

Sample Name : SCV
FileName : C:\TC4\158\APRIL2~1\BAPR297.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 4/17/12 08:38
Time of Injection: 4/16/12 16:01
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00338

Software Version: 4.1<2F12>
Sample Name : SCV
Sample Number:
Operator : BJH

Time : 4/17/12 08:38
Study : 8011

Instrument : 158
AutoSampler :
Rack/Vial : 0/0

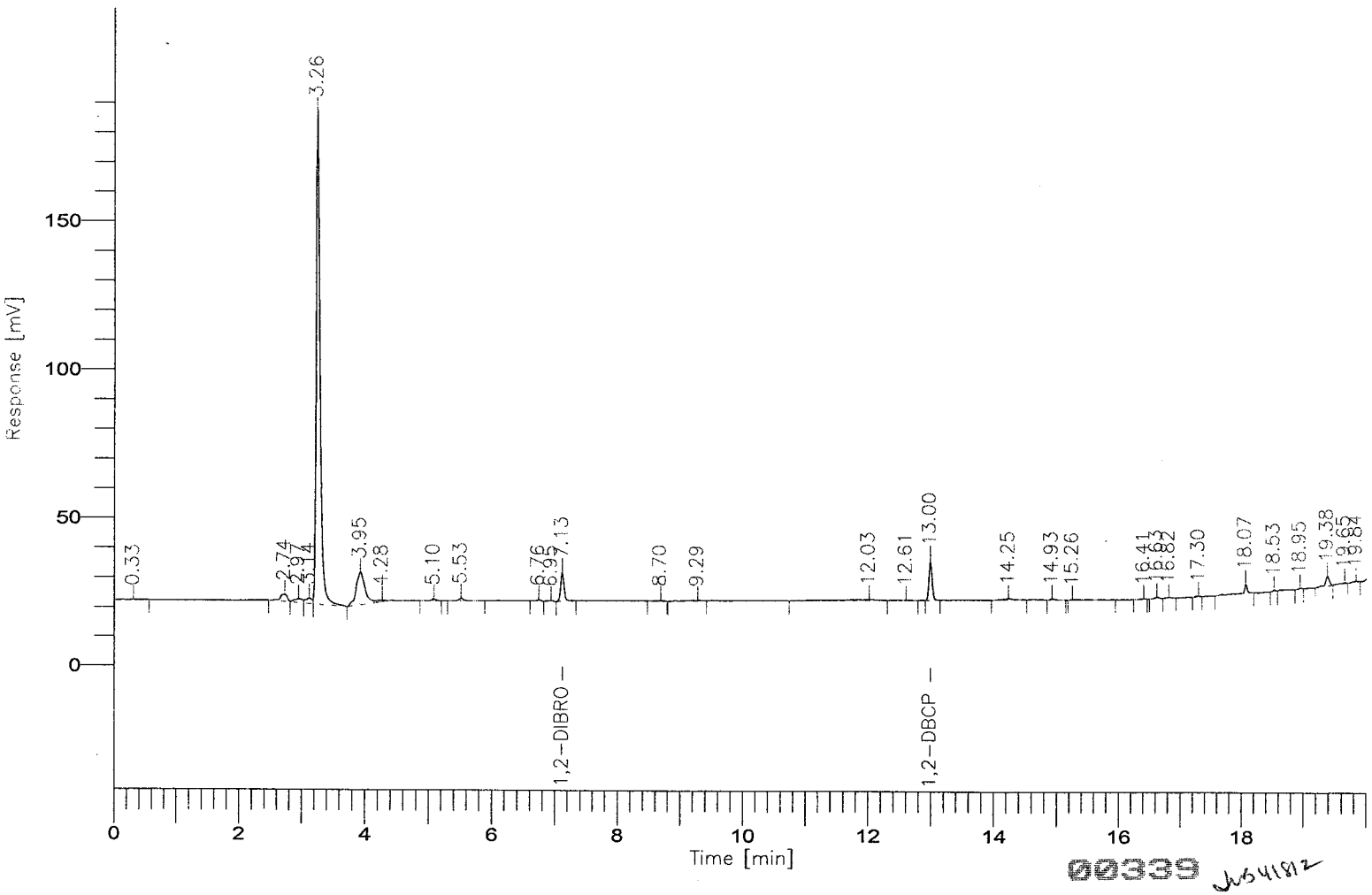
Channel : B A/D mV Range : 1000

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 16:01
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\BAPR297.RAW
Result File : C:\TC4\158\APRIL2~1\BAPR297.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\BAPR297.R
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul
Sample Amount : 1.0000

Area Reject : 0.000000
Dilution Factor : 1.00



00339 JWS 4/18/12

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)	
7.13	1,2-DIBROMOETHANE (2	0.0051	10027.15	37165.00	35	2	0.29305	Pass
13.00	1,2-DBCP (2C)	0.0054	13721.09	45156.00	35	2	0.30759	↓
			23748.24	82321.00				

Report stored in ASCII file: C:\TC4\158\APRIL2~1\BAPR297.TX0

CONTINUING CALIBRATION CHECK

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM050112
Client: TechLaw
Project: KNM
Lab Sample ID: 2E07013-CCV1
Lab File ID: AMAY027-0
Injection Date: 05/04/12
Injection Time: 10:03
Calibration Date: 04/16/12 08:55
Calibration: 2D17008
Sequence: 2E07013
Instrument ID: 158

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,2-Dibromoethane	L	0.00560	0.00430	6967893	4369834		-23.2	40

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

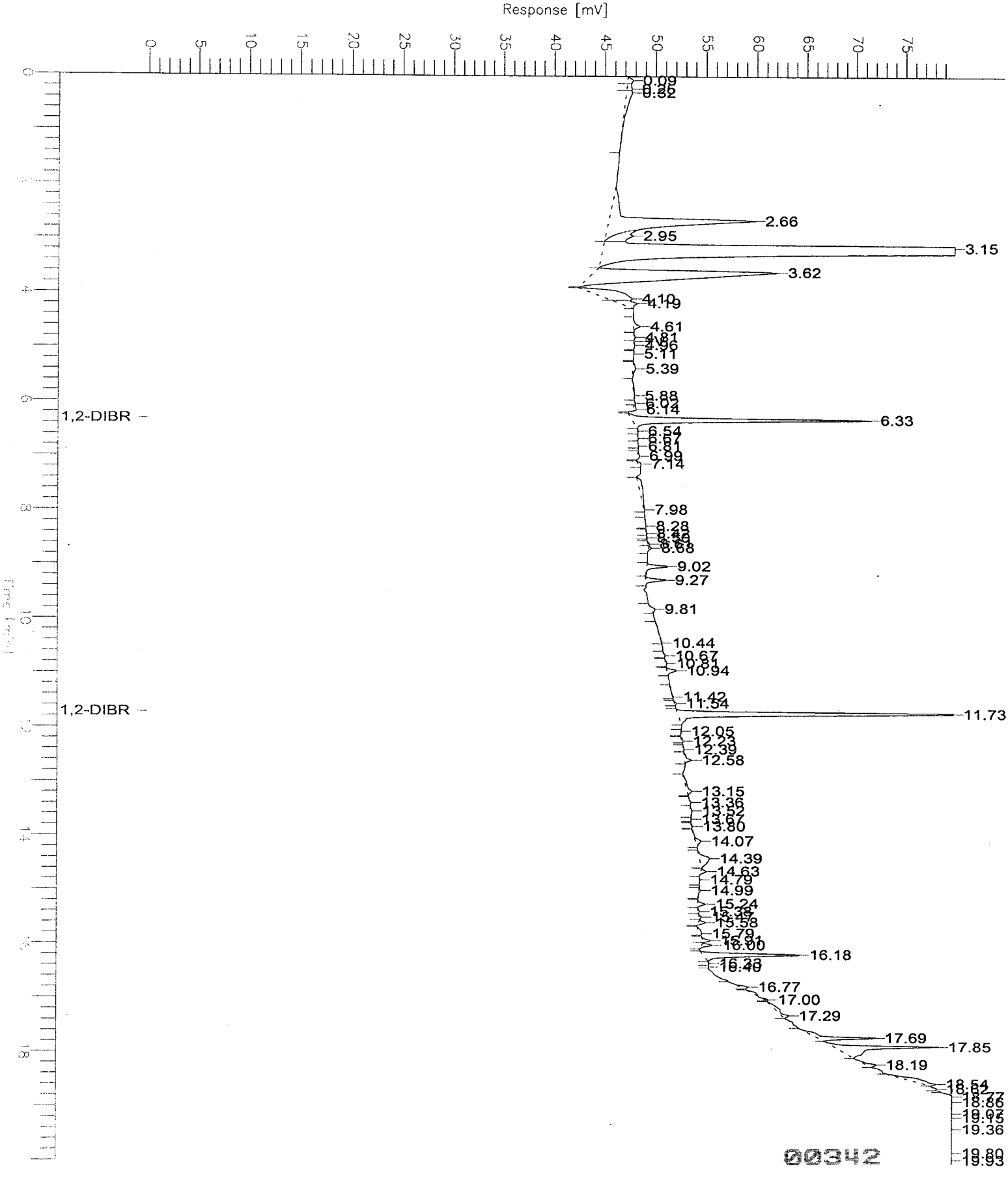
* Values outside of QC limits

00341

Chromatogram

Sample Name : CCV1
FileName : C:\TC4\158\MAY2012\AMAY027.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/4/12 15:58
Time of Injection: 5/4/12 10:03
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



00342

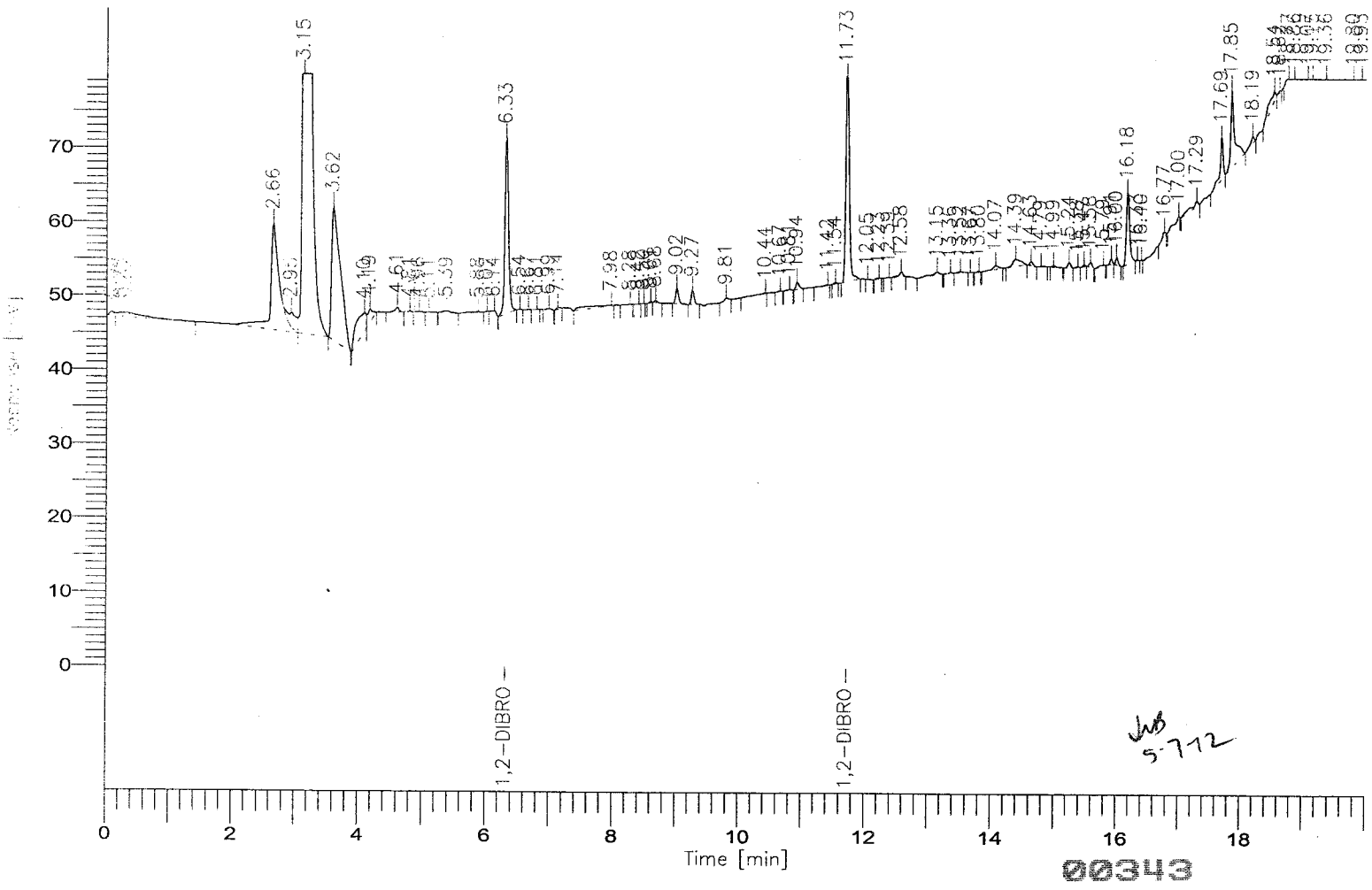
Software Version: 4.1<2F12>
Sample Name : CCV1 Time : 5/4/12 15:58
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 10:03
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\AMAY027.RAW
Result File : C:\TC4\158\MAY2012\AMAY027.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\AMAY027.RS
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



JWB 5-7-12

00343

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

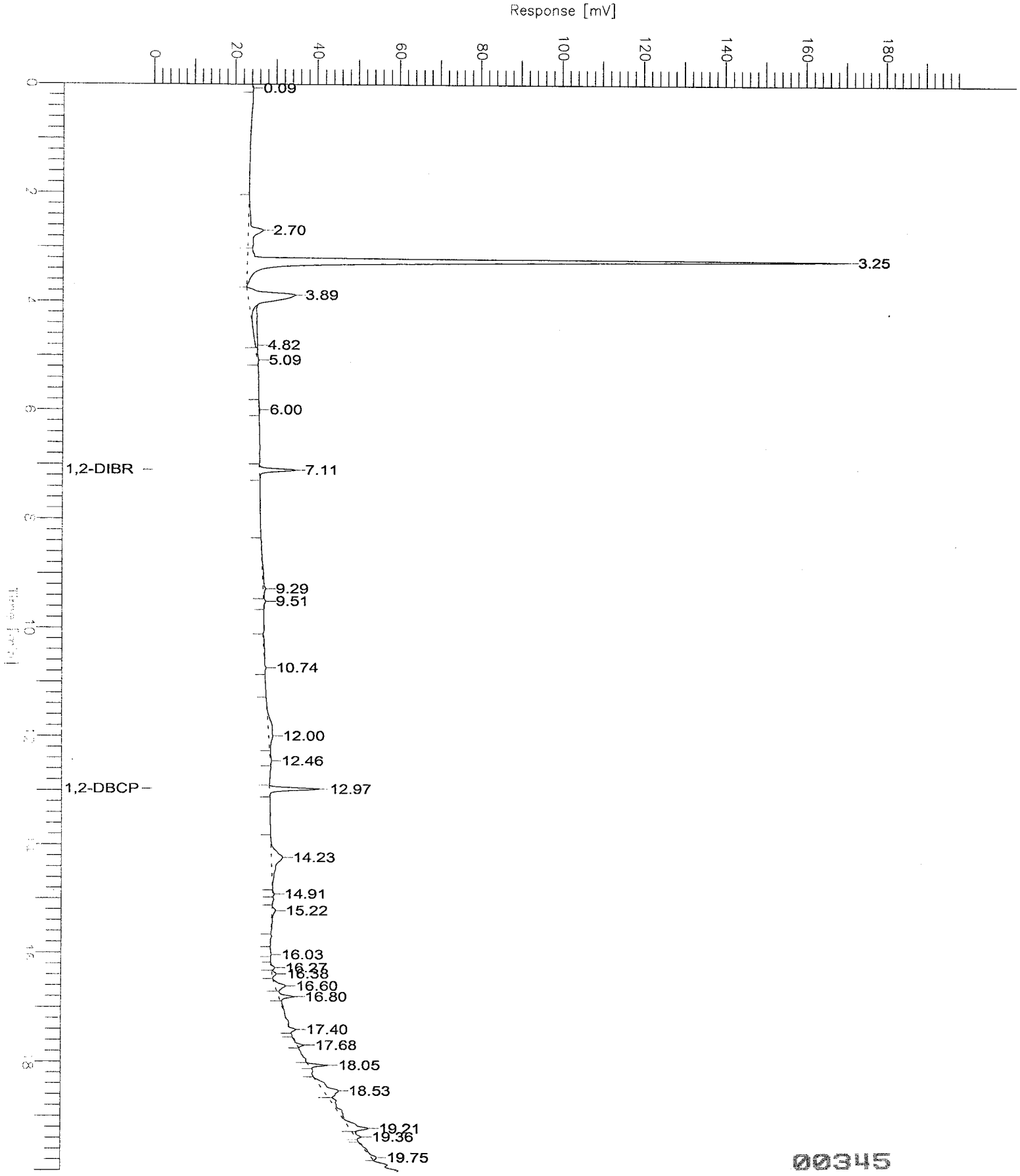
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)	
6.33	1,2-DIBROMOETHANE	0.0043	24471.07	94293.00	35	2	0.24636	Pass
11.73	1,2-DIBROMO3CHLOROPR	0.0039	32910.96	117526.00	35	2	0.22286	
			57382.03	211819.00				

Report stored in ASCII file: C:\TC4\158\MAY2012\AMAY027.TX0

Chromatogram

Sample Name : CCV1
FileName : C:\TC4\158\MAY2012\BMAY027.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/4/12 15:58
Time of Injection: 5/4/12 10:03
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



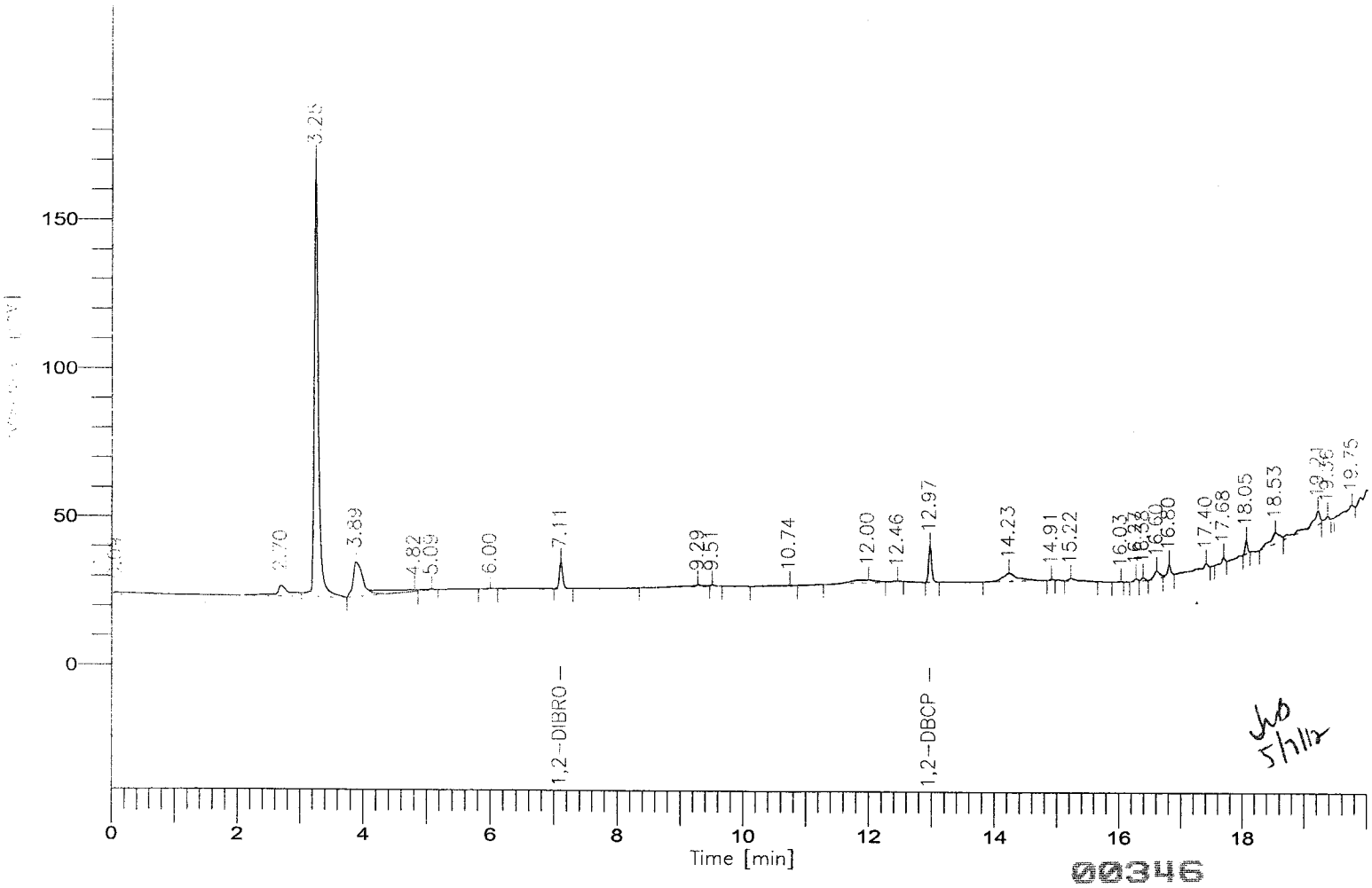
Software Version: 4.1<2F12>
Sample Name : CCV1 Time : 5/4/12 15:58
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 10:03
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\BMAY027.RAW
Result File : C:\TC4\158\MAY2012\BMAY027.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\BMAY027.RS
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)	
7.11	1,2-DIBROMOETHANE (2	0.0046	9012.10	32223.00	35	2	0.26240	Pass
12.97	1,2-DBCP (2C)	0.0048	12244.66	40172.50	35	2	0.27557	
			21256.77	72395.50				

Report stored in ASCII file: C:\TC4\158\MAY2012\BMAY027.TX0

CONTINUING CALIBRATION CHECK

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM050112
Client: TechLaw
Project: KNM
Lab Sample ID: 2E07013-CCV2
Lab File ID: AMAY038-0
Injection Date: 05/04/12
Injection Time: 15:11
Calibration Date: 04/16/12 08:55
Calibration: 2D17008
Sequence: 2E07013
Instrument ID: 158

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,2-Dibromoethane	L	0.00560	0.00500	6967893	5003096		-10.7	40

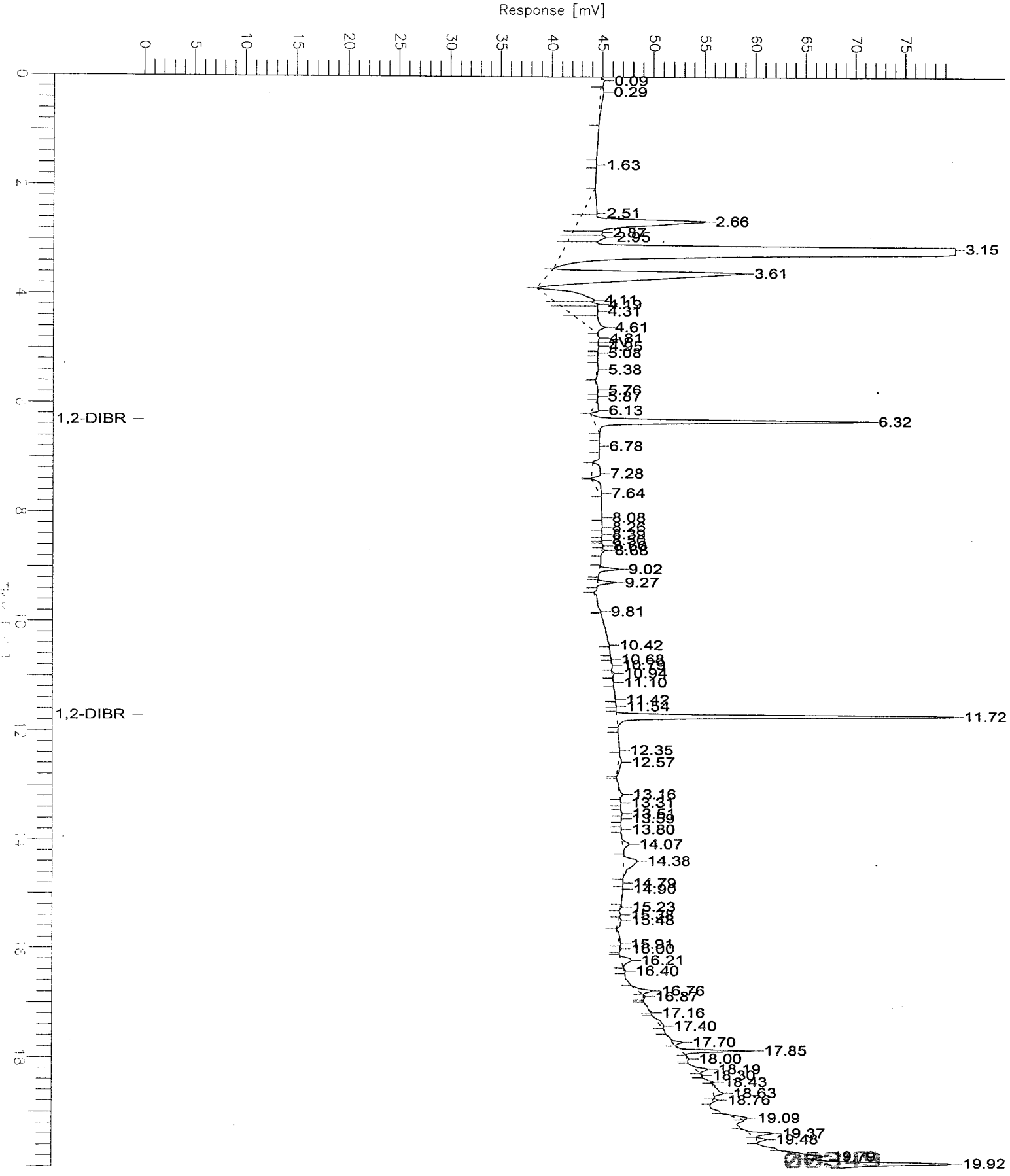
Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

Chromatogram

Sample Name : CCV2
FileName : C:\TC4\158\MAY2012\AMAY038.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/4/12 15:59
Time of Injection: 5/4/12 15:11
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



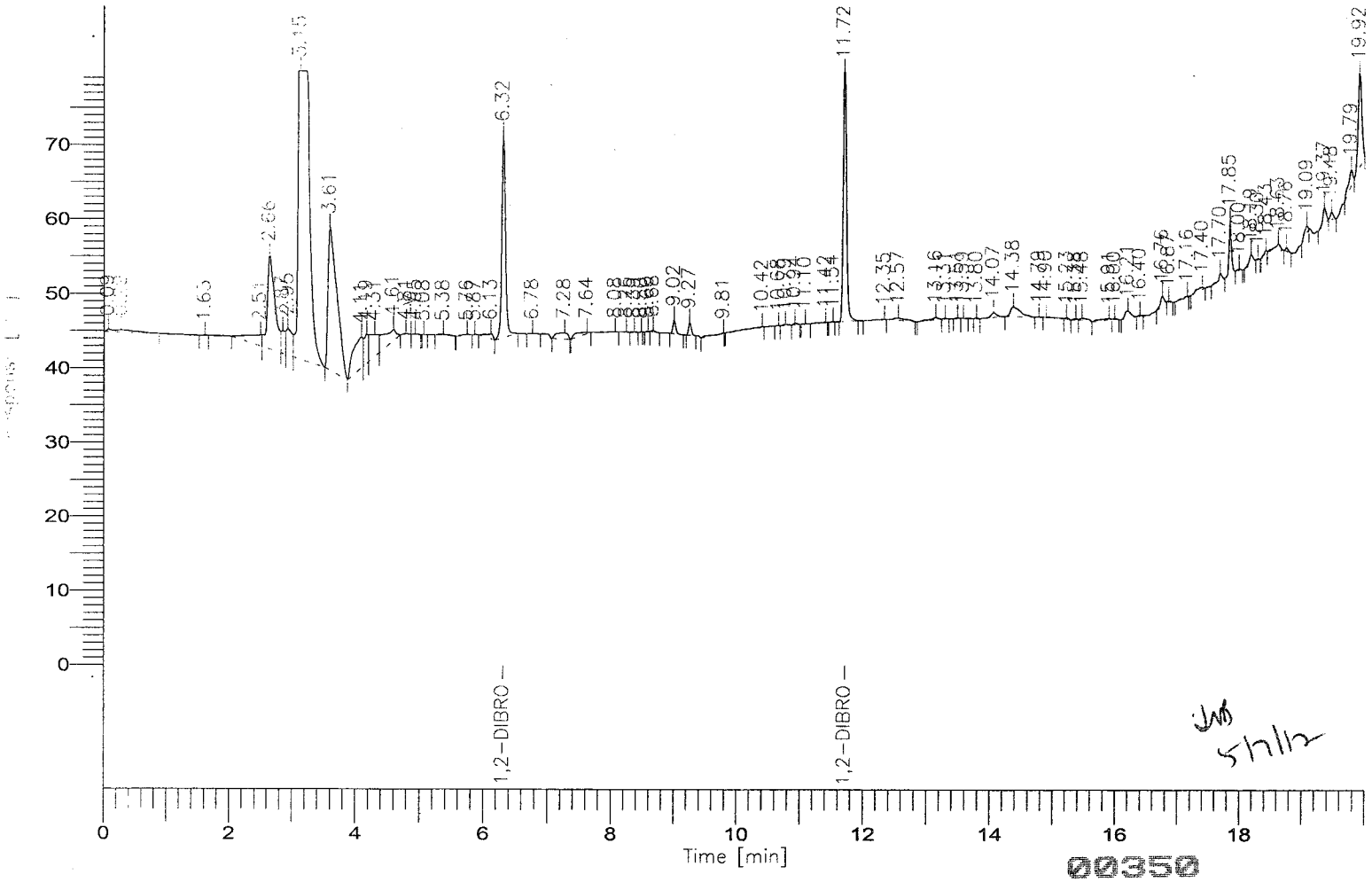
Software Version: 4.1<2F12>
Sample Name : CCV2 Time : 5/4/12 15:59
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 15:11
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\AMAY038.RAW
Result File : C:\TC4\158\MAY2012\AMAY038.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\AMAY038.RS
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



5/7/12

00350

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

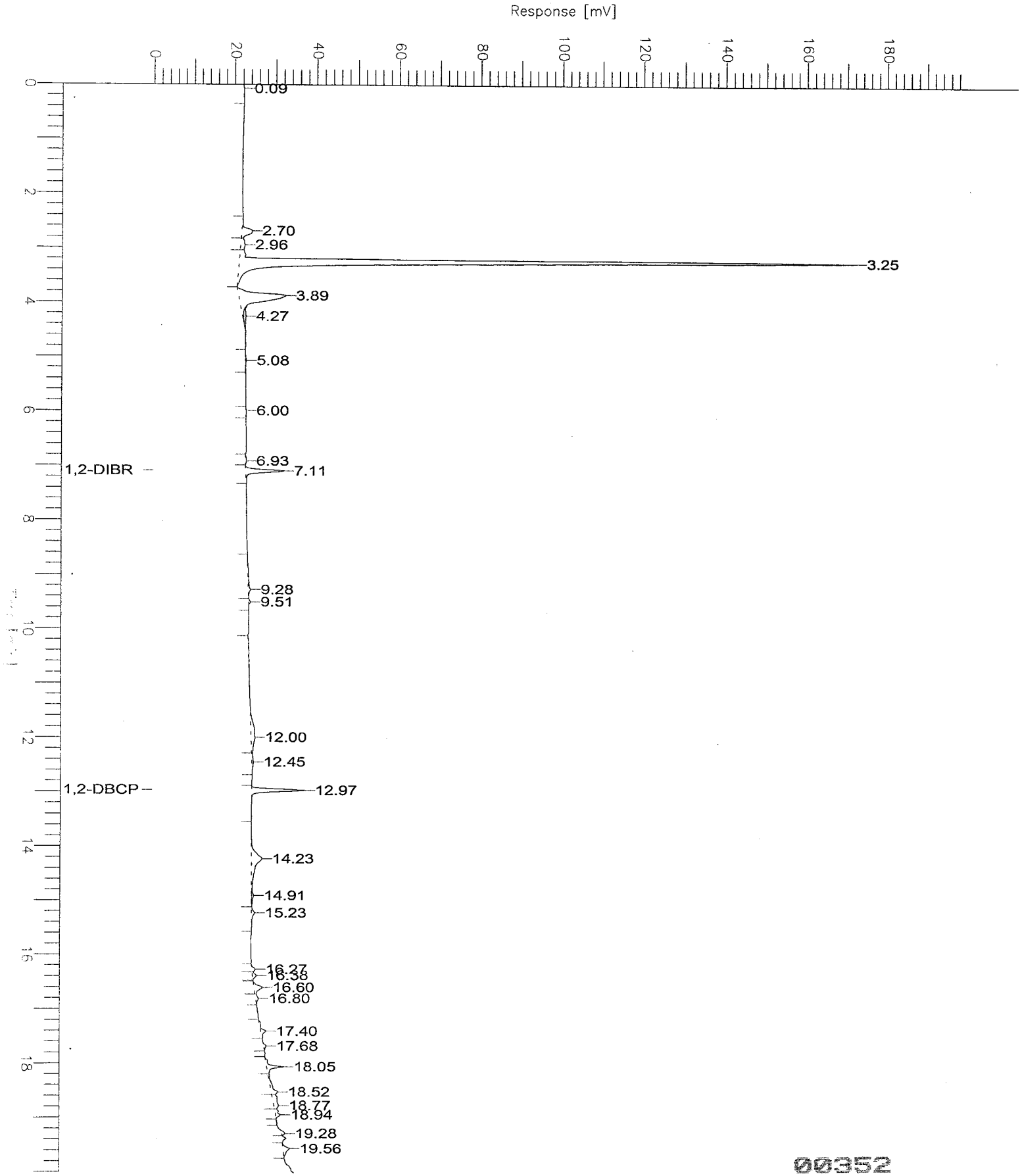
Time (min)	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)	
6.32	1,2-DIBROMOETHANE	0.0050	28017.34	108806.00	35	2	0.28687	Pass
11.72	1,2-DIBROMO3CHLOROPR	0.0045	37273.13	131726.00	35	2	0.25437	
			65290.46	240532.00				

Report stored in ASCII file: C:\TC4\158\MAY2012\AMAY038.TX0

Chromatogram

Sample Name : CCV2
FileName : C:\TC4\158\MAY2012\BMAY038.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/4/12 15:59
Time of Injection: 5/4/12 15:11
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00352

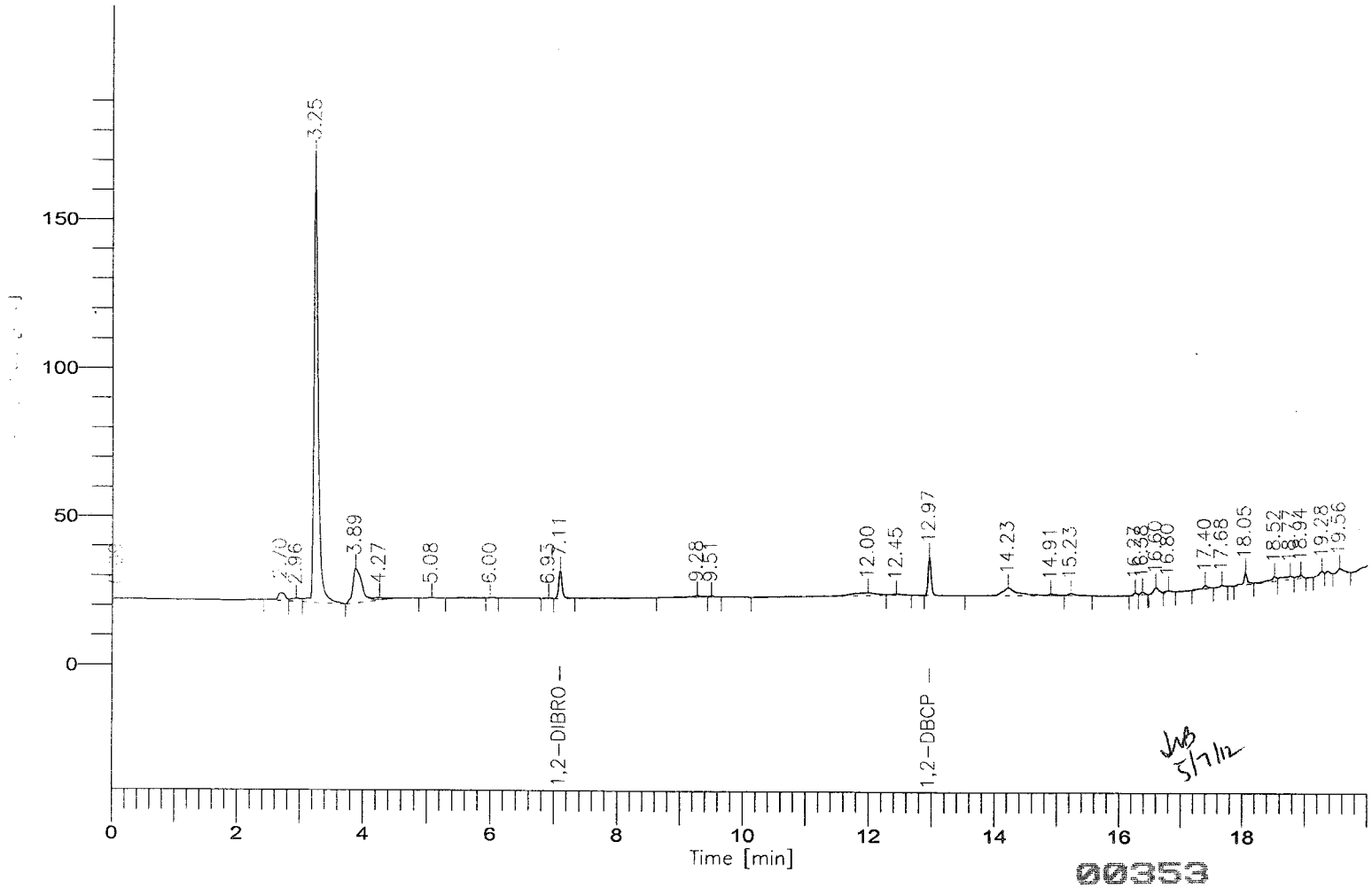
Software Version: 4.1<2F12>
Sample Name : CCV2 Time : 5/4/12 15:59
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 15:11
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\BMAY038.RAW
Result File : C:\TC4\158\MAY2012\BMAY038.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\BMAY038.RS
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



JWB 5/7/12

00353

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)	
7.11	1,2-DIBROMOETHANE (2	0.0049	9640.16	35427.00	35	2	0.28137	Pass
12.97	1,2-DBCP (2C)	0.0051	12982.09	43173.00	35	2	0.29156	
			22622.25	78600.00				

Report stored in ASCII file: C:\TC4\158\MAY2012\BMAY038.TX0

METHOD BLANK DATA SHEET
USEPA-8011

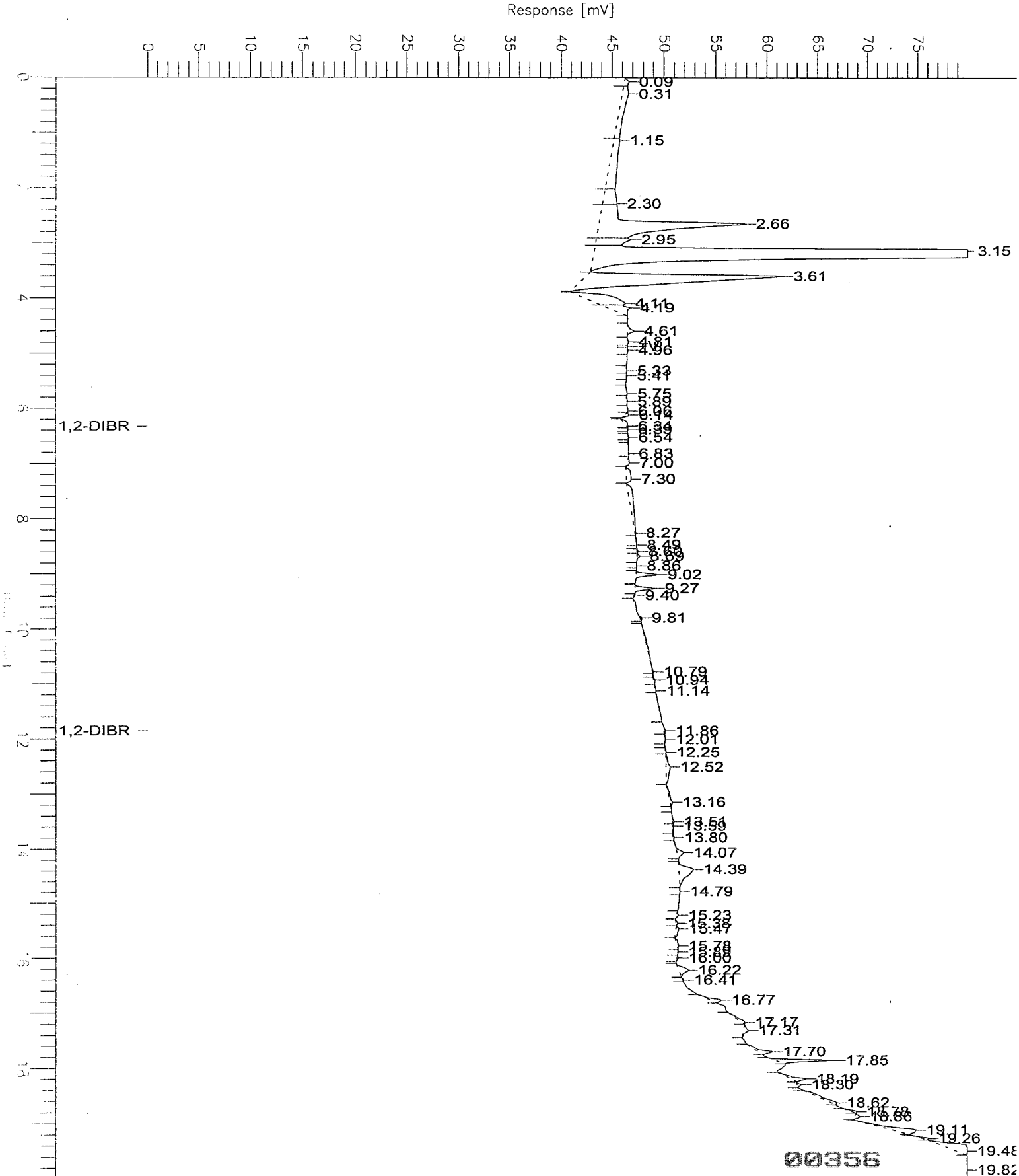
Laboratory: TriMatrix Laboratories, Inc.
SDG: KNM050112
Client: TechLaw
Project: KNM
Matrix: Water
Laboratory ID: 1205560-BLK1
File ID: AMAY028-0
Prepared: 05/04/12 08:27
Analyzed: 05/04/12 10:31
Preparation: Method-Specific Extracti
Initial/Final: 35 mL / 2 mL
QC Batch: 1205560
Sequence: 2E07013
Calibration: 2D17008
Instrument: 158

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
106-93-4	1,2-Dibromoethane	0.050	ug/L	0.0078	0.050	U

Chromatogram

Sample Name : 1205560-BLK1
FileName : C:\TC4\158\MAY2012\AMAY028.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/4/12 15:58
Time of Injection: 5/4/12 10:31
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



00356

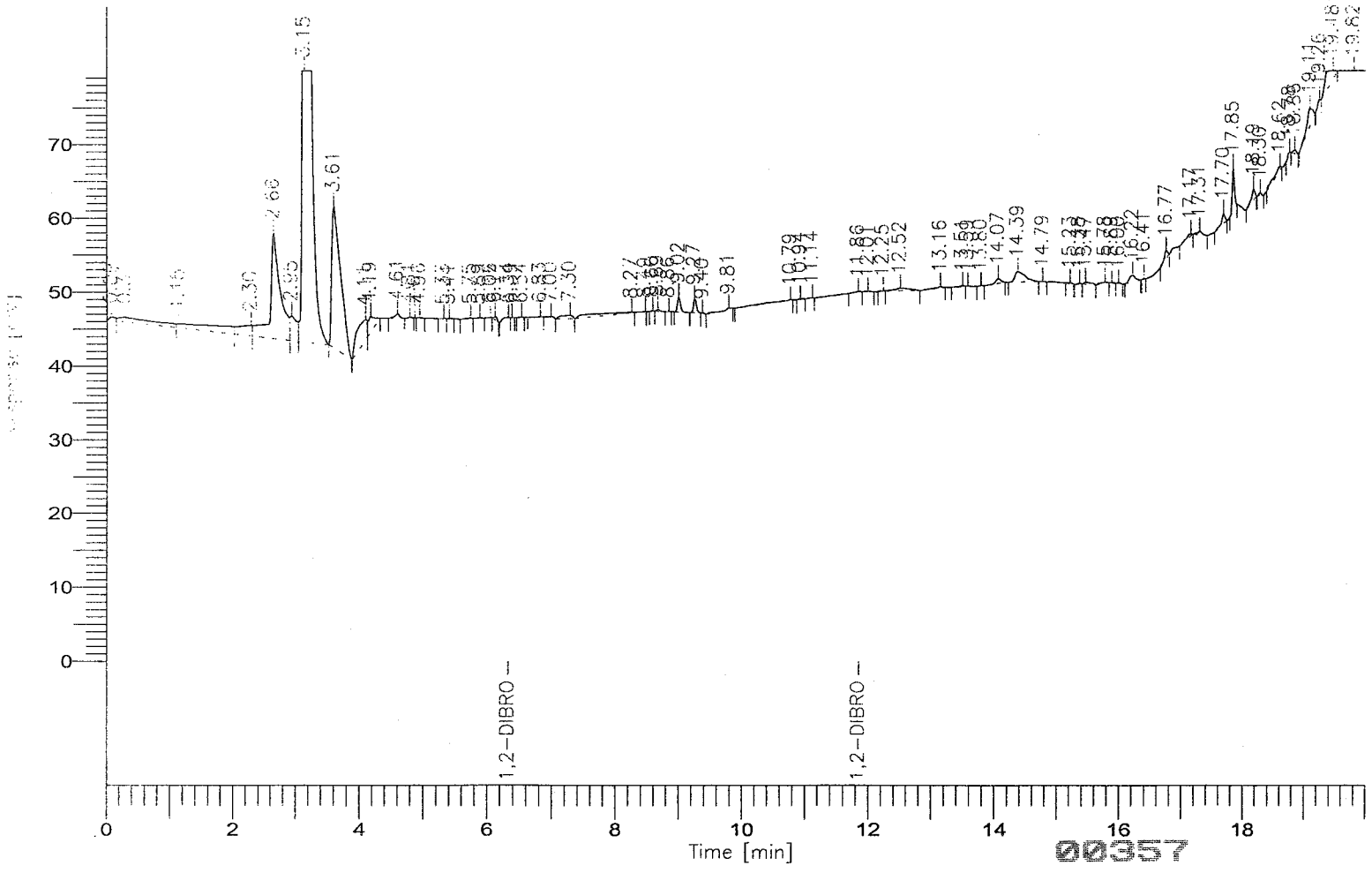
Software Version: 4.1<2F12>
Sample Name : 1205560-BLK1 Time : 5/4/12 15:58
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 10:31
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\AMAY028.RAW
Result File : C:\TC4\158\MAY2012\AMAY028.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\AMAY028.RS
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

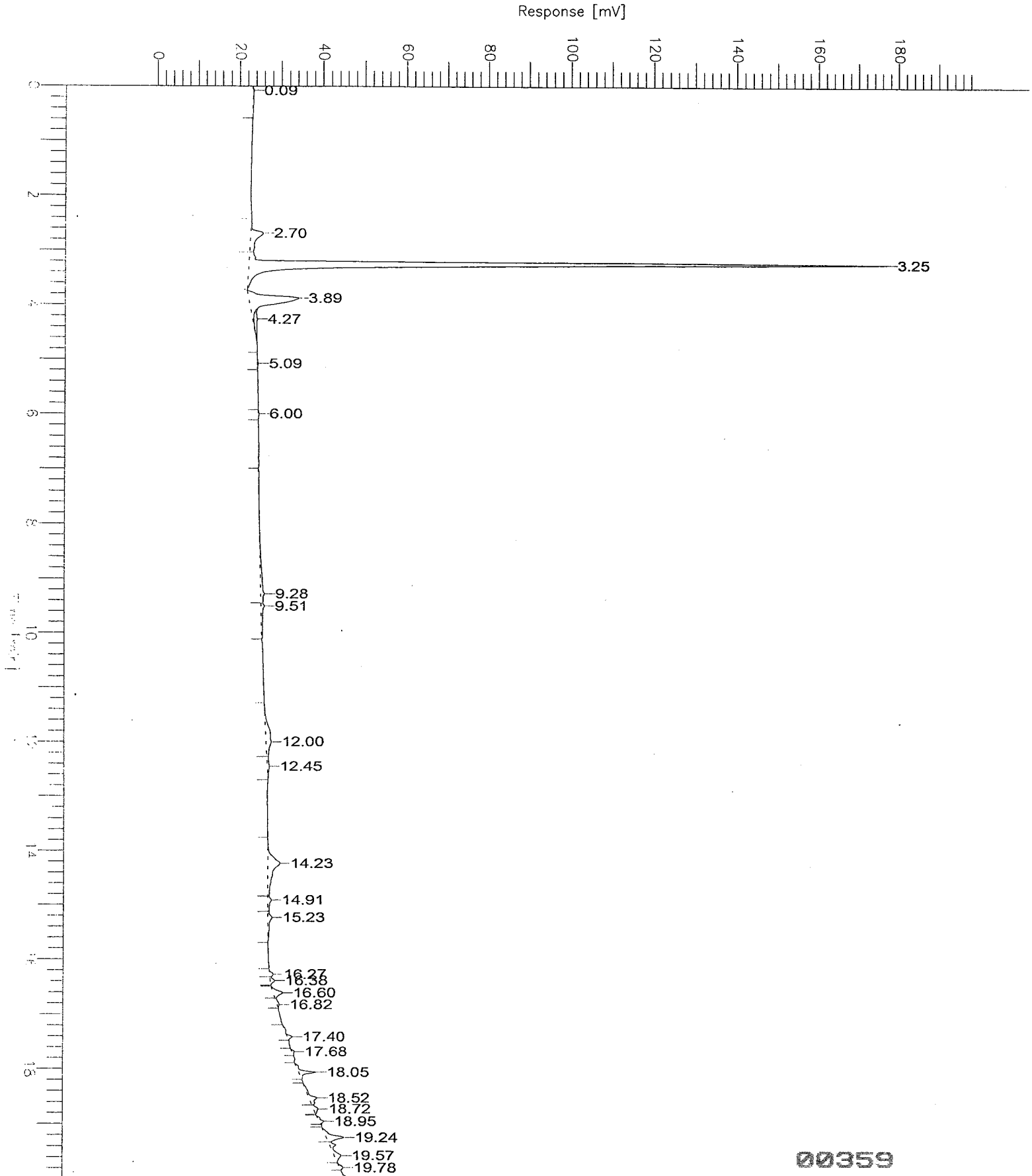
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)	
6.34	1,2-DIBROMOETHANE	-0.0006	124.50	2457.00	35	2	-0.03175	<MDL
11.86	1,2-DIBROMO3CHLOROPR	-0.0002	121.86	1007.50	35	2	-0.01400	
			246.36	3464.50				

Report stored in ASCII file: C:\TC4\158\MAY2012\AMAY028.TX0

Chromatogram

Sample Name : 1205560-BLK1
FileName : C:\TC4\158\MAY2012\BMAY028.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/4/12 15:58
Time of Injection: 5/4/12 10:31
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00359

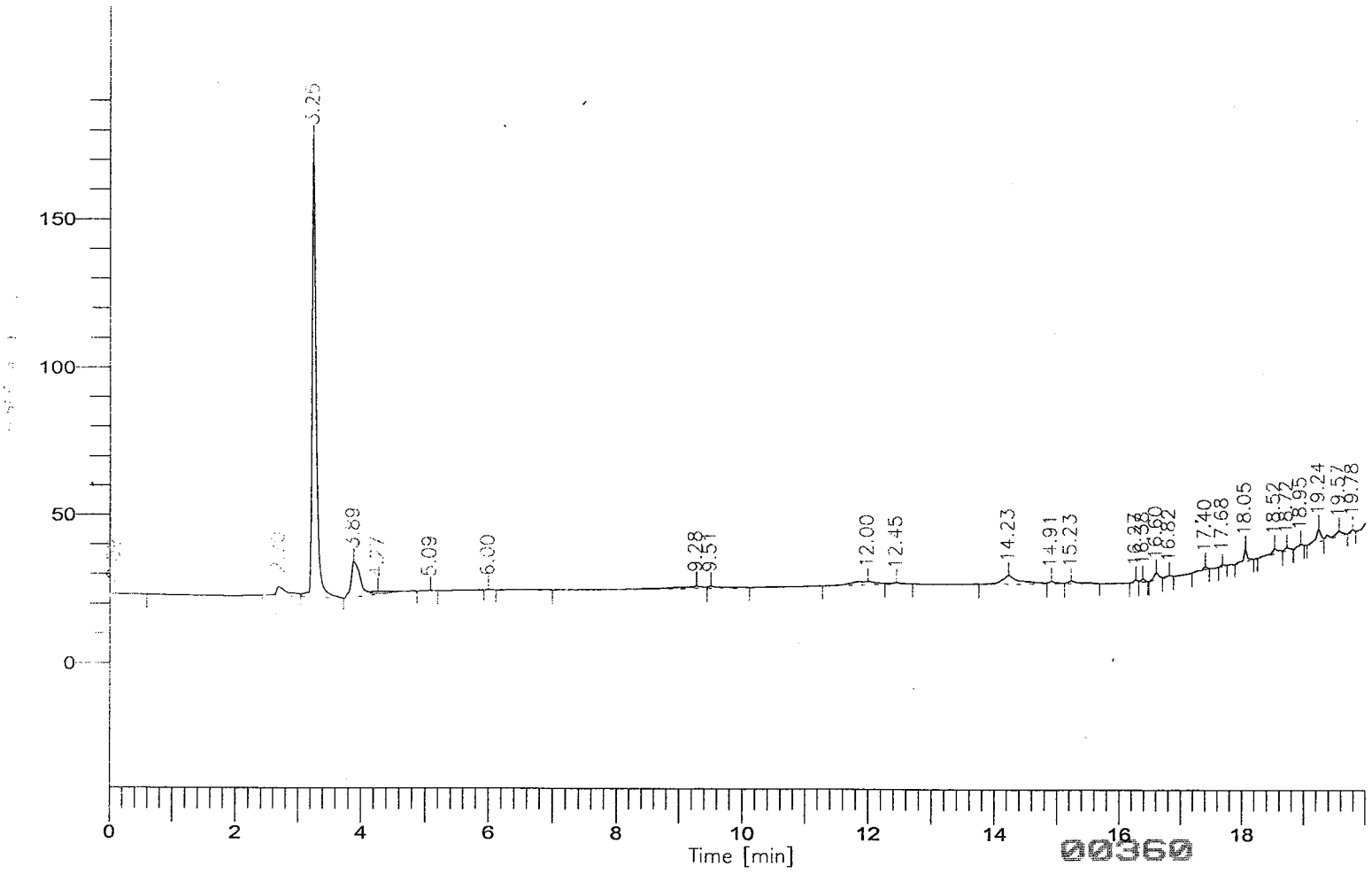
Software Version: 4.1<2F12>
Sample Name : 1205560-BLK1 Time : 5/4/12 15:58
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 10:31
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\BMAY028.RAW
Result File : C:\TC4\158\MAY2012\BMAY028.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\BMAY028.RS
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00360

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)	
7.11	1,2-DIBROMOETHANE (2	0.0000	0.00	0.00	35	2	0.00000	ZMDL
12.98	1,2-DBCP (2C)	0.0000	0.00	0.00	35	2	0.00000	
			0.00	0.00				

Report stored in ASCII file: C:\TC4\158\MAY2012\BMAY028.TX0

LCS / LCS DUPLICATE RECOVERY

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205560

SDG: KNM050112

Project: KNM

Laboratory ID: 1205560-BS1

Preparation: Method-Specific Extraction

Initial/Final: 35 mL / 2 mL

Sequence: 2E07013

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
1,2-Dibromoethane	0.320	0.263	82	60 - 140	ug/L

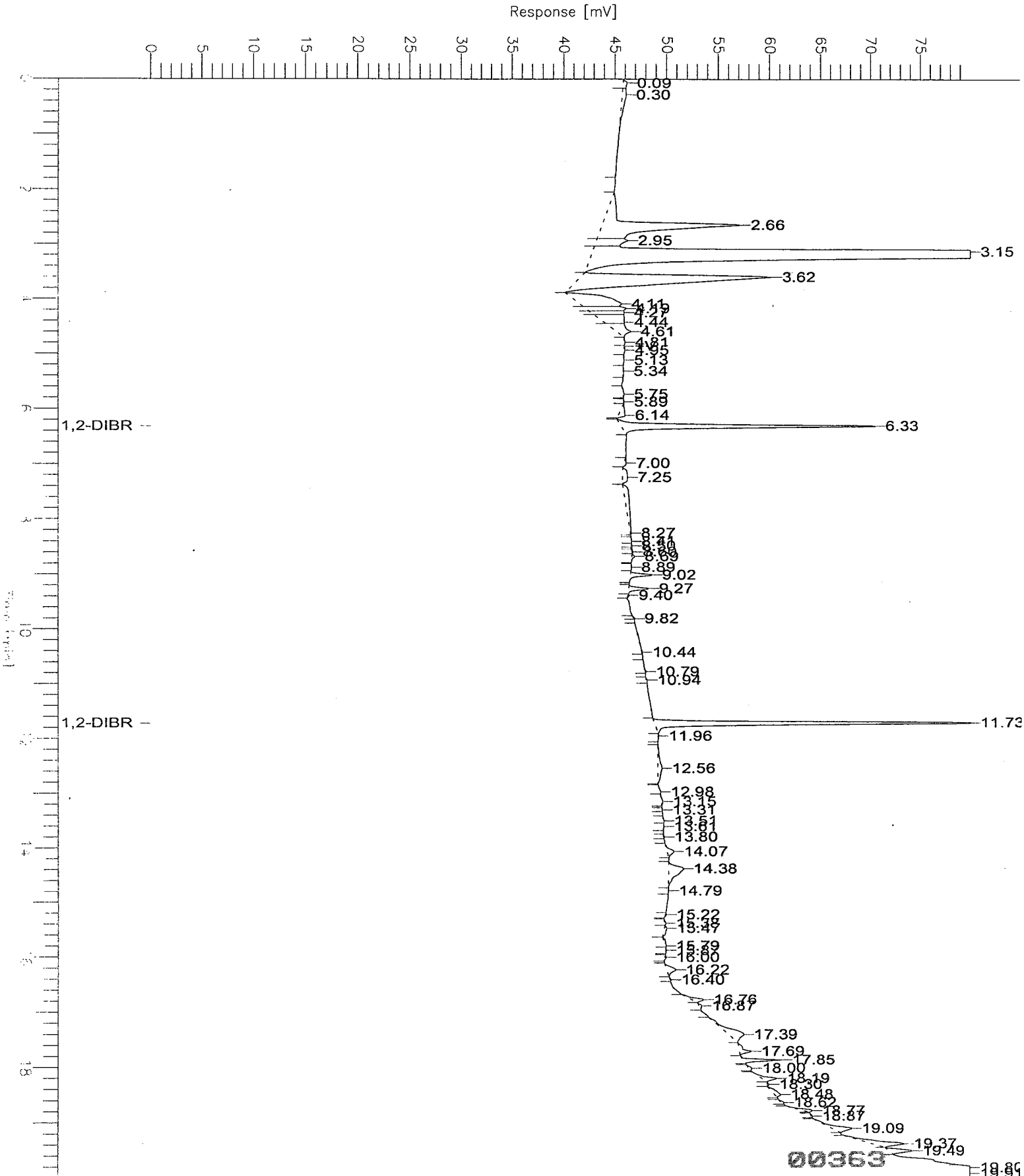
Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Chromatogram

Sample Name : 1205560-BS1
FileName : C:\TC4\158\MAY2012\AMAY029.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/4/12 15:58
Time of Injection: 5/4/12 10:59
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



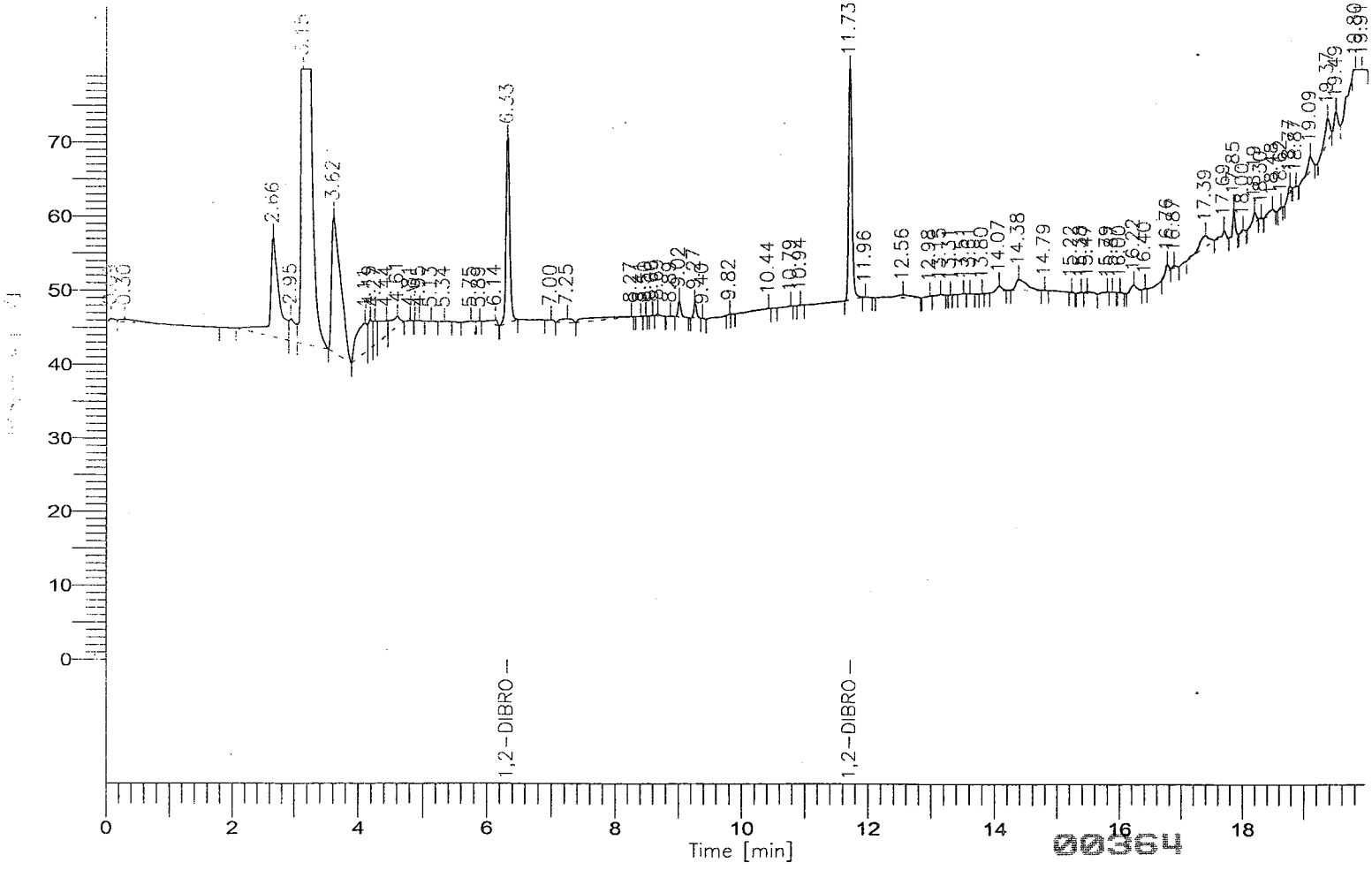
Software Version: 4.1<2F12>
Sample Name : 1205560-BS1 Time : 5/4/12 15:58
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 10:59
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\AMAY029.RAW
Result File : C:\TC4\158\MAY2012\AMAY029.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\AMAY029.R
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00364

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

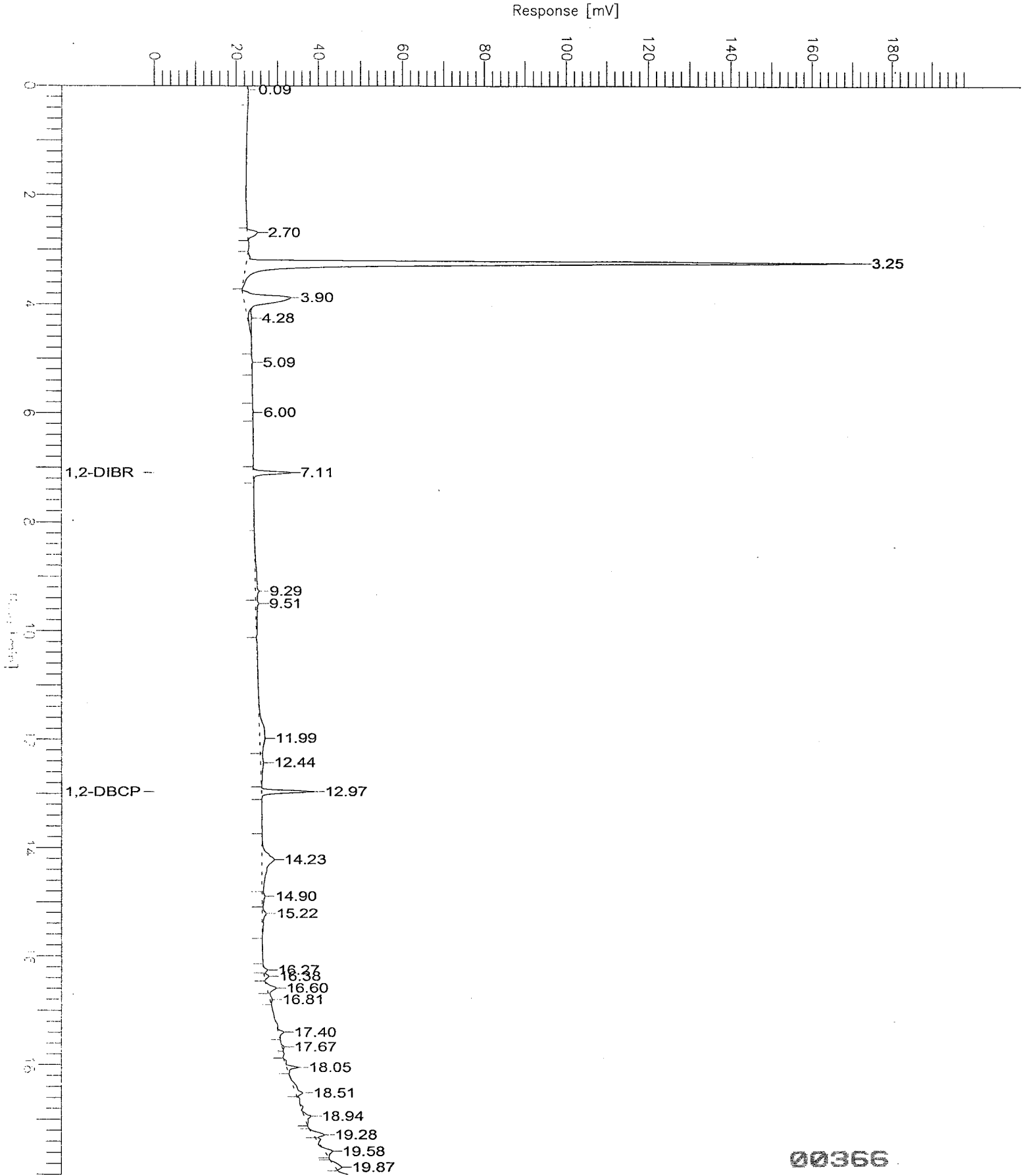
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.33	1,2-DIBROMOETHANE	0.0046	25934.46	99906.50	35	2	0.26308
11.73	1,2-DIBROMO3CHLOROPR	0.0041	34594.95	122669.00	35	2	0.23502
			60529.41	222575.50			

Report stored in ASCII file: C:\TC4\158\MAY2012\AMAY029.TX0

Chromatogram

Sample Name : 1205560-BS1
FileName : C:\TC4\158\MAY2012\BMAY029.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/4/12 15:58
Time of Injection: 5/4/12 10:59
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00366

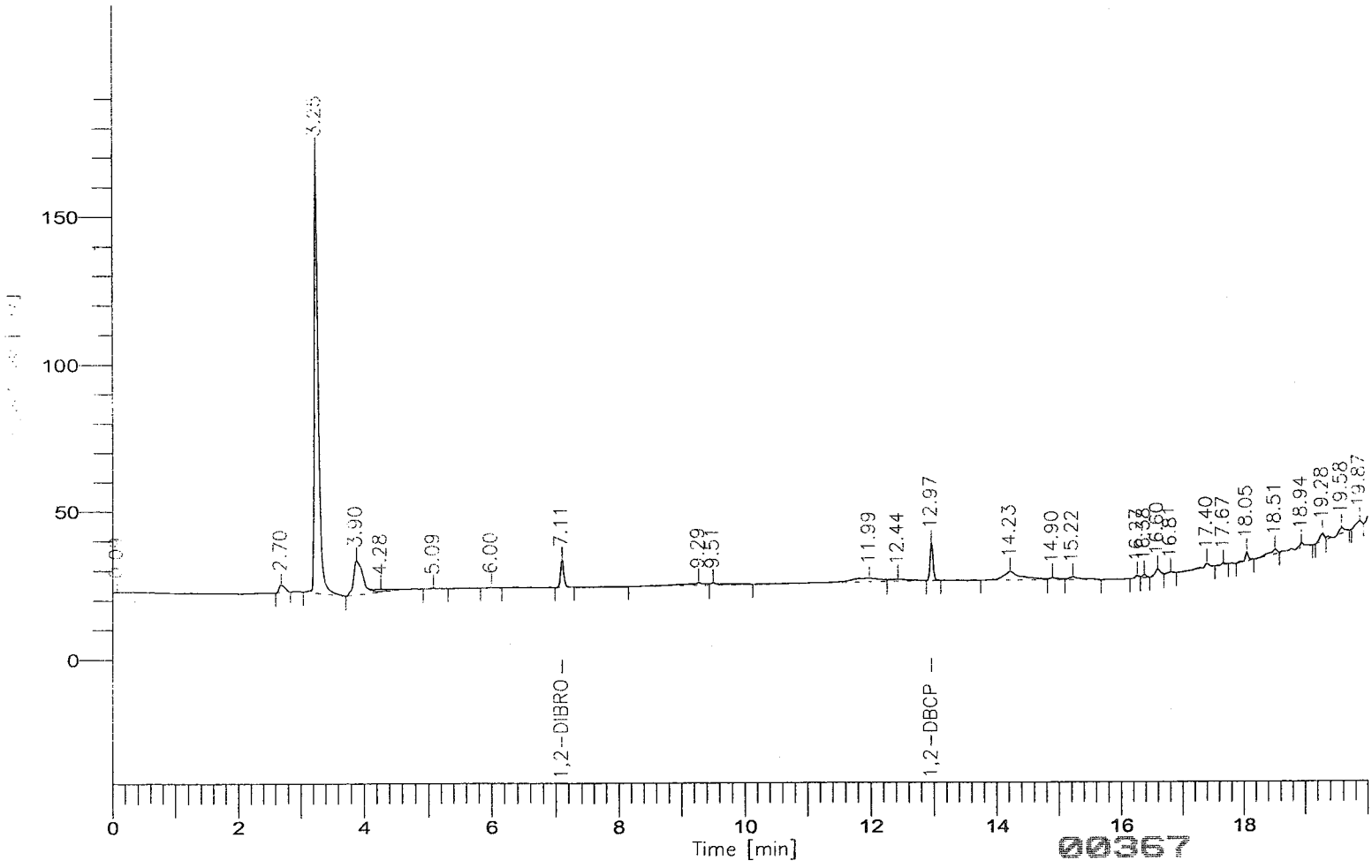
Software Version: 4.1<2F12>
Sample Name : 1205560-BS1 Time : 5/4/12 15:58
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 10:59
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\BMAY029.RAW
Result File : C:\TC4\158\MAY2012\BMAY029.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\BMAY029.RS
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
7.11	1,2-DIBROMOETHANE (2	0.0048	9402.77	33894.00	35	2	0.27420
12.97	1,2-DBCP (2C)	0.0050	12819.49	42210.56	35	2	0.28803
			22222.26	76104.56			

Report stored in ASCII file: C:\TC4\158\MAY2012\BMAY029.TX0

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106037

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205560

SDG: KNM050112

Project: KNM

Laboratory ID: 1205560-MS1

Preparation: Method-Specific Extraction

Initial/Final: 34.9 mL / 2 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
1,2-Dibromoethane	0.321	0.168	0.430	82	60 - 140	ug/L

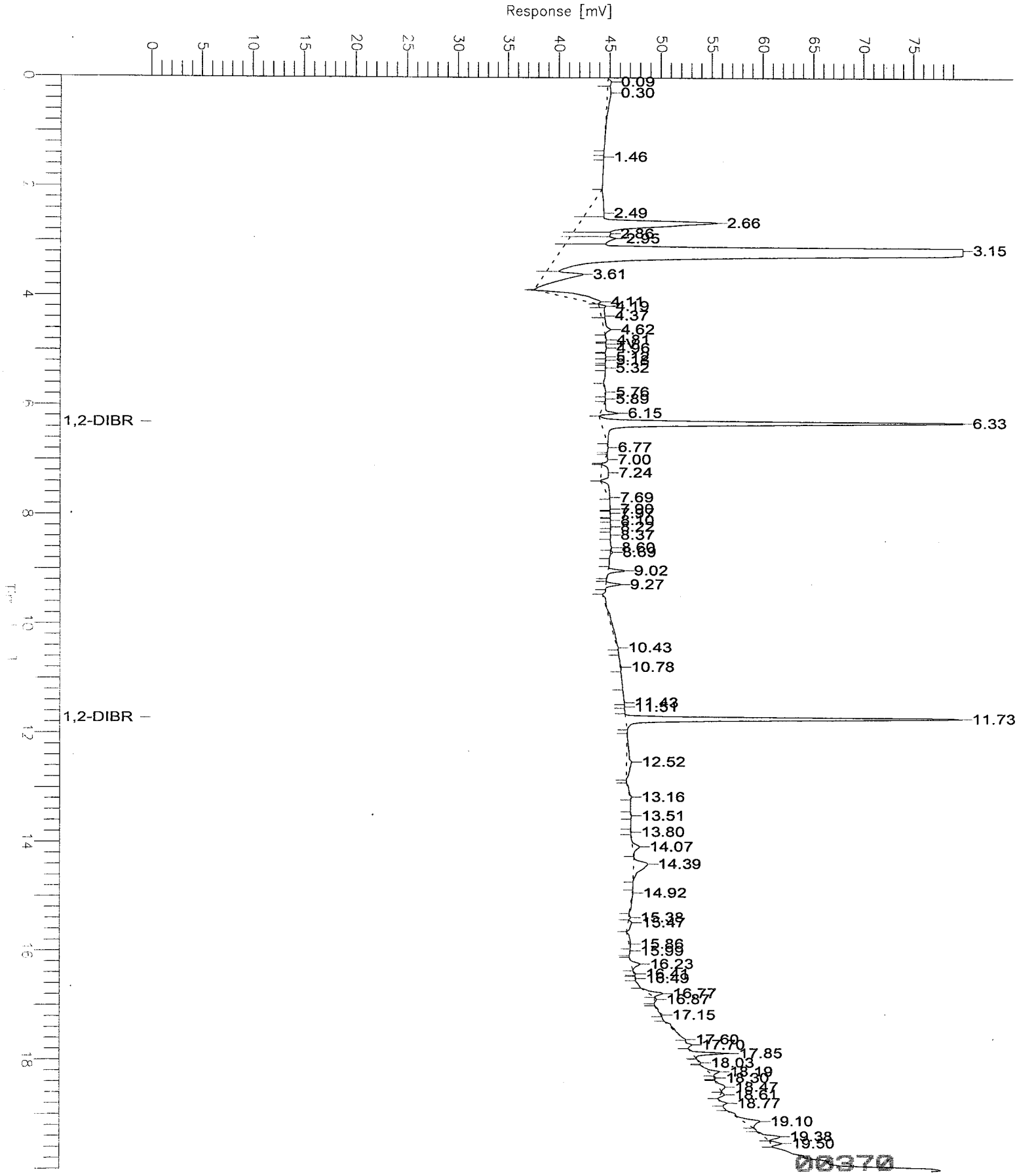
Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Chromatogram

Sample Name : 1205560-MS1
FileName : C:\TC4\158\MAY2012\AMAY036.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/7/12 09:23
Time of Injection: 5/4/12 14:15
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



Software Version: 4.1<2F12>
Sample Name : 1205560-MS1
Sample Number:
Operator : BJH

Time : 5/7/12 09:23
Study : 8011

Instrument : 158
AutoSampler :
Rack/Vial : 0/0

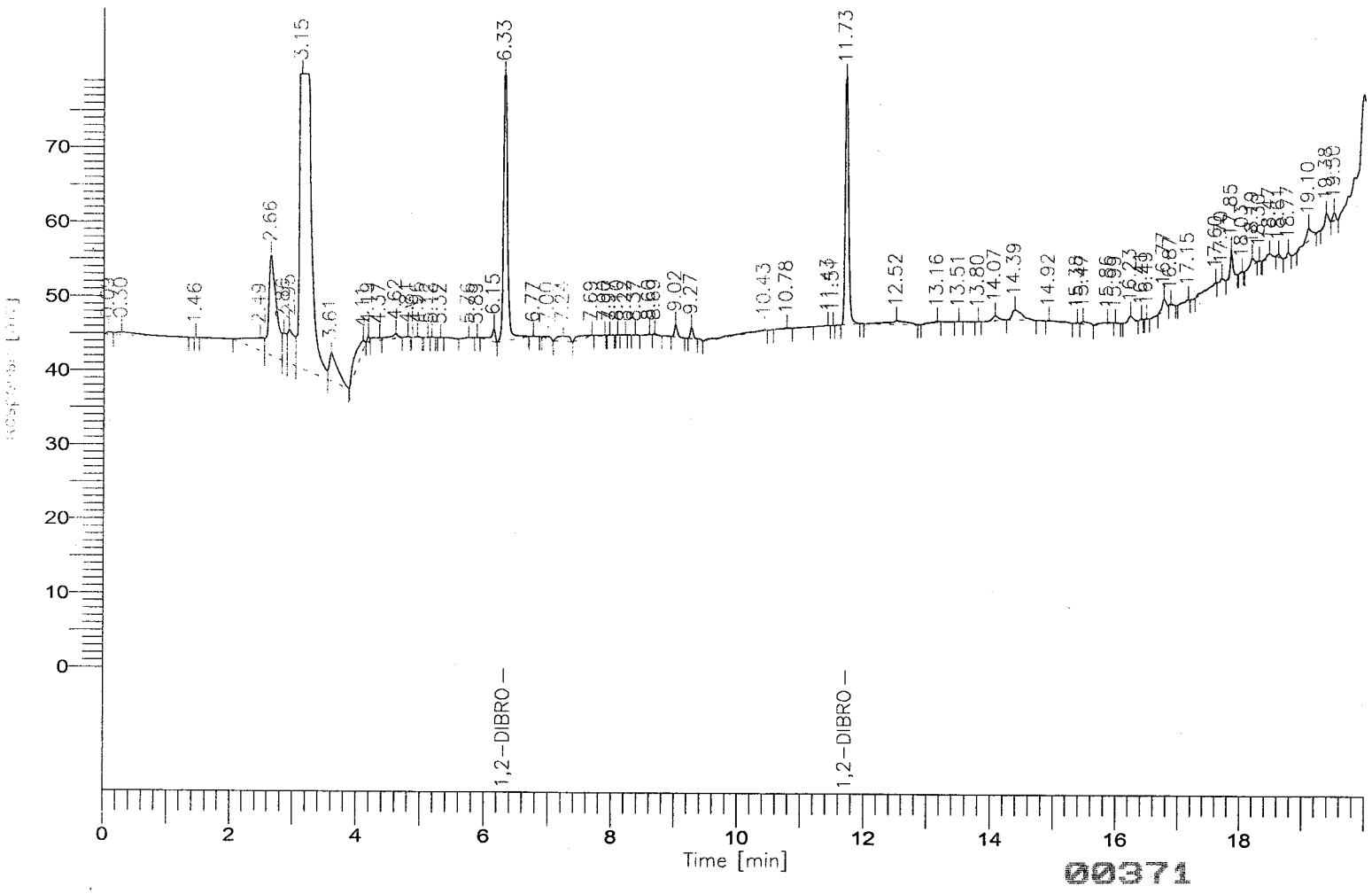
Channel : A A/D mV Range : 1000

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 14:15
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\AMAY036.RAW
Result File : C:\TC4\158\MAY2012\AMAY036.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\AMAY036.RS
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul
Sample Amount : 1.0000

Area Reject : 0.000000
Dilution Factor : 1.00



00371

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

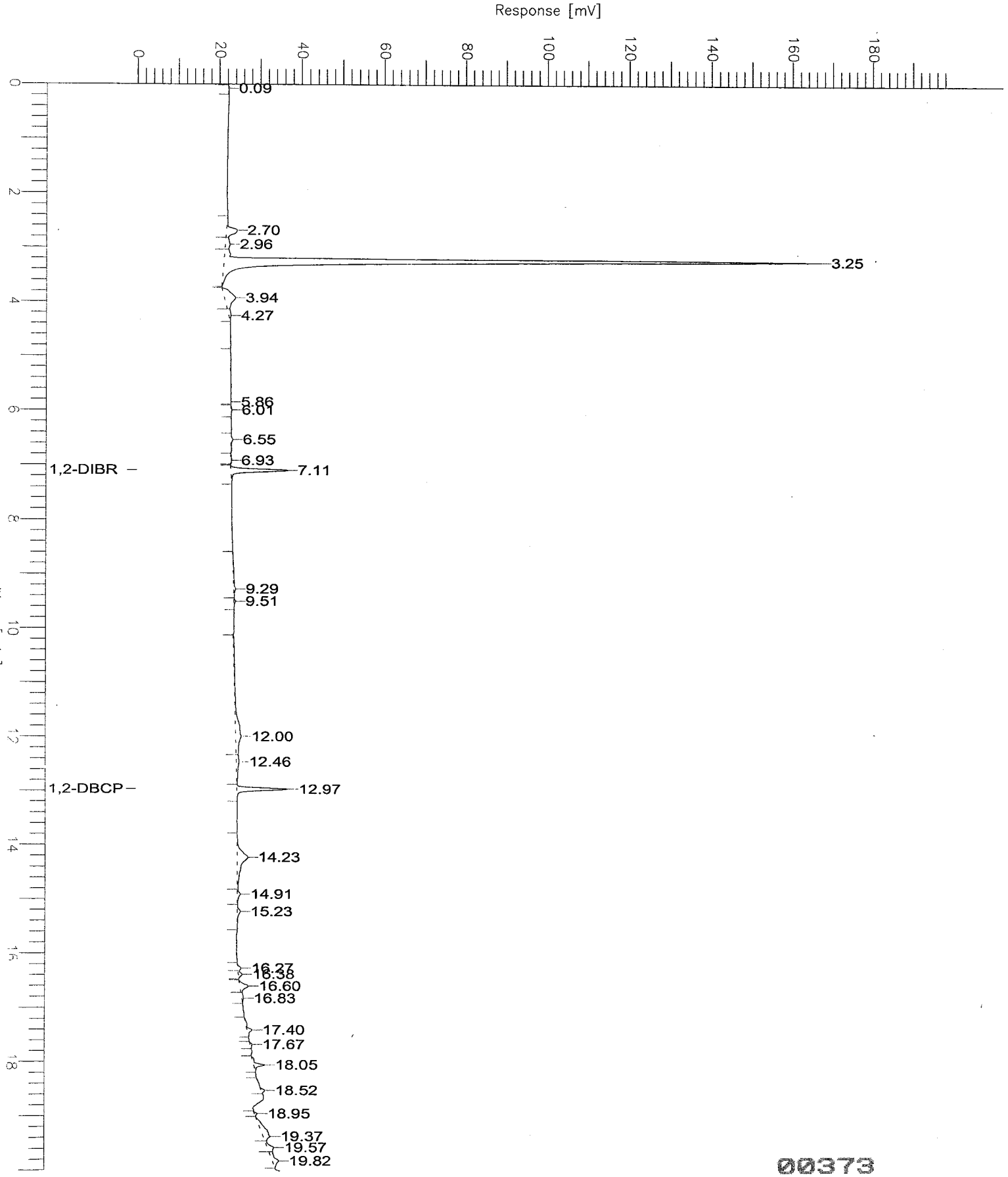
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.33	1,2-DIBROMOETHANE	0.0075	40567.35	163529.00	35	2	0.43146
11.73	1,2-DIBROMO3CHLOROPR	0.0042	35487.92	125845.00	35	2	0.24216
			76055.27	289374.00			

Report stored in ASCII file: C:\TC4\158\MAY2012\AMAY036.TX0

Chromatogram

Sample Name : 1205560-MS1
FileName : C:\TC4\158\MAY2012\BMAY036.raw
Method : 041612A
Start Time : 0:00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/7/12 09:23
Time of Injection: 5/4/12 14:15
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



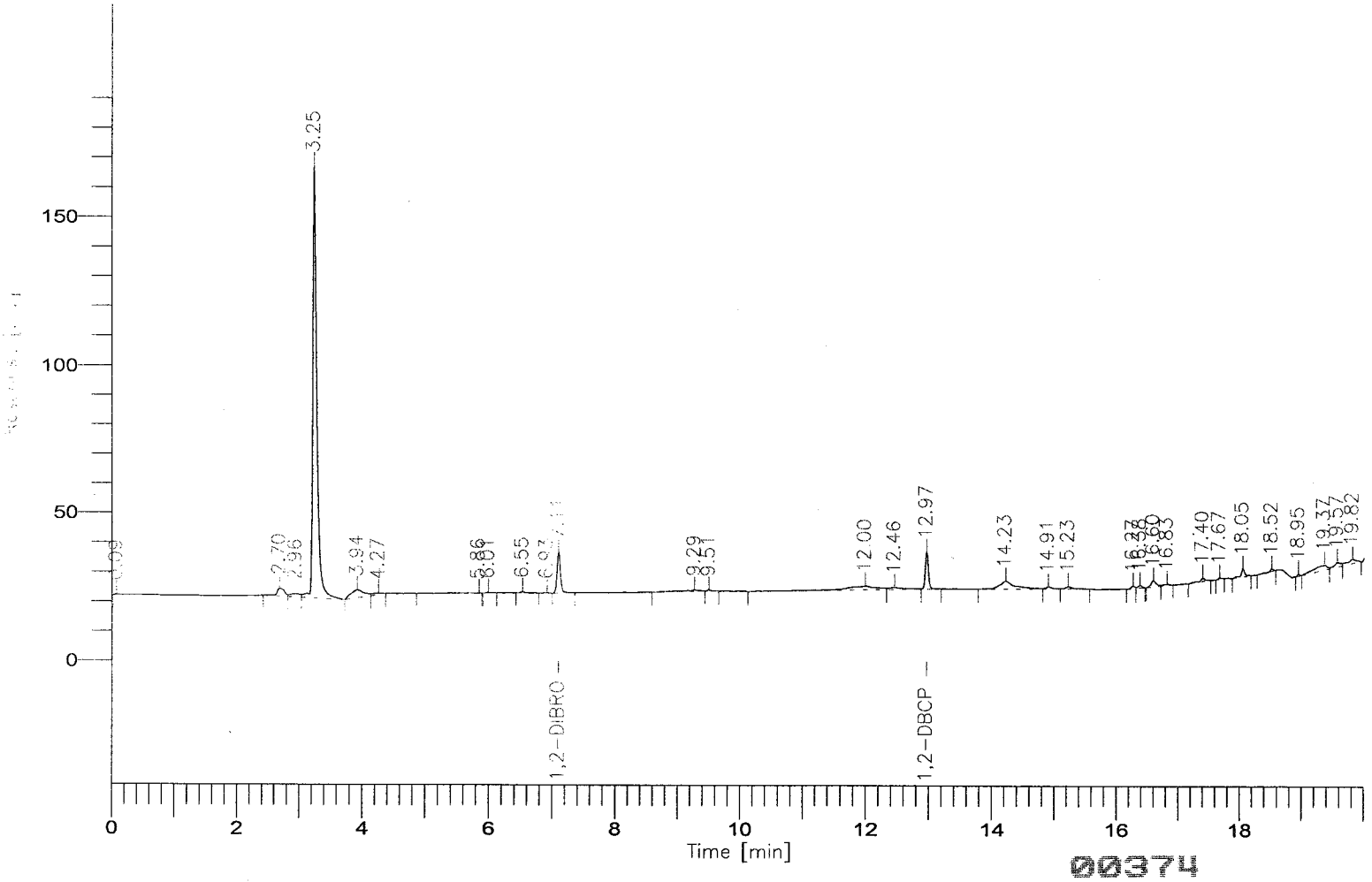
Software Version: 4.1<2F12>
Sample Name : 1205560-MS1 Time : 5/7/12 09:23
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 14:15
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\BMAY036.RAW
Result File : C:\TC4\158\MAY2012\BMAY036.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\BMAY036.RS
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00374

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
7.11	1,2-DIBROMOETHANE (2	0.0074	14309.92	52704.00	35	2	0.42359
12.97	1,2-DBCP (2C)	0.0050	12634.80	42694.86	35	2	0.28484
			26944.72	95398.86			

Report stored in ASCII file: C:\TC4\158\MAY2012\BMAY036.TX0

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

106037

USEPA-8011

Laboratory: TriMatrix Laboratories, Inc.

Client: TechLaw

Matrix: Water

QC Batch: 1205560

SDG: KNM050112

Project: KNM

Laboratory ID: 1205560-MSD1

Preparation: Method-Specific Extraction

Initial/Final: 35 mL / 2 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
1,2-Dibromoethane	0.320	0.434	83	1	20	60 - 140	ug/L

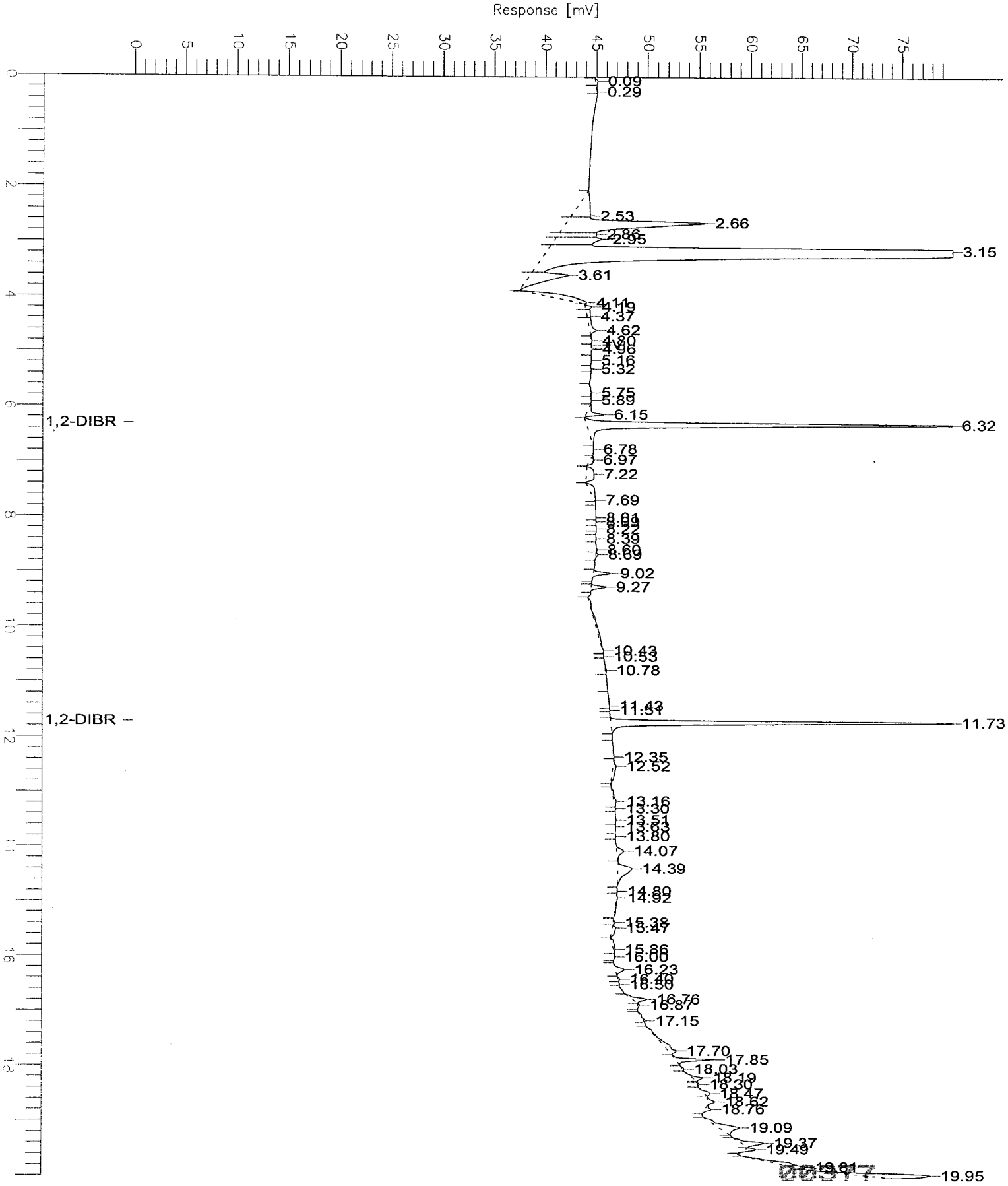
Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Chromatogram

Sample Name : 1205560-MSD1
FileName : C:\TC4\158\MAY2012\AMAY037.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/7/12 09:23
Time of Injection: 5/4/12 14:43
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



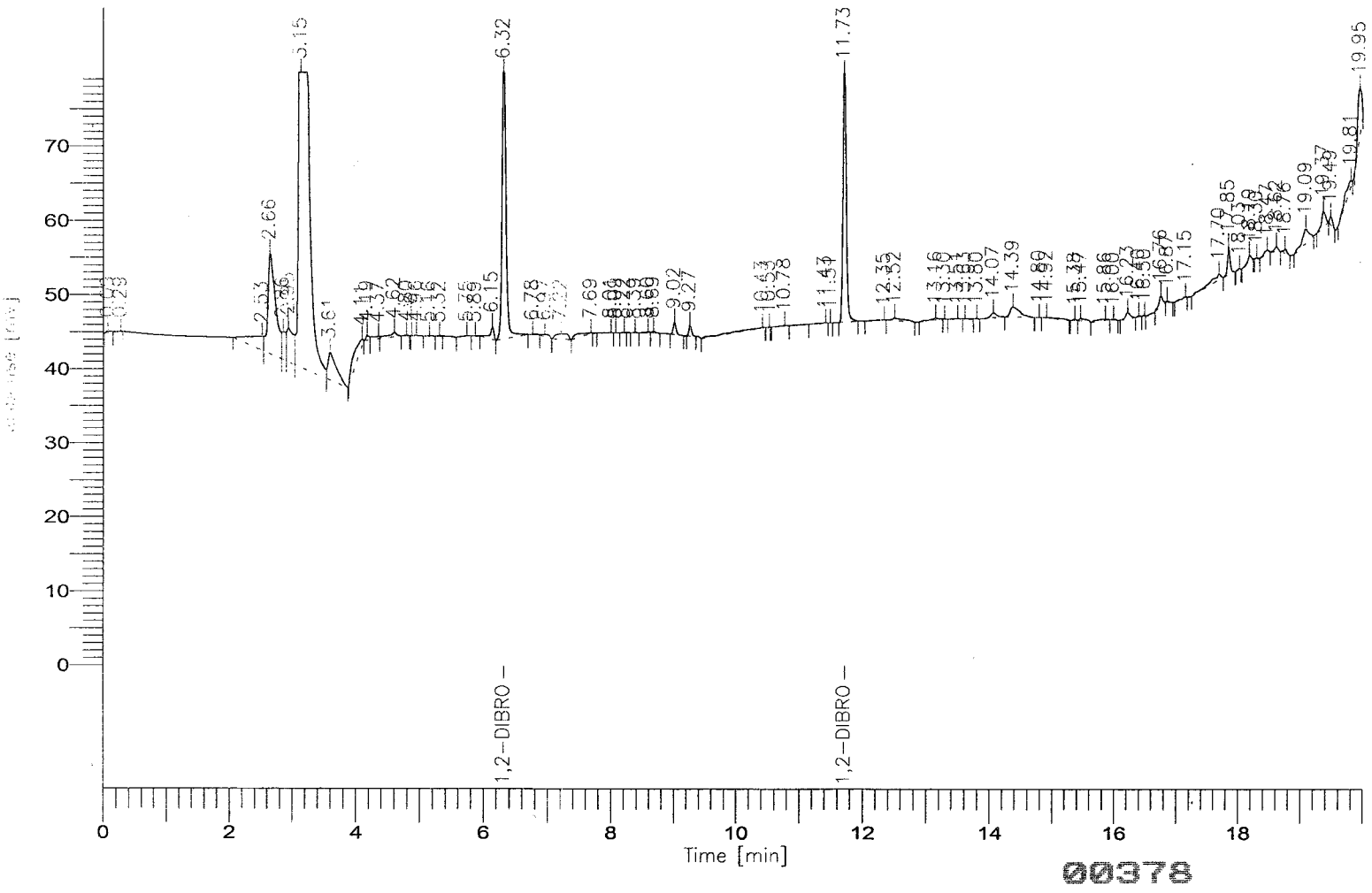
Software Version: 4.1<2F12>
Sample Name : 1205560-MSD1 Time : 5/7/12 09:23
Sample Number: Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 14:43
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\AMAY037.RAW
Result File : C:\TC4\158\MAY2012\AMAY037.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\AMAY037.RS
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00378

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

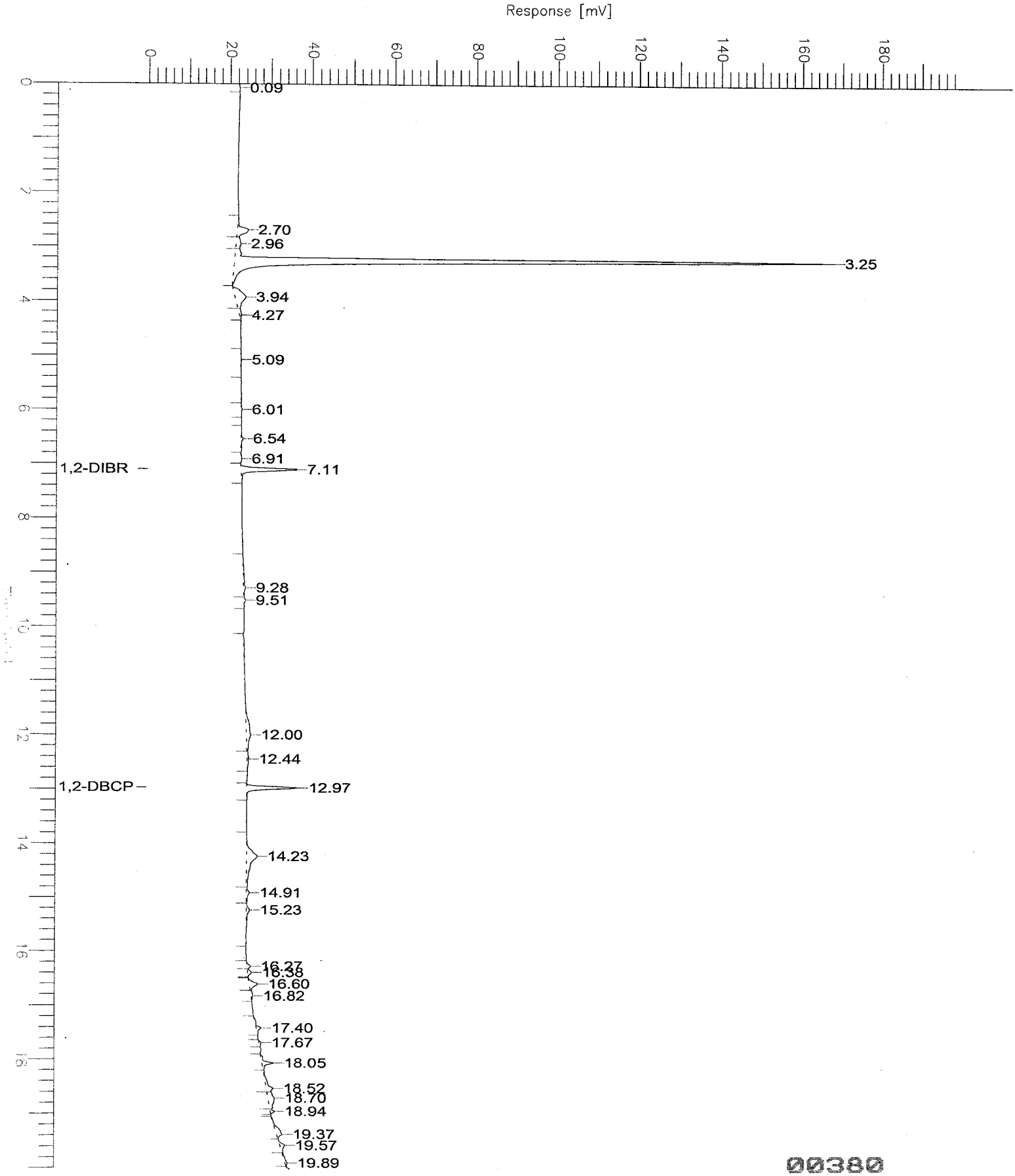
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.32	1,2-DIBROMOETHANE	0.0076	41010.73	163707.00	35	2	0.43529
11.73	1,2-DIBROMO3CHLOROPR	0.0042	35567.35	126687.00	35	2	0.24205
			76578.09	290394.00			

Report stored in ASCII file: C:\TC4\158\MAY2012\AMAY037.TX0

Chromatogram

Sample Name : 1205560-MSD1
FileName : C:\TC4\158\MAY2012\BMAY037.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: Page 1 of 1
Date : 5/7/12 09:23
Time of Injection: 5/4/12 14:43
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



00380

Software Version: 4.1<2F12>
Sample Name : 1205560-MSD1
Sample Number:
Operator : BJH

Time : 5/7/12 09:23
Study : 8011

Instrument : 158
AutoSampler :
Rack/Vial : 0/0

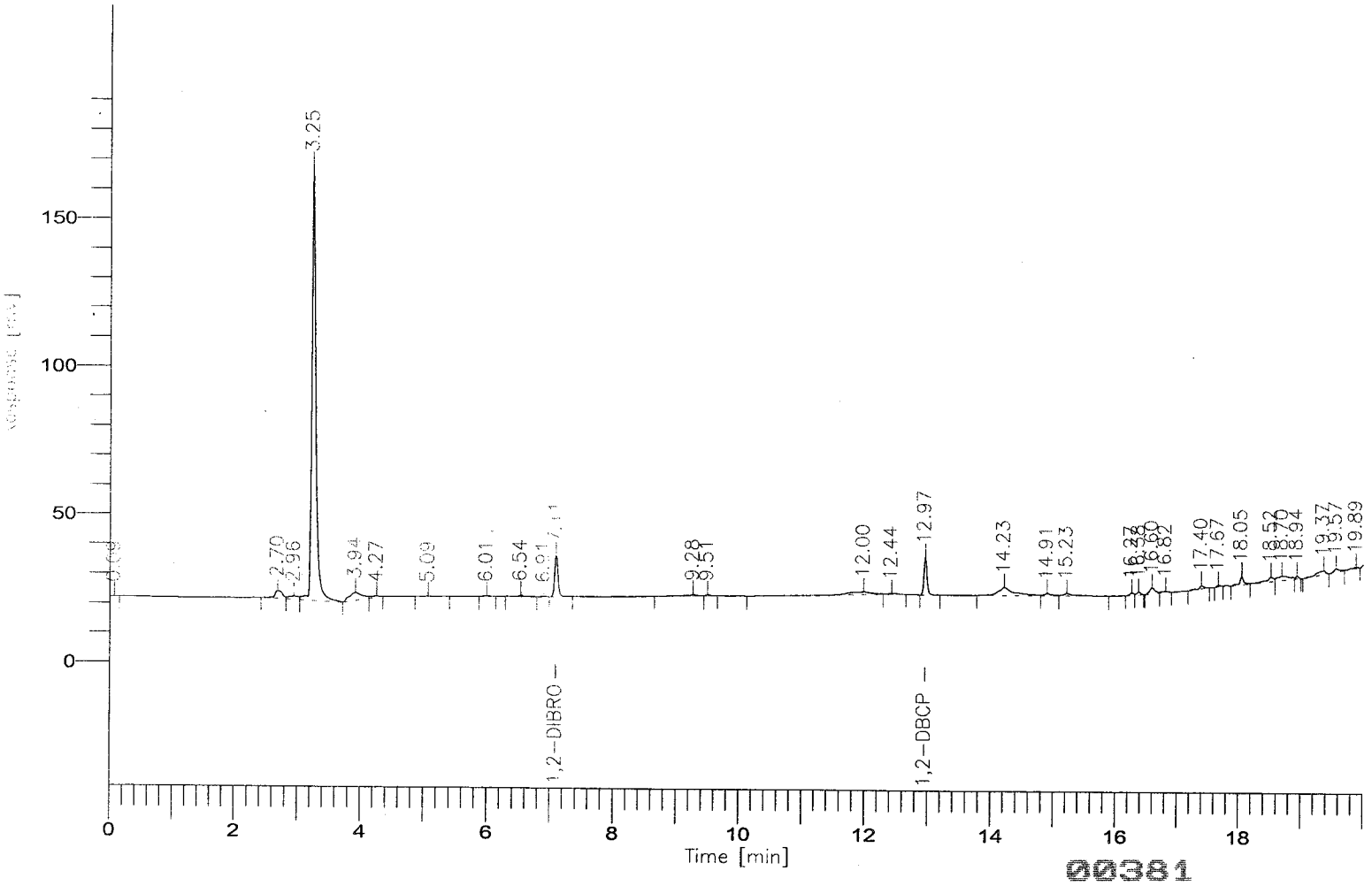
Channel : B A/D mV Range : 1000

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 14:43
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\BMAY037.RAW
Result File : C:\TC4\158\MAY2012\BMAY037.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\BMAY037.RS
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul
Sample Amount : 1.0000

Area Reject : 0.000000
Dilution Factor : 1.00



00381

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
7.11	1,2-DIBROMOETHANE (2	0.0074	14374.85	52749.00	35	2	0.42434
12.97	1,2-DBCP (2C)	0.0050	12644.30	41650.50	35	2	0.28423
			27019.15	94399.50			

Report stored in ASCII file: C:\TC4\158\MAY2012\BMAY037.TX0

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1205560

Printed: 5/7/2012 8:41:53AM

Semivolatiles GC, Water, Method-Specific Extraction

(No Surrogate)

Batch Comments: (none)

Standard	Description	Solvent	LotNum
2040528	8011 2.24 ug/mL	MeOH/113905	na

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204454	8011 EDB/DBCP	1205072	8011 EDB/DBCP	1205073	8011 EDB/DBCP
1205085	8011 EDB/DBCP				

Balance ID: _____ **pH Meter:** _____

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1205560-BLK1		May-04-12 08:27	BJH	35	2					BLANK	
1205560-BS1		May-04-12 08:27	BJH	35	2			2040528	5	LCS	
1205560-MS1		May-04-12 08:27	BJH	34.9	2		1205085-02	2040528	5	MATRIX SPIKE	
1205560-MSD1		May-04-12 08:27	BJH	35	2		1205085-02	2040528	5	MATRIX SPIKE DUP	
1204454-01	A	May-04-12 08:27	BJH	34.6	2					TechLaw	EDB only
1204454-02	A	May-04-12 08:27	BJH	34.5	2					TechLaw	EDB only
1205072-01	A	May-04-12 08:27	BJH	34.4	2					TechLaw	EDB only
1205073-01	A	May-04-12 08:27	BJH	34.7	2					TechLaw	EDB only
1205085-01	A	May-04-12 08:27	BJH	34.7	2					TechLaw	EDB only
1205085-02	A	May-04-12 08:27	BJH	34.6	2					TechLaw	EDB only

Comments:	Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1205560

Printed: 5/4/2012 8:32:39AM

Semivolatiles GC, Water, Method-Specific Extraction

(No Surrogate)

Batch Comments: (none)

Standard	Description	Solvent	LotNum

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1204454	8011 EDB/DBCP	1205072	8011 EDB/DBCP	1205073	8011 EDB/DBCP
1205085	8011 EDB/DBCP				

Balance ID: _____ **pH Meter:** _____

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1205560-BLK1		May-04-12 08:27	BJH	35	2					BLANK	
1205560-BS1		May-04-12 08:27	BJH	35	2			204052E	5.0	LCS	
1205560-MS1		May-04-12 08:27	BJH	~~35~~ 34.9	2	60.4 -25.9	1205085-02	↓	↓	MATRIX SPIKE	
1205560-MSD1		May-04-12 08:27	BJH	35	2	60.5 -25.9	1205085-02			MATRIX SPIKE DUP	
1204454-01	A	May-04-12 08:27	BJH	~~35~~ 34.6	2	60.6 -26.0				TechLaw	EDB only
1204454-02	A	May-04-12 08:27	BJH	~~35~~ 34.5	2	60.5 -26.0				TechLaw	EDB only
1205072-01	A	May-04-12 08:27	BJH	~~35~~ 34.4	2	60.3 -25.9				TechLaw	EDB only
1205073-01	A	May-04-12 08:27	BJH	~~35~~ 34.7	2	60.5 -25.8				TechLaw	EDB only
1205085-01	A	May-04-12 08:27	BJH	~~35~~ 34.7	2	60.3 -25.6				TechLaw	EDB only
1205085-02	A	May-04-12 08:27	BJH	~~35~~ 34.6	2	60.1 -25.5				TechLaw	EDB only

Comments:	Analyst Initials:

Semivolatiles GC, Water, May-04-12

Instrument = 158, Calibration = 2D17008

Sequence Analyses:
8011 EDB/DBCP

Lab Number	*Analysis*	*Contain*	*STD ID*	*ISTD ID*	*Client / QC Type*	*Extraction Comments*
2E07013-CCV1	QC		2040797		CALIBRATION CHECK	
1205560-BLK1	QC				BLANK	
1205560-BS1	QC				LCS	
1204454-01	8011 EDB/DBCP	A 01			TechLaw	EDB only
1204454-02	8011 EDB/DBCP	A 01			TechLaw	EDB only
1205072-01	8011 EDB/DBCP	A 01			TechLaw	EDB only
1205073-01	8011 EDB/DBCP	A 01			TechLaw	EDB only
1205085-01	8011 EDB/DBCP	A 01			TechLaw	EDB only
1205085-02	8011 EDB/DBCP	A 01			TechLaw	EDB only
1205560-MS1	QC				MATRIX SPIKE	
1205560-MSD1	QC				MATRIX SPIKE DUP	
2E07013-CCV2	QC		2040797		CALIBRATION CHECK	

Comments:

Analyst Initials:

TRIMATRIX LABORATORIES

RETENTION TIME WINDOWS

Instrument Information		Column Temperature Program							
Instrument Number:	158	Hold for:	2 min	Ramp to:	155 C	deg/min:	8	Initial Temp:	40 C
Detector:	ECD	Hold for:	0 min	Ramp to:	300 C	deg/min:	40		
Method/Column Reference:	8011	Hold for:	-	Ramp to:	-	deg/min:	-		
		Hold for:	-	Ramp to:	-	deg/min:	-		
		Injection Port Temperature					250		
Column 1 Element #:	1050423	Column 2 Element #:		1050422					

	Std 1 RT	Std 2 RT	Std 3 RT	Standard Deviation (min.)	RT Window Std. Dev. x 3 (min.)		Absolute Window (sec.)	Compound Name
Date of Injection	10/14/11	10/21/11	10/26/11					
Time of Injection	2:52 PM	2:29 PM	1:24 AM					
Compound / File Name	AB008110	AB008165	AB008239					
ECD Detector	-	-	-	-	-	-	-	ECD Detector
1,2-Dibromoethane (CLP1)	6.64	6.67	6.65	0.015	+/-	0.046	2.75	1,2-Dibromoethane (CLP1)
bromo-3-chloropropane (CLP1)	12.14	12.16	12.13	0.015	+/-	0.046	2.75	1,2-Dibromo-3-chloropropane (C
-					+/-			-
1,2-Dibromoethane (CLP2)	7.28	7.33	7.30	0.025	+/-	0.075	4.53	1,2-Dibromoethane (CLP2)
bromo-3-chloropropane (CLP2)	13.20	13.24	13.22	0.020	+/-	0.060	3.60	1,2-Dibromo-3-chloropropane (C

TRIMATRIX LABORATORIES

DAILY RETENTION TIME WINDOWS

Instrument #:	158	**Date:**	5/4/12
Column 1 ID:	1050423	**File Name:**	ABMAY027
Column 2 ID:	1050422		

COMPOUND	RETENTION TIME	TODAY'S RETENTION TIME WINDOW		
ECD Detector				
1,2-Dibromoethane (CLP1)	6.33	6.28	to	6.38
bromo-3-chloropropane (CLP1)	11.73	11.68	to	11.78
-			to	
1,2-Dibromoethane (CLP2)	7.11	7.03	to	7.19
bromo-3-chloropropane (CLP2)	12.97	12.91	to	13.03

TRIMATRIX LABORATORIES

Instrument 158 HP5890	Date: 5/4/12	Date Archived:	Analyst: BSH

Instrument Settings / Injection Volume	GC Program				CCV Standards		Routine Maintenance Items
Column Type: A=RTXCLP B=RTXCLP2	Initial:						Column Clipped: Yes / No
Column ID: A= 1050423 B= 1050422	Hold:						New Injection Port Liner: Yes / No
Injection Volume: ~~1uL~~ 2uL	Rate:						New Septa: Yes / No
Injector / Detector: 240°C / 320°C	Final:						New Syringe: Yes / No
Method: 8081 / 8082 / 608 / 608.2 / 8011 / 8151 / 8121	Hold:						Shift Start Time:
Default Temperature Program: Yes / No							Shift Stop Time:

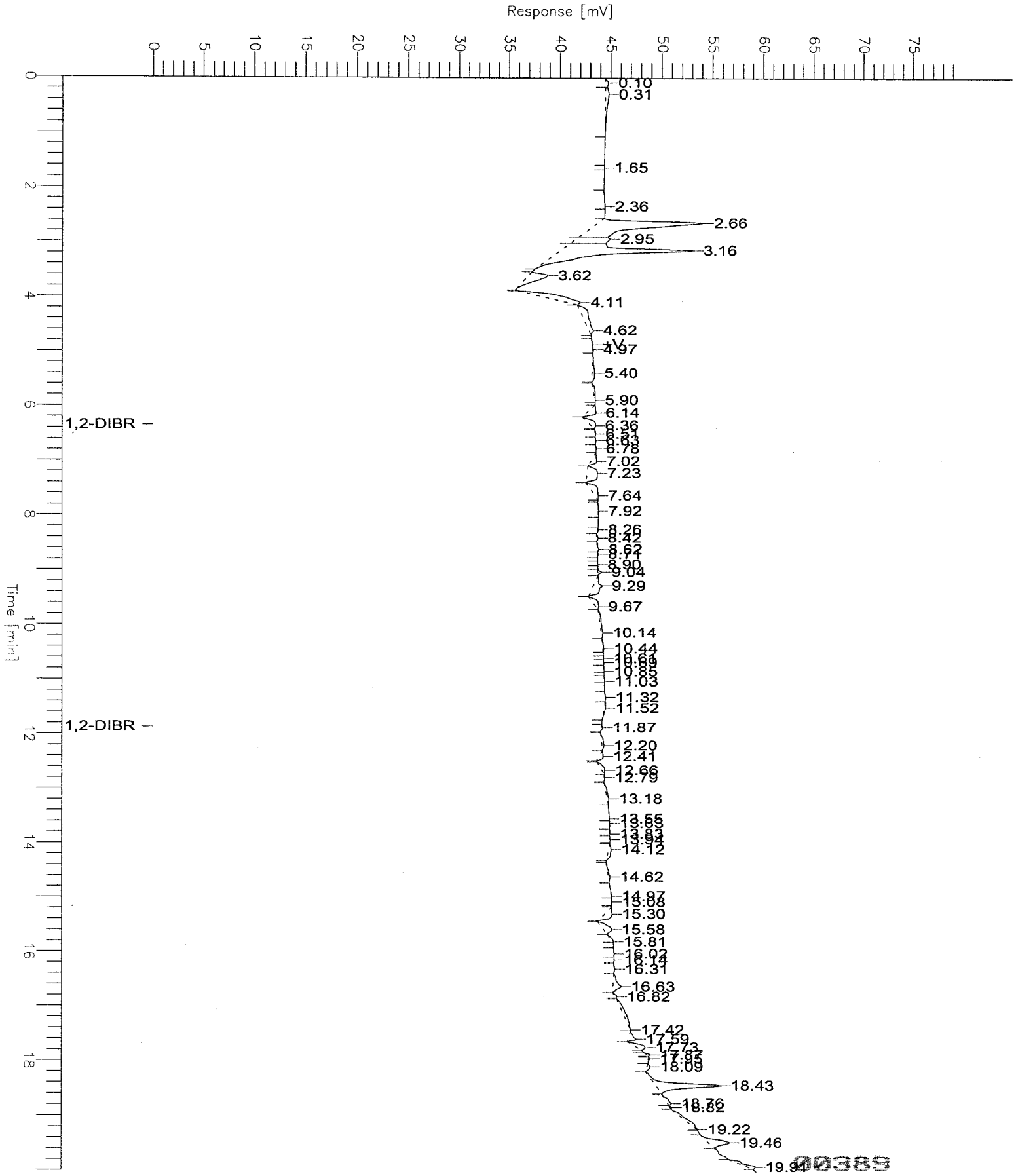
Run ID	File ID	Analysis Method	Dilution	ICV/CCV Check (Pass or High/Low)	Sample Notes, Calibration Standards, PEM Injection Times, Analytical Batch Information, etc.
Hex	25	041612A/B			
Inst Blk	26				
CCV1	27			Pass	
1205560-BLK1	28				
1205560-BS1	29				
1204454-01	30				
1204454-02	31				
1205072-01	32				
1205073-01	33				
1205085-01	34				
1205085-02	35				
1205560-MS1	36				
1205560-MSD1	37				
CCV2	38			Pass	
					BSH 5/4/12

00338

Chromatogram

Sample Name : INST BLK
FileName : C:\TC4\158\APRIL2~1\AAPR290.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: 4/16 Page 1 of 1
Date : 4/16/12 16:03
Time of Injection: 4/16/12 12:44
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



00389

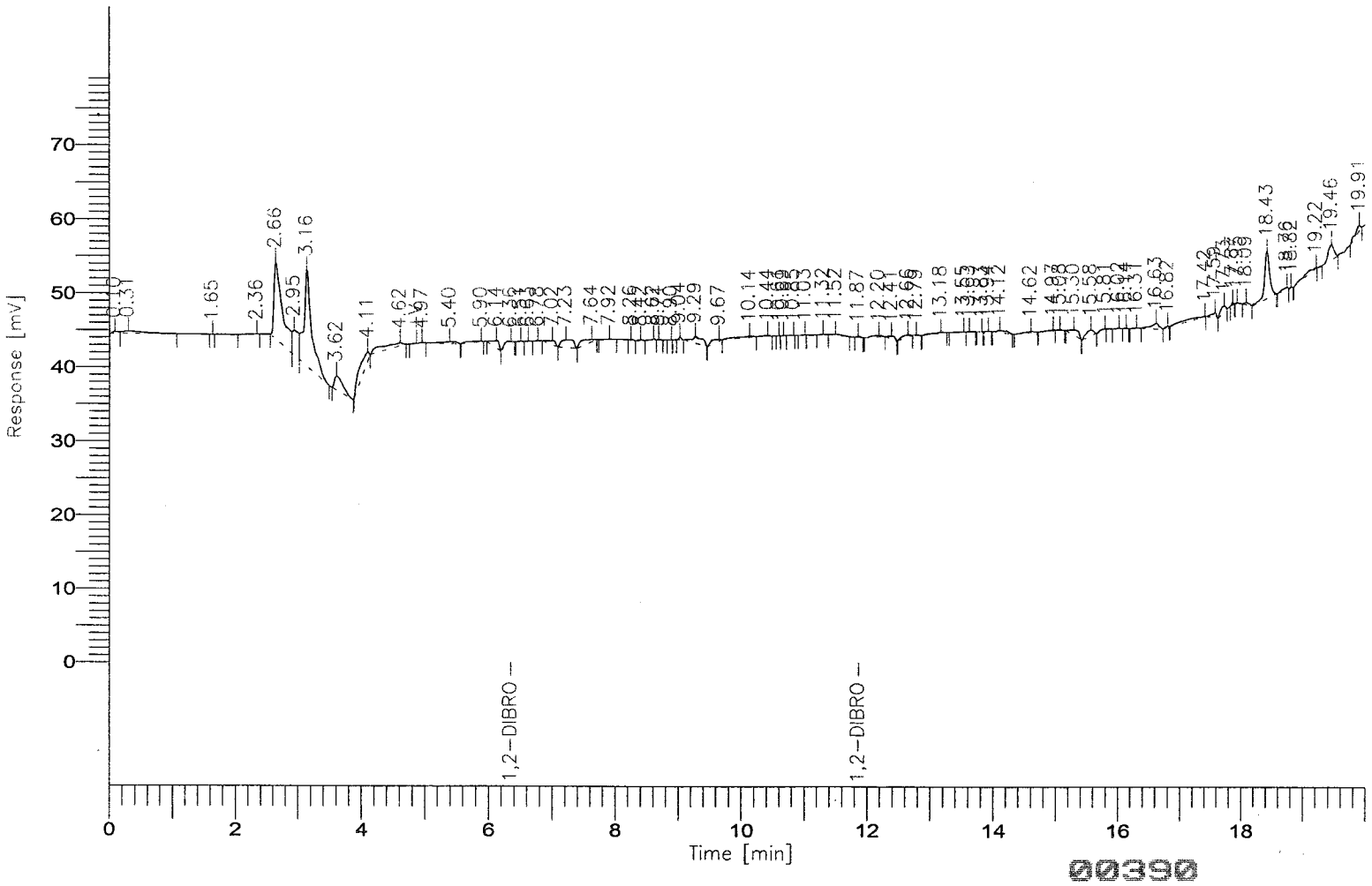
Software Version: 4.1<2F12>
Sample Name : INST BLK Time : 4/16/12 16:03
Sample Number: 4/16 Study : 8011
Operator : BJH

Instrument : 158 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 12:44
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\AAPR290.RAW
Result File : C:\TC4\158\APRIL2~1\AAPR290.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\AAPR290.R
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00



00390

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

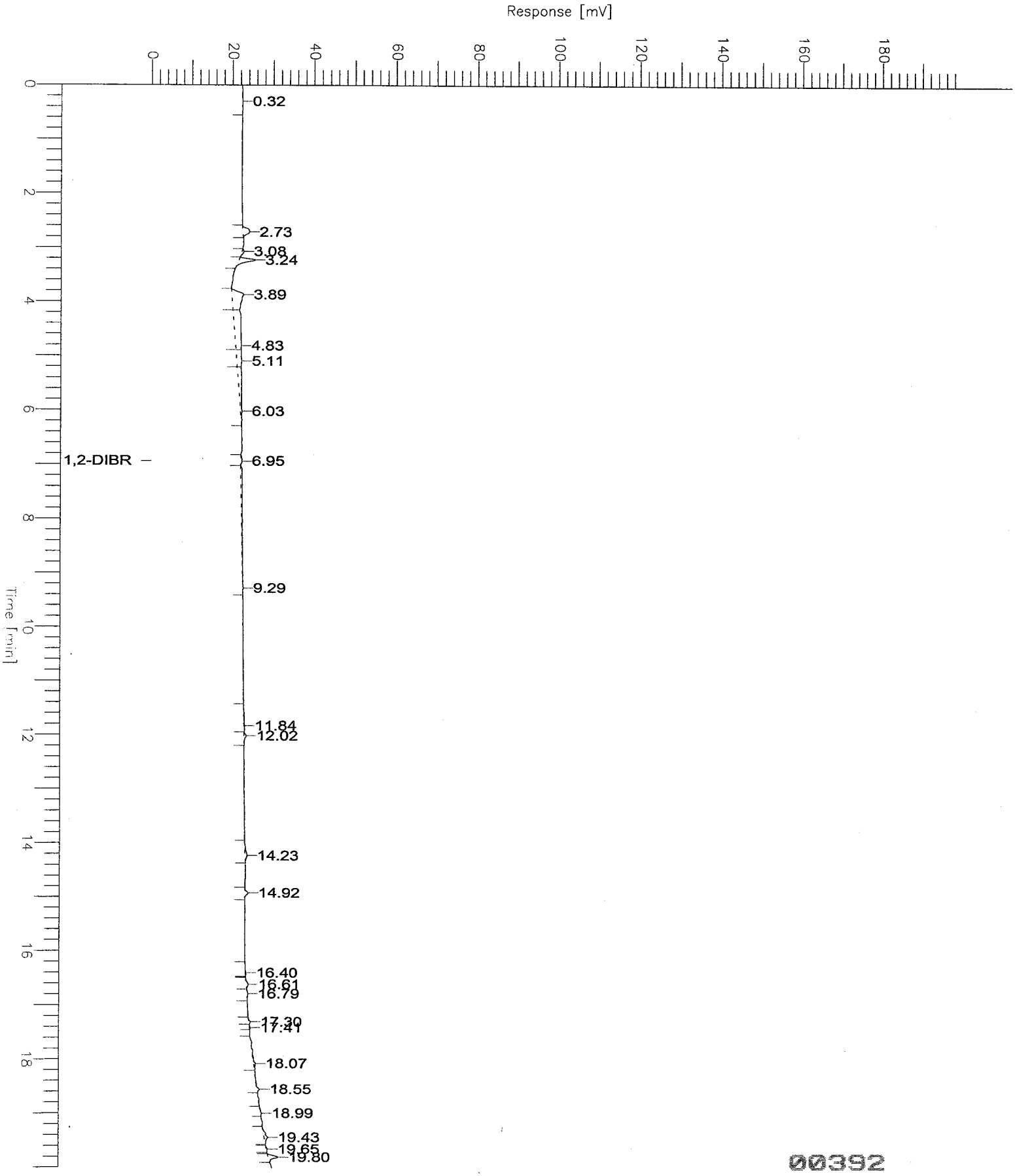
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.36	1,2-DIBROMOETHANE	-0.0005	362.68	5686.50	35	2	-0.02902
11.87	1,2-DIBROMO3CHLOROPR	-0.0002	136.80	509.00	35	2	-0.01389
			499.49	6195.50			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\AAPR290.TX0

Chromatogram

Sample Name : INST BLK
FileName : C:\TC4\158\APRIL2~1\BAPR290.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: 4/16
Date : 4/16/12 16:03
Time of Injection: 4/16/12 12:44
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



Software Version: 4.1<2F12>
Sample Name : INST BLK
Sample Number: 4/16
Operator : BJH

Time : 4/16/12 16:03
Study : 8011

Instrument : 158
AutoSampler :
Rack/Vial : 0/0

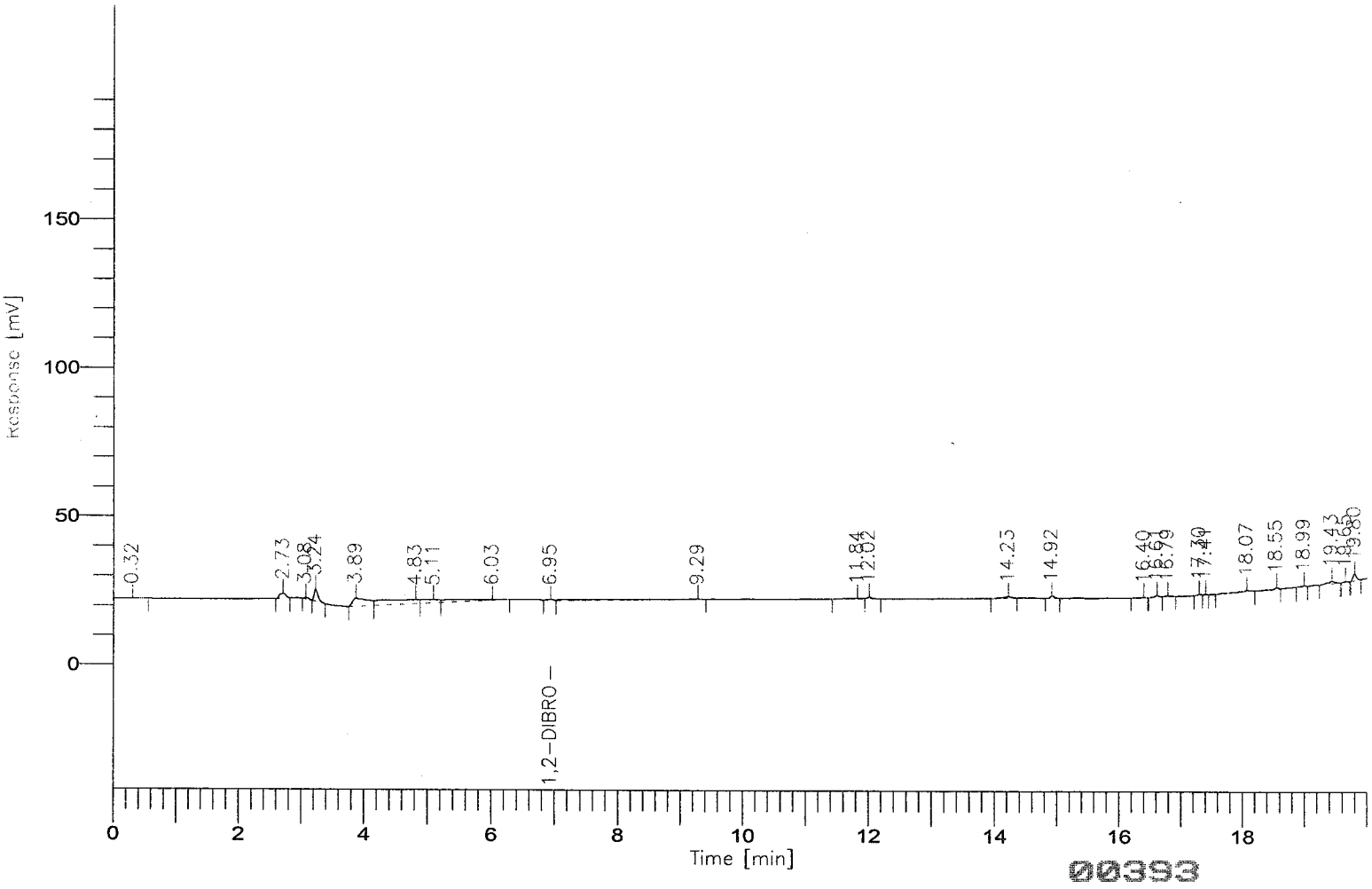
Channel : B A/D mV Range : 1000

Interface Serial # : 2119574781 Data Acquisition Time: 4/16/12 12:44
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\APRIL2~1\BAPR290.RAW
Result File : C:\TC4\158\APRIL2~1\BAPR290.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\APRIL2~1\BAPR290.R
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\APRIL2~1\APR2012.SEQ

Sample Volume : 1.0000 ul
Sample Amount : 1.0000

Area Reject : 0.000000
Dilution Factor : 1.00



00393

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

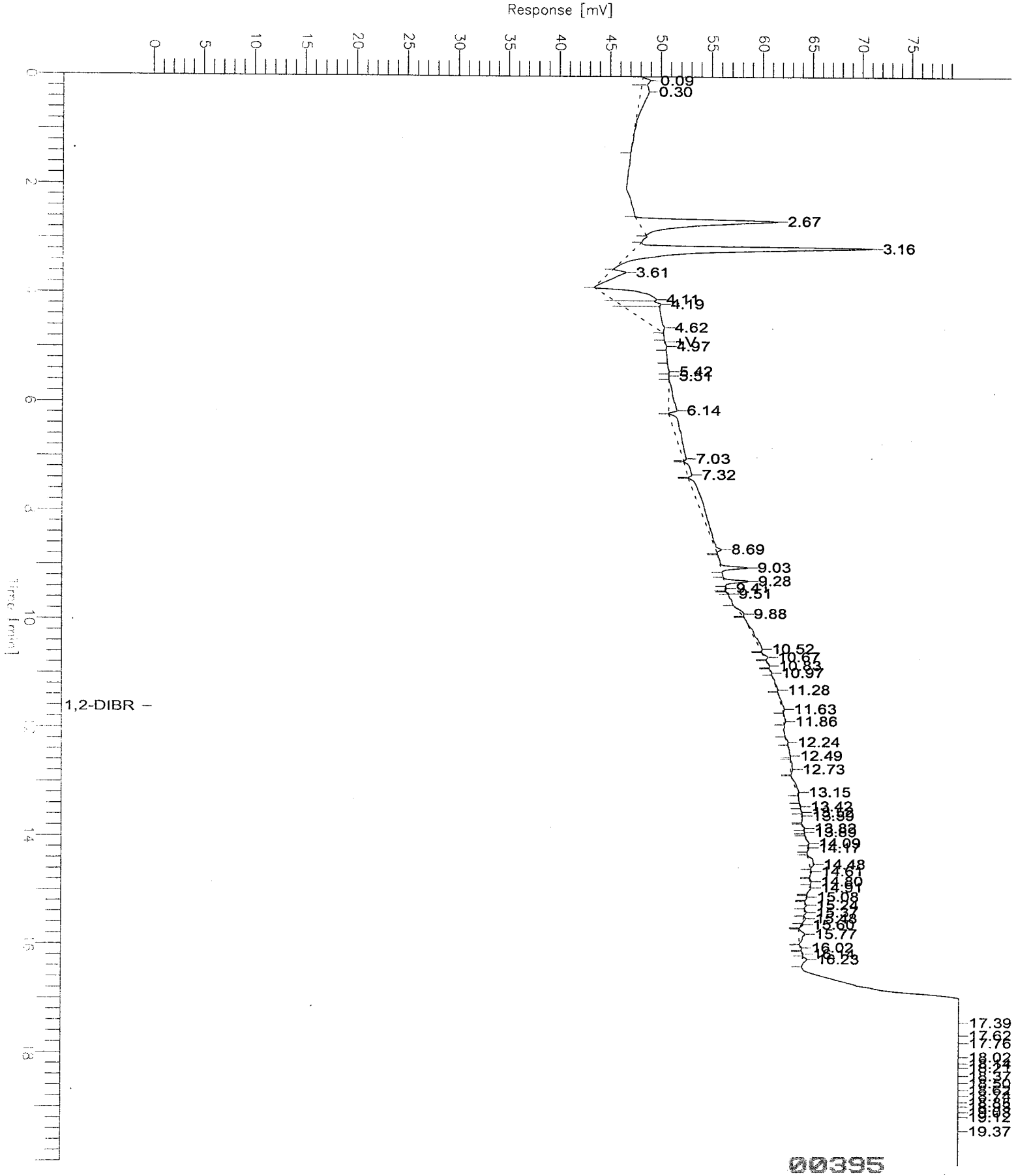
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)
6.95	1,2-DIBROMOETHANE (2	-4.53e-06	313.92	2516.00	35	2	-0.00026
12.98	1,2-DBCP (2C)	0.0000	0.00	0.00	35	2	0.00000
			313.92	2516.00			

Report stored in ASCII file: C:\TC4\158\APRIL2~1\BAPR290.TX0

Chromatogram

Sample Name : INST BLK
FileName : C:\TC4\158\MAY2012\AMAY026.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: 5/4
Date : 5/4/12 15:58
Time of Injection: 5/4/12 09:35
Low Point : 0.00 mV High Point : 80.00 mV
Plot Scale: 80.0 mV



Software Version: 4.1<2F12>
Sample Name : INST BLK
Sample Number: 5/4
Operator : BJH

Time : 5/4/12 15:58
Study : 8011

Instrument : 158
AutoSampler :
Rack/Vial : 0/0

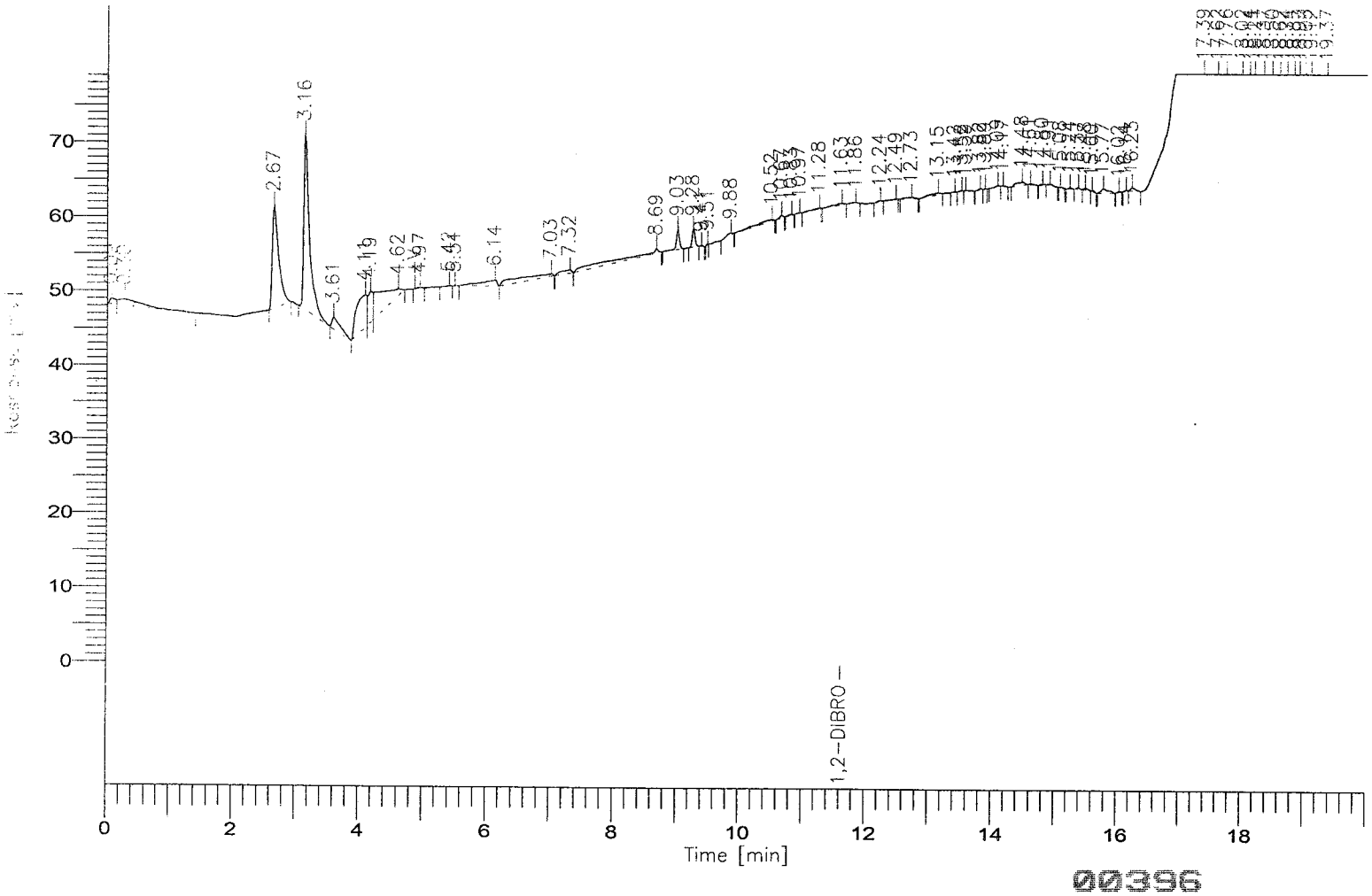
Channel : A A/D mV Range : 1000

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 09:35
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\AMAY026.RAW
Result File : C:\TC4\158\MAY2012\AMAY026.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\AMAY026.RS
Proc Method : C:\TC4\158\8011ME~1\041612A.mth
Calib Method : C:\TC4\158\8011ME~1\041612A.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul
Sample Amount : 1.0000

Area Reject : 0.000000
Dilution Factor : 1.00



00396

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

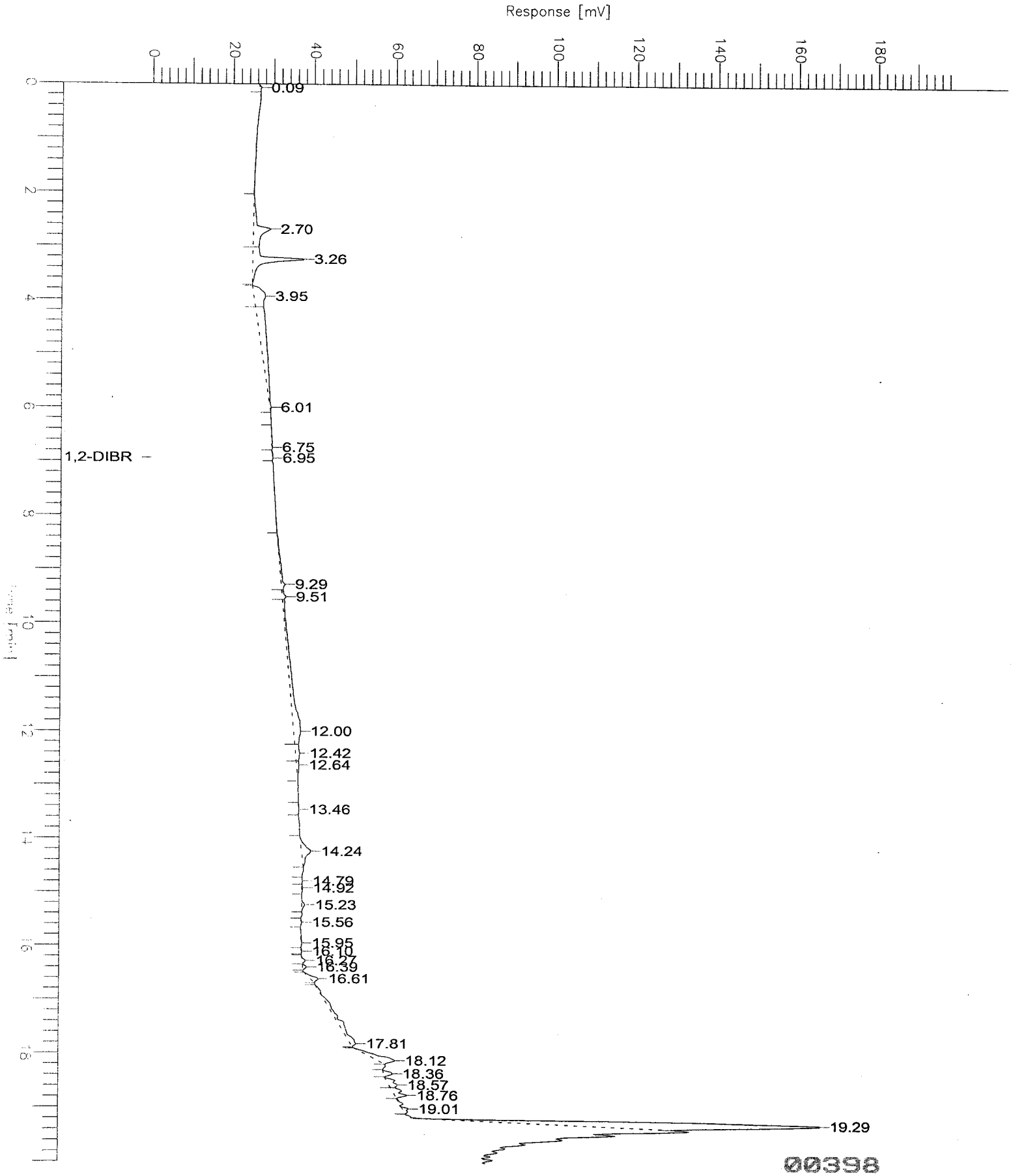
Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)	
6.34	1,2-DIBROMOETHANE	0.0000	0.00	0.00	35	2	0.00000	<MDL
11.63	1,2-DIBROMO3CHLOROPR	-0.0002	187.98	2791.00	35	2	-0.01353	
			187.98	2791.00				

Report stored in ASCII file: C:\TC4\158\MAY2012\AMAY026.TX0

Chromatogram

Sample Name : INST BLK
FileName : C:\TC4\158\MAY2012\BMAY026.raw
Method : 041612A
Start Time : 0.00 min End Time : 20.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: 5/4
Date : 5/4/12 15:58
Time of Injection: 5/4/12 09:35
Low Point : 0.00 mV High Point : 200.00 mV
Plot Scale: 200.0 mV



Software Version: 4.1<2F12>
Sample Name : INST BLK
Sample Number: 5/4
Operator : BJH

Time : 5/4/12 15:58
Study : 8011

Instrument : 158
AutoSampler :
Rack/Vial : 0/0

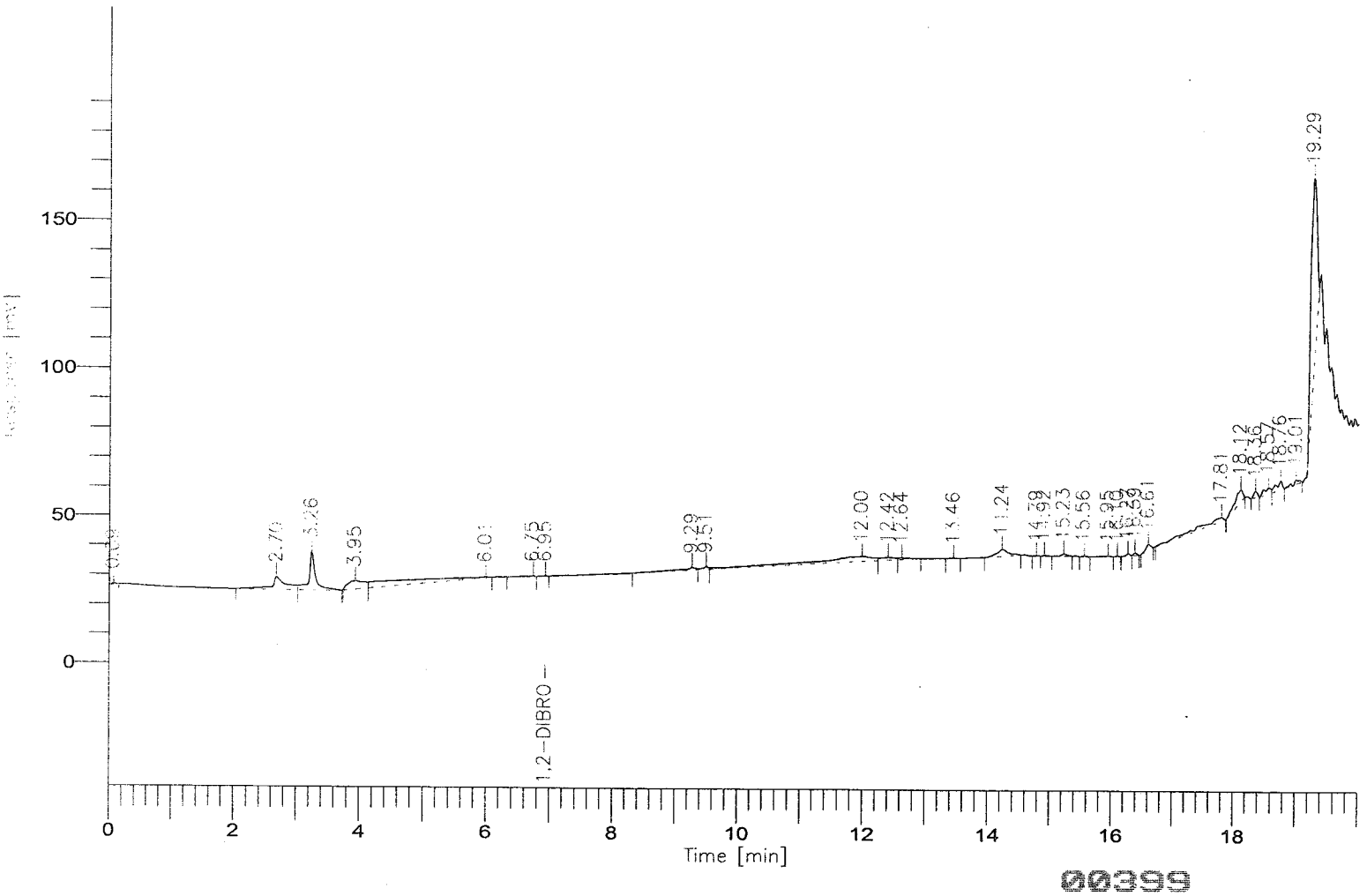
Channel : B A/D mV Range : 1000

Interface Serial # : 2119574781 Data Acquisition Time: 5/4/12 09:35
Delay Time : 0.00 min.
End Time : 20.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\TC4\158\MAY2012\BMAY026.RAW
Result File : C:\TC4\158\MAY2012\BMAY026.RST
Inst Method : C:\TC4\158\8011ME~1\041612A from C:\TC4\158\MAY2012\BMAY026.RS
Proc Method : C:\TC4\158\8011ME~1\041612B.mth
Calib Method : C:\TC4\158\8011ME~1\041612B.mth
Sequence File : C:\TC4\158\MAY2012\MAY2012.SEQ

Sample Volume : 1.0000 ul
Sample Amount : 1.0000

Area Reject : 0.000000
Dilution Factor : 1.00



00399

TriMatrix Laboratories GC158 EPA METHOD 8011

Column: A: RTXCLP2 30M X 0.53MM ID B: RTX CLP 30M X 0.53MM ID

Time [min]	Component Name	Amount (ng/ul)	Height [µV]	Area [µV·s]	Initial (ml)	Final (ml)	Conc. (ug/l)	
6.95	1,2-DIBROMOETHANE (2	-0.0001	150.67	1413.00	35	2	-0.00519	LMDL
12.98	1,2-DBCP (2C)	0.0000	0.00	0.00	35	2	0.00000	
			150.67	1413.00				

Report stored in ASCII file: C:\TC4\158\MAY2012\BMAY026.TX0