

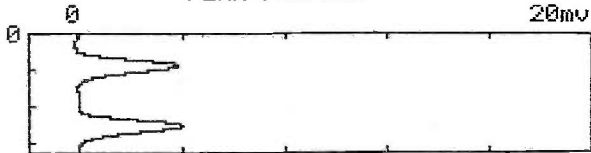
SAMPLE NAME : 1

TYPE : NPOC VIAL : 30 2.5 QA
[INJ 80uL, C# TC2 ,DL 1, SP 3.0min,
ACID 0.0%, #WASH 2]

#	AREA	ms/L	C#	INJ	DL
1	19.46	2.543	TC2	80	1
2	19.25	2.515	TC2	80	1

MN 19.36 2.529
SD 0.15 0.02
CV 0.77 % 0.79 % 2.53 mg/L

PEAK PROFILE



DATE 10(OCT)-16-2012 17:27

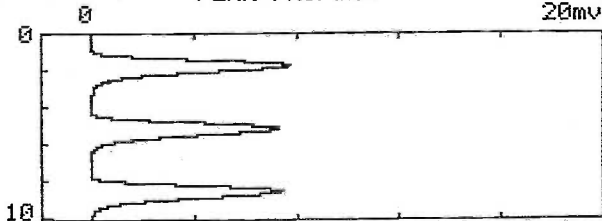
SAMPLE NAME : 1

TYPE : NPOC VIAL : 31 5.0 QA
[INJ 80uL, C# TC2 ,DL 1, SP 3.0min,
ACID 0.0%, #WASH 2]

#	AREA	ms/L	C#	INJ	DL
1	36.45E	4.822	TC2	80	1
2	35.18	4.652	TC2	80	1
3	34.90	4.614	TC2	80	1

MN 35.04 4.633
SD 0.20 0.03
CV 0.57 % 0.57 % 4.63 mg/L

PEAK PROFILE



DATE 10(OCT)-16-2012 17:45

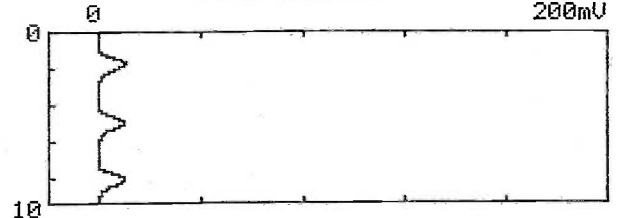
SAMPLE NAME : 1

TYPE : NPOC VIAL : 29 10 QA
[INJ 50uL, C# TC3 ,DL 1, SP 3.0min,
ACID 0.0%, #WASH 2]

#	AREA	ms/L	C#	INJ	DL
1	48.46E	10.70	TC3	50	1
2	44.93	9.947	TC3	50	1
3	45.95	10.17	TC3	50	1

MN 45.44 10.06
SD 0.72 0.15
CV 1.59 % 1.54 % 10.1 mg/L

PEAK PROFILE



DATE 10(OCT)-16-2012 17:12

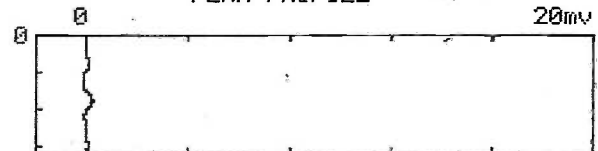
SAMPLE NAME : 1

TYPE : NPOC VIAL : 32 8V
[INJ 80uL, C# TC2 ,DL 1, SP 3.0min,
ACID 0.0%, #WASH 2]

#	AREA	ms/L	C#	INJ	DL
1	0.000	-0.067	TC2	80	1
2	1.586E	0.146	TC2	80	1
3	0.000	-0.067	TC2	80	1

MN 0.000 -0.067
SD 0.00 0.00
CV 0.00 % 0.00 % ND 0.5 mg/L

PEAK PROFILE



DATE 10(OCT)-16-2012 18:00

ALAB : 00284

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LMC-PET-00001569

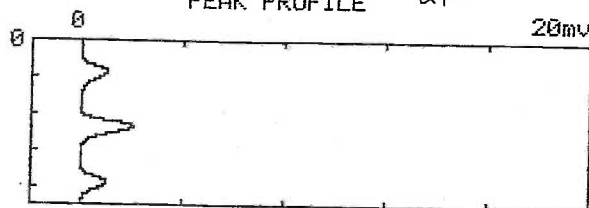
SAMPLE NAME : 1

TYPE : NPOC VIAL : 26 0.50A
[INJ 80uL, C# TC2 ,DL 1, SP 3.0min,
ACID 0.0%, #WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	4.715	0.565	TC2	80	1
2	9.761E	1.242	TC2	80	1
3	4.527	0.540	TC2	80	1

MN 4.621 0.553
SD 0.13 0.02
CV 2.88 % 3.23 % 0.55 mg/L

PEAK PROFILE RP-



DATE 10(OCT)-16-2012 16:19

ALAB : 00285

CONFIDENTIAL

LMC-PET-00001570

EPA 8270M

GC/MS/SIM

ALAB : 00286

CONFIDENTIAL

LMC-PET-00001571

BATCH ID: 8210-101512

[illegible]

Solvent Manufacturer and Lot #	Fisher: # 125315	Surrogate Lot #	W-6270
Sand Manufacturer & Lot #		Spike Lot #	W-6145
		Na ₂ SO ₄ Manufacturer & Lot #	M.T.# 30562N

ALAB: 00150
ALAB: 00207

Associated Labs QC Batch Bench Sheet

QC Batch ID: QC1130590

Test: 8270M Dioxane
 Method: EPA 8270M
 Instrument: SVOA-MS (group
 Analysis Date: 10/15/2012
 Analyst/Employee:

Created Date: 10/17/2012
 Created By: qnguyen
 Matrix: Water

Seq. #	Sample ID	Customer Sample ID	QC Source	Sur. Added	Spk. Added	Init. Wt/Vol	Final Vol.	Extraction Date	Time	Comments
0	LCS_1									
1	LCSD_1									
2	Method Blank_1									
3	311991-009	PV-GW-C-49-101112	311991-009							
4	311991-010	PV-GW-C-142-101112	311991-010							
5	311991-016	PV-GW-C-145-101112	311991-016							
6	311991-018	PV-GW-C-145N-101111	311991-018							
7	312080-003	MW-1	312080-003							
8	312080-004	MW-2	312080-004							
9	312094-005	M-W-6	312094-005							

Initial Calib STD:		Solvent Manufacturer and Lot:	
Calib Check STD:		Sand Manufacturer and Lot:	
Internal STD:		Na2SO4 Manufacturer and Lot:	
Surrogate STD:		Surrogate Lot:	
LCSS STD:		Spike Lot:	
MS STD:		Prep By Signature:	

Sequence Name: C:\MSDChem\1\sequence\NDMA_1_4_Dioxane\101612_.S

Comment: Prep10-11-2012 / Seq10-15/1625-M_010809F2

Operator: QN

Data Path: C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch
(X) Full Method (X) Inject Anyway
() Reprocessing Only () Don't Inject

Line	Sample Name/Misc Info
1) Sample 99	Mec1 DFPDIOF2 Mec1
2) Sample 98	DFTPP DFPDIOF2 DFTPP
3) Sample 100	
Datafile	ICV@10ppb-01
Method	1625_M_041311F2
4) Sample 1	
Datafile	10-16-12_001
Method	1625_M_041311F2
5) Sample 99	Mec1-1 DFPDIOF2 Mec1
6) Sample 98	DFTPP-1 DFPDIOF2 DFTPP
7) Sample 100	
Datafile	ICV@10ppb-1
Method	1625_M_041311F2
8) Sample 98	DFTPP-2 DFPDIOF2 DFTPP
9) Sample 98	DFTPP-3 DFPDIOF2 DFTPP
10) Sample 100	
Datafile	ICV@10ppb-001
Method	1625_M_041311F2
11) Sample 99	Mec1-2 DFPDIOF2 Mec1
12) Sample 99	Mec1-3 DFPDIOF2 Mec1
13) Sample 98	DFTPP-4 DFPDIOF2 DFTPP
14) Sample 100	
Datafile	ICV@10ppb-3
Method	1625_M_041311F2
15) Sample 1	
Datafile	10-16-12_01
Method	1625_M_041311F2
16) Sample 2	
Datafile	10-16-12_002
Method	1625_M_041311F2
17) Sample 3	
Datafile	10-16-12_003
Method	1625_M_041311F2
18) Sample 4	
Datafile	10-16-12_004
Method	1625_M_041311F2
19) Sample 5	
Datafile	10-16-12_005
Method	1625_M_041311F2
20) Sample 6	
Datafile	10-16-12_006
Method	1625_M_041311F2
21) Sample 7	
Datafile	10-16-12_007
Method	1625_M_041311F2
22) Sample 8	
Datafile	10-16-12-008
Method	1625_M_041311F2
23) Sample 9	
Datafile	10-16-12-009

Last Modified: Wed Oct 17 08:47:20 2012

Page: 1

ALAB: 00289

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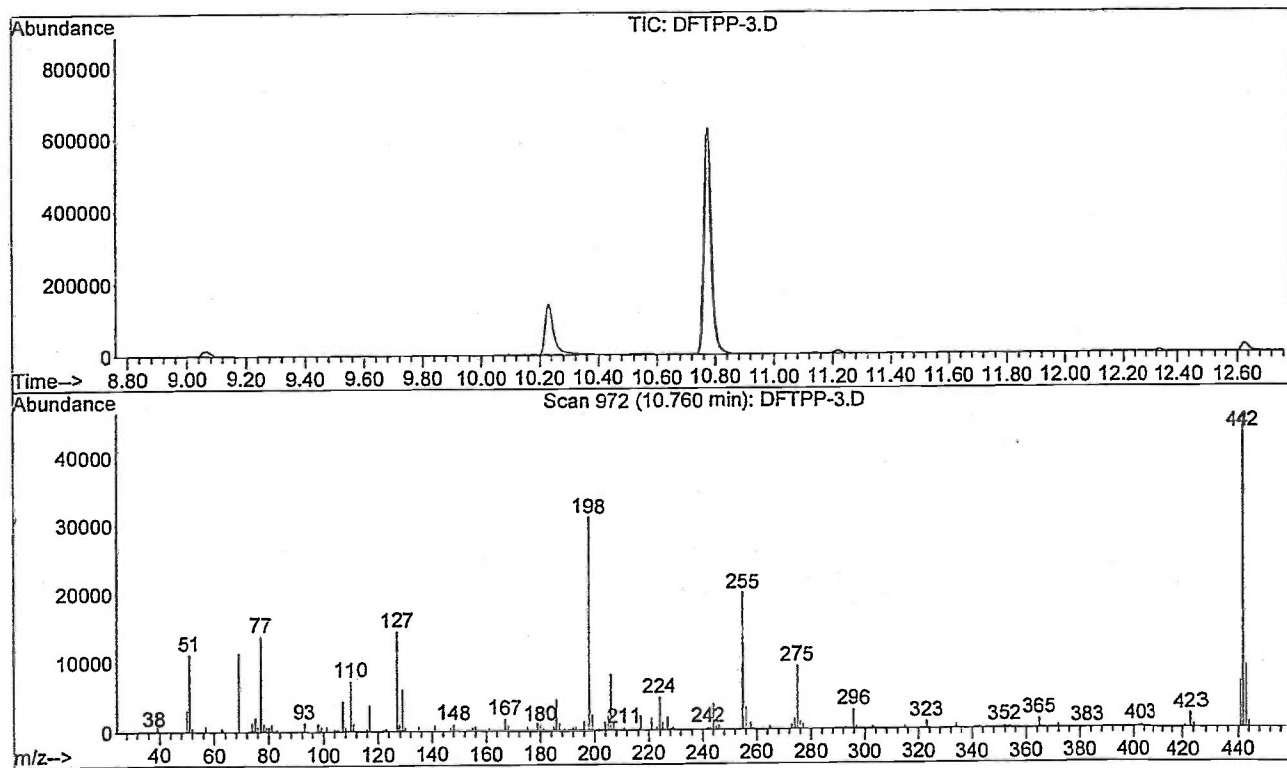
LMC-PET-00001574

	Method		1625_M_041311F2
24)	Sample	10	
	Datafile		10-16-12-010
	Method		1625_M_010809F2
25)	Sample	100	
	Datafile		ICV@10ppb-4
	Method		1625_M_041311F2
26)	Sample	11	
	Datafile		10-16-12-011
	Method		1625_M_041311F2
27)	Sample	12	
	Datafile		10-16-12-012
	Method		1625_M_041311F2
28)	Sample	13	
	Datafile		10-16-12-013
	Method		1625_M_041311F2
29)	Sample	14	
	Datafile		10-16-12-014
	Method		1625_M_041311F2
30)	Sample	15	
	Datafile		10-16-12-015
	Method		1625_M_041311F2
31)	Sample	16	
	Datafile		10-16-12-016
	Method		1625_M_041311F2
32)	Sample	17	
	Datafile		10-16-12-017
	Method		1625_M_041311F2
33)	Sample	100	
	Datafile		10-16-12-018
	Method		1625_M_041311F2

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_Dioxane\20121016\
 Data File : DFTPP-3.D
 Acq On : 16 Oct 2012 1:25 pm
 Operator : QN
 Sample : DFTPP
 Misc : s-1948
 ALS Vial : 98 Sample Multiplier: 1

Integration File: EVENTS.E

Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
 Title :
 Last Update : Wed May 05 16:21:01 2010



Spectrum Information: Scan 972

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.8	11107	PASS
68	69	0.00	2	1.4	155	PASS
69	198	0.00	100	36.7	11372	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	46.4	14388	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	31008	PASS
199	198	5	9	7.4	2302	PASS
275	198	10	30	29.6	9188	PASS
365	198	1	100	4.2	1304	PASS
441	443	0.01	100	74.3	6704	PASS
442	198	40	200	142.5	44184	PASS
443	442	17	23	20.4	9027	PASS

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
 Data File : ICV@10ppb-4.D
 Acq On : 16 Oct 2012 8:18 pm
 Operator : QN
 Sample : ICV@10ppb-2
 Misc : W-6204
 ALS Vial : 100 Sample Multiplier: 1

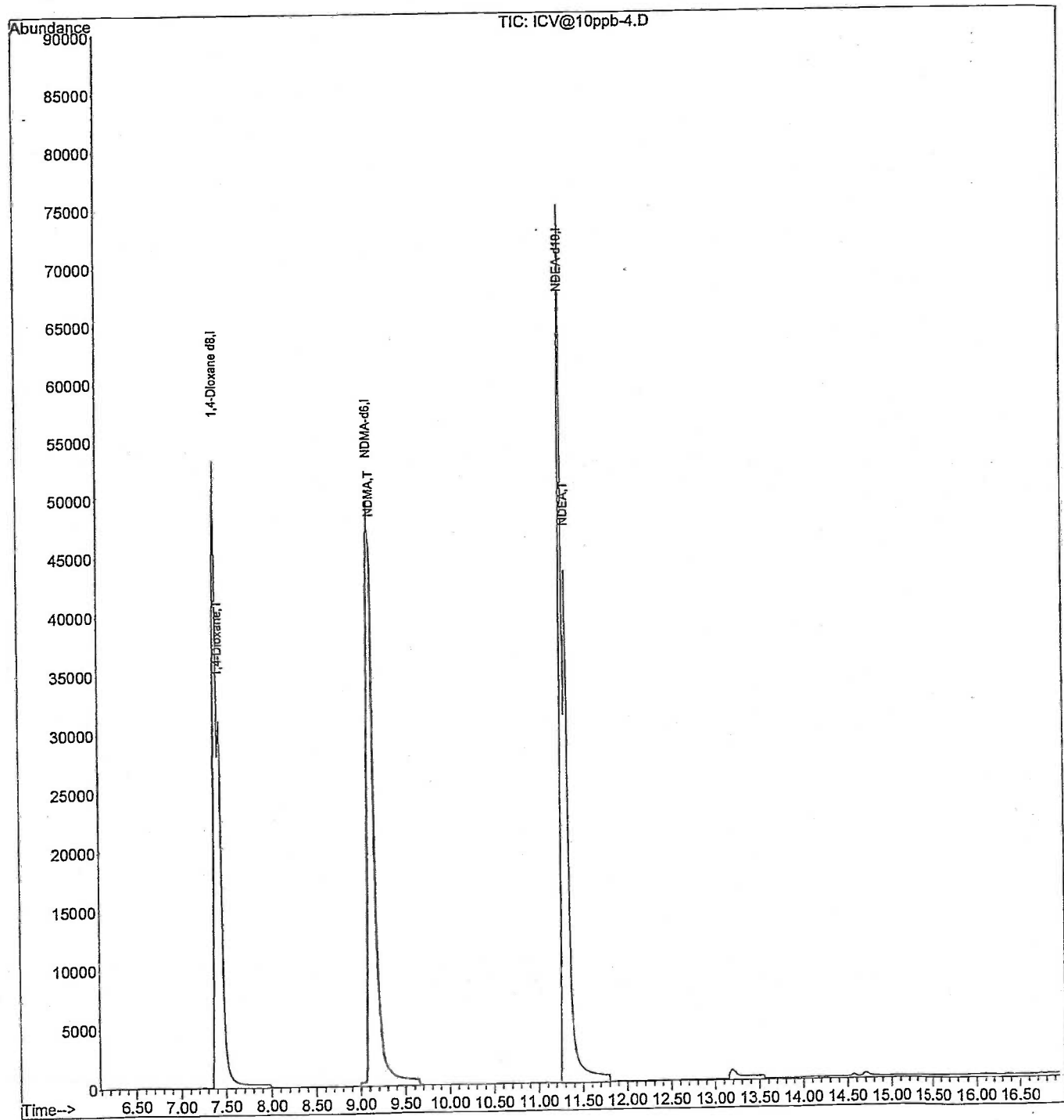
Quant Time: Oct 16 20:35:09 2012
 Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
 Quant Title :
 QLast Update : Wed May 05 16:21:01 2010
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	905667	20.00	ug/L	-0.18
3) NDMA-d6	9.11	80	1337163	20.00	ug/L	-0.18
5) NDEA-d10	11.29	112	1274918	20.00	ug/L	-0.18
						Qvalue
Target Compounds	7.45	88	425787	10.17	ug/L	97
2) 1,4-Dioxane	9.15	74	558373	9.41	ug/L	100
4) NDMA	11.34	102	596483	10.76	ug/L	98
6) NDEA						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : ICV@10ppb-4.D
Acq On : 16 Oct 2012 8:18 pm
Operator : QN
Sample : ICV@10ppb-2
Misc : W-6204
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Oct 16 20:35:09 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



1625_M_041311F2.M Wed Oct 17 10:23:26 2012

Page: 2

ALAB: 00293

CONFIDENTIAL

LMC-PET-00001578

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-008.D
Acq On : 16 Oct 2012 6:59 pm
Operator : QN
Sample : mb1015
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 17 09:42:23 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

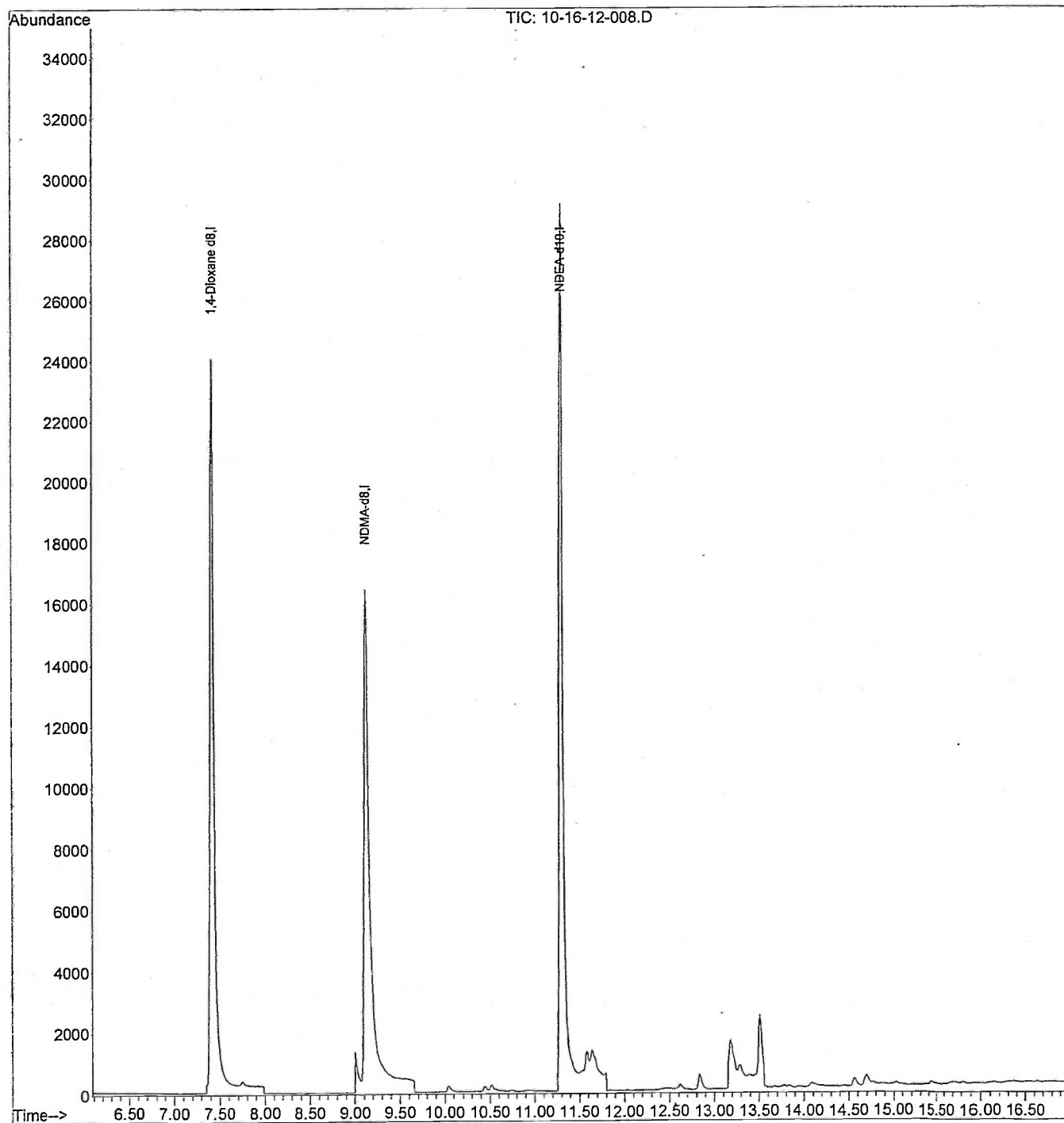
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.41	96	421459	20.00	ug/L	-0.16
3) NDMA-d6	9.12	80	576418	20.00	ug/L	-0.17
5) NDEA-d10	11.30	112	552086	20.00	ug/L	-0.17

Target Compounds	Qvalue
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-008.D
Acq On : 16 Oct 2012 6:59 pm
Operator : QN
Sample : mb1015
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 17 09:42:23 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-009.D
Acq On : 16 Oct 2012 7:25 pm
Operator : QN
Sample : lcs1015
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 17 12:30:22 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

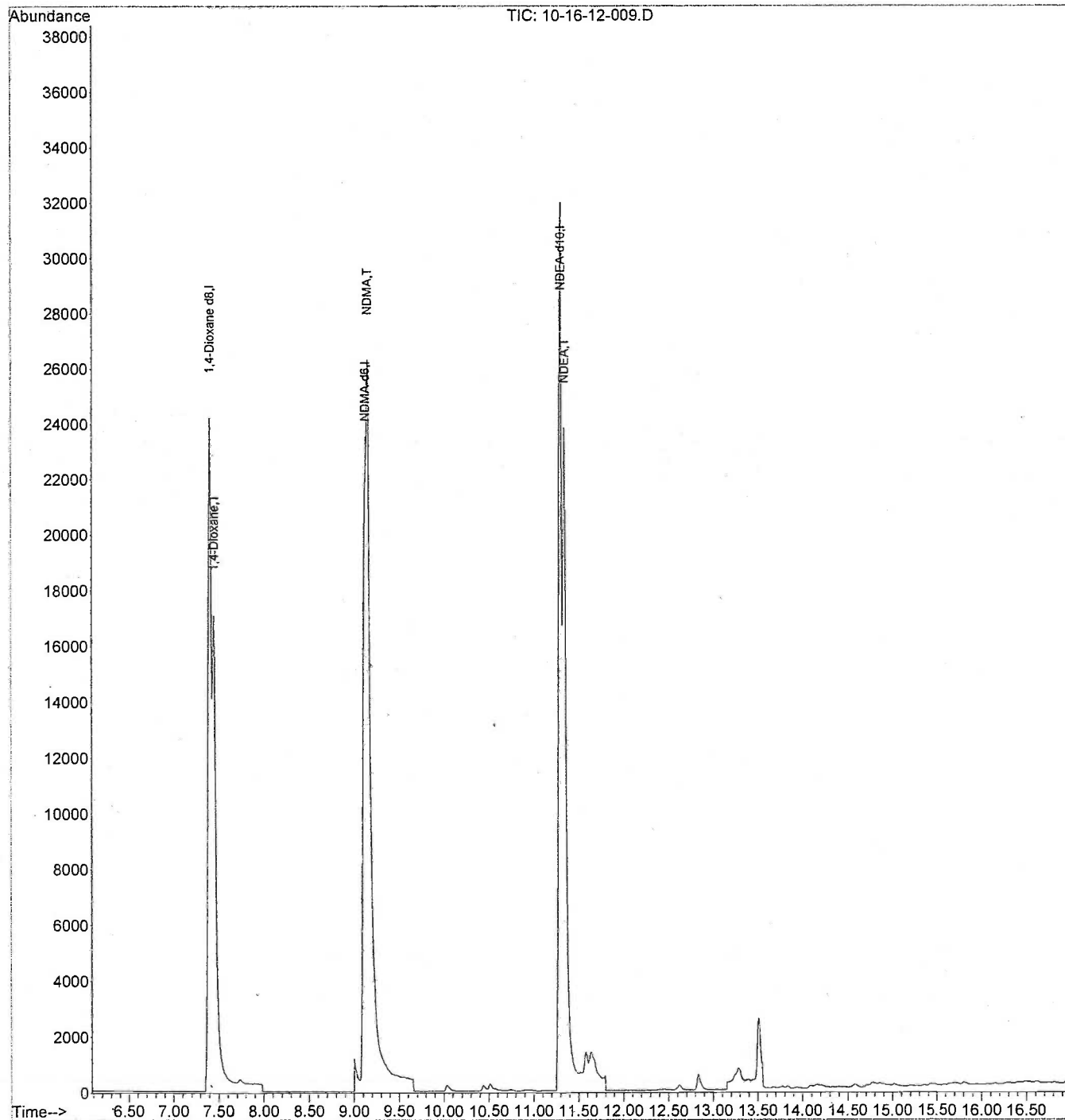
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	404067	20.00	ug/L	-0.18
3) NDMA-d6	9.12	80	586443	20.00	ug/L	-0.17
5) NDEA-d10	11.29	112	562314	20.00	ug/L	-0.18

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	7.45	88	249983	13.39	ug/L	99
4) NDMA	9.15	74	357936	13.75	ug/L	97
6) NDEA	11.34	102	344346	14.08	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-009.D
Acq On : 16 Oct 2012 7:25 pm
Operator : QN
Sample : lcs1015
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 17 12:30:22 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-010.D
Acq On : 16 Oct 2012 7:51 pm
Operator : QN
Sample : lcsd1015
Misc :
ALS Vial : 10 Sample Multiplier: 1

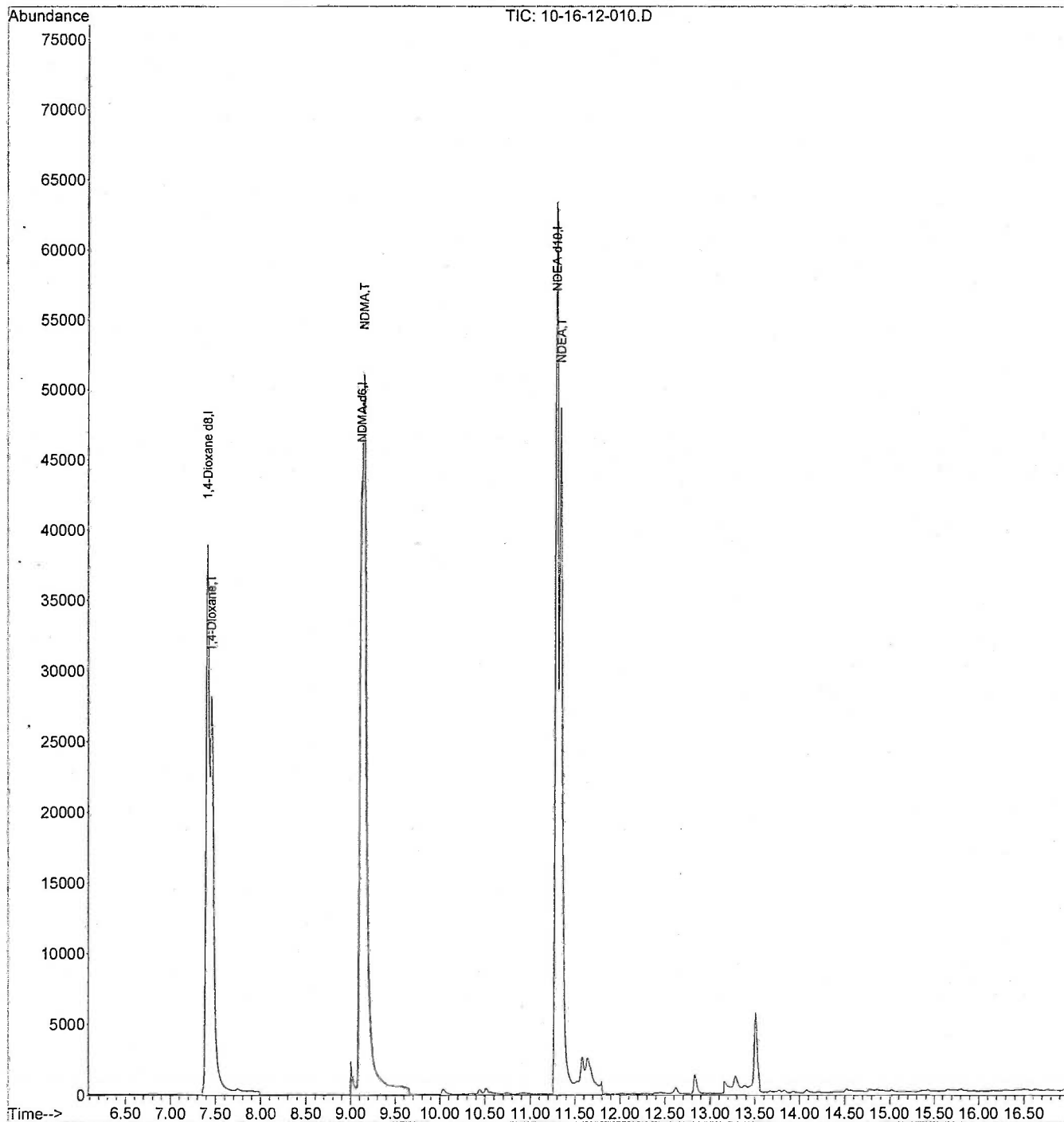
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Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) 1,4-Dioxane d8	7.41	96	634272	20.00	ug/L	-0.16
3) NDMA-d6	9.12	80	1031446	20.00	ug/L	-0.17
5) NDEA-d10	11.29	112	1038516	20.00	ug/L	-0.18
Target Compounds						Qvalue
2) 1,4-Dioxane	7.46	88	408775	13.95	ug/L	97
4) NDMA	9.15	74	668053	14.59	ug/L	95
6) NDEA	11.34	102	690389	15.28	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-010.D
Acq On : 16 Oct 2012 7:51 pm
Operator : QN
Sample : lcsd1015
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 17 12:30:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-017.D
Acq On : 16 Oct 2012 11:21 pm
Operator : QN
Sample : 312094-005
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 17 10:42:43 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

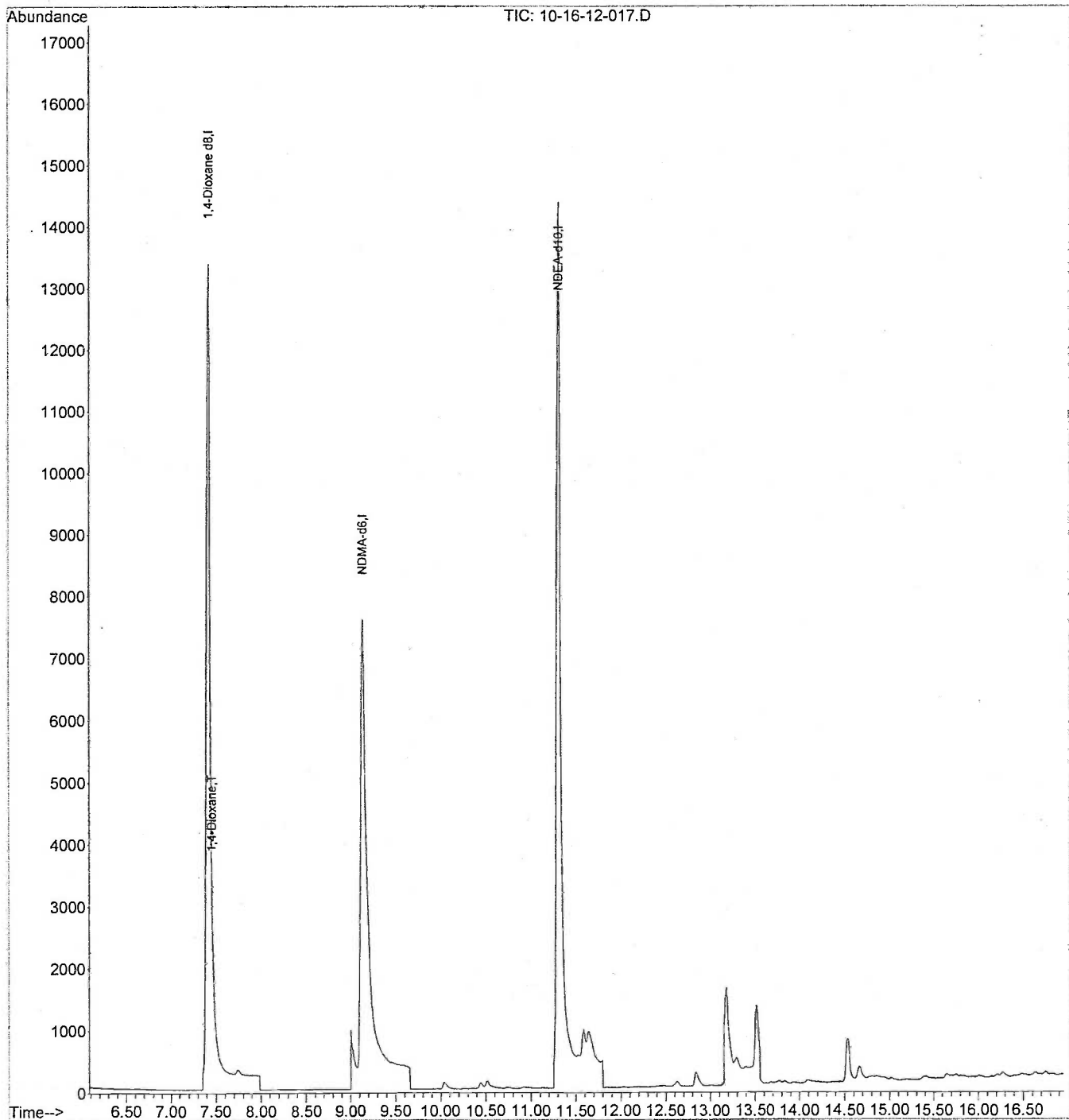
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.41	96	234954	20.00	ug/L	-0.17
3) NDMA-d6	9.13	80	310113	20.00	ug/L	-0.16
5) NDEA-d10	11.30	112	305976	20.00	ug/L	-0.17
Target Compounds						Qvalue
2) 1,4-Dioxane	7.46	88	11660m	1.07	ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

10/17/12

```
Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\  
Data File : 10-16-12-017.D  
Acq On    : 16 Oct 2012  11:21 pm  
Operator  : QN  
Sample    : 312094-005  
Misc      :  
ALS Vial  : 17      Sample Multiplier: 1
```

Quant Time: Oct 17 10:42:43 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-018.D
Acq On : 16 Oct 2012 11:47 pm
Operator : QN
Sample : ICV@10ppb-3
Misc : W-6204
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Oct 17 09:46:52 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

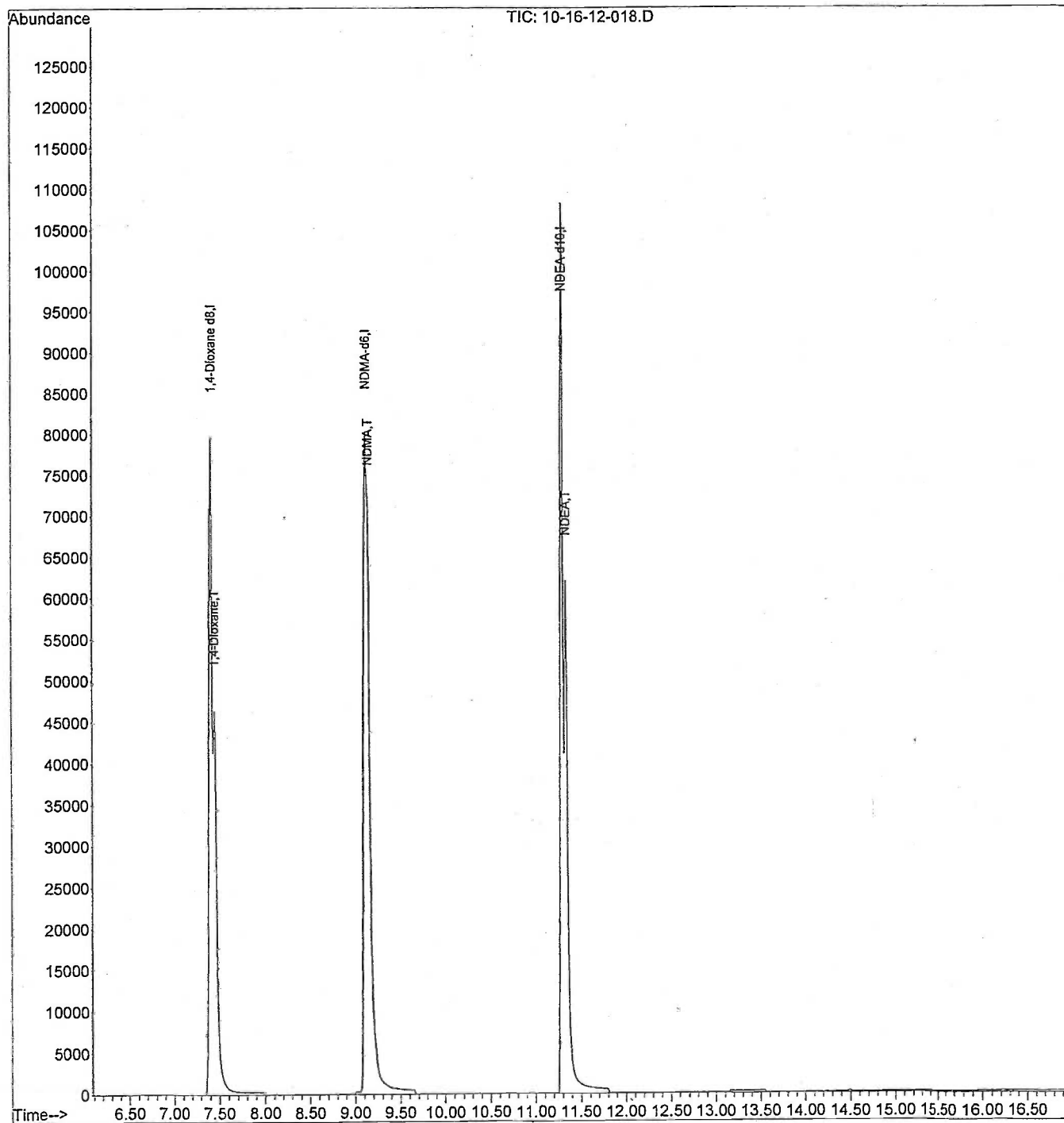
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	1338766	20.00	ug/L	-0.17
3) NDMA-d6	9.11	80	1988221	20.00	ug/L	-0.18
5) NDEA-d10	11.29	112	1755002	20.00	ug/L	-0.18

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	7.45	88	636802	10.29	ug/L	98
4) NDMA	9.15	74	834733	9.46	ug/L	99
6) NDEA	11.34	102	840060	11.01	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-018.D
Acq On : 16 Oct 2012 11:47 pm
Operator : QN
Sample : ICV@10ppb-3
Misc : W-6204
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Oct 17 09:46:52 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



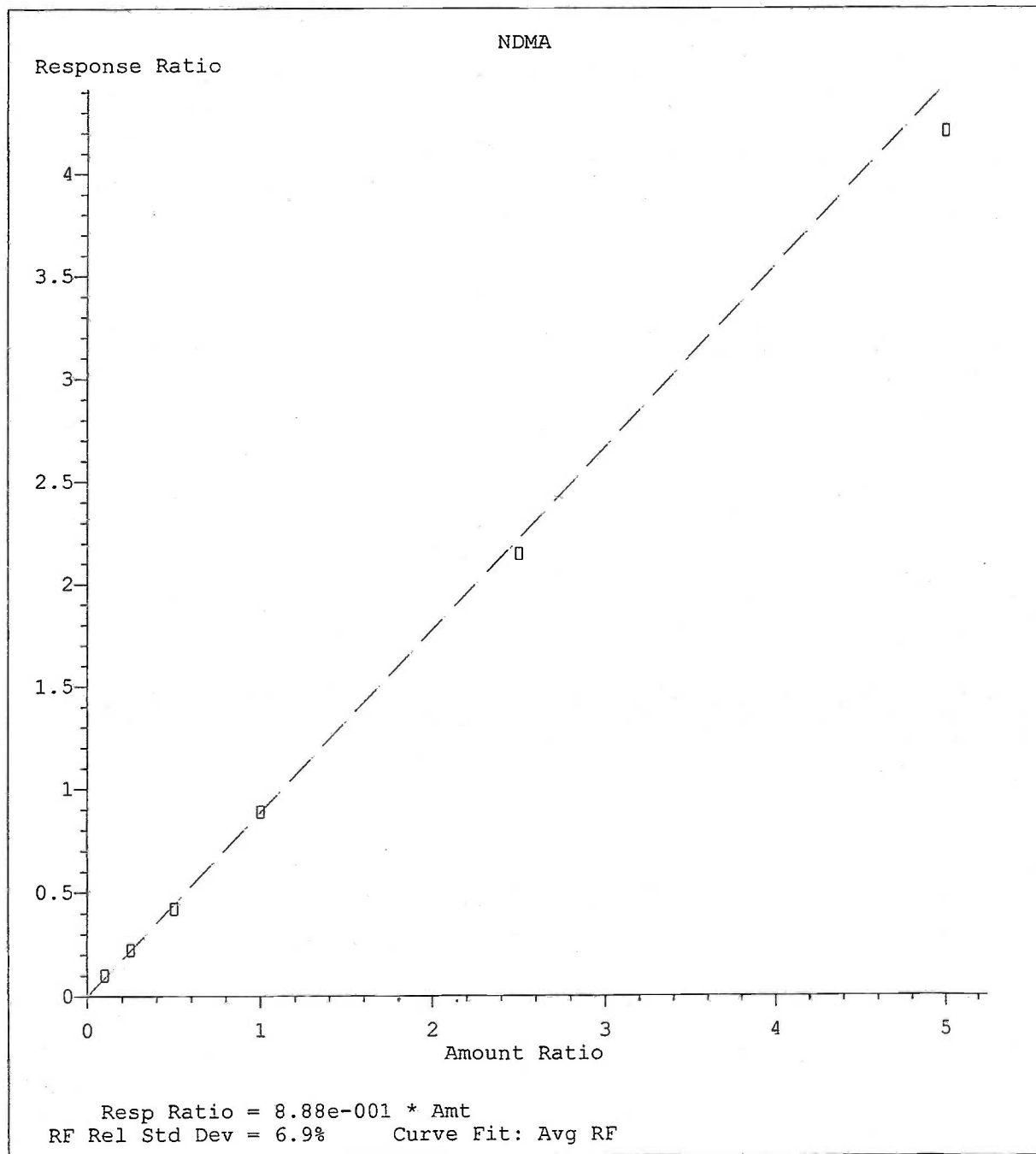
Method Path : C:\MSDCHEM\1\METHODS\
Method File : 1625_M_041311F2.M
Title :
Last Update : Wed May 05 16:21:01 2010
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	2	20	C:\MSDCHEM\1\DATA\NDMA_1_4_Dioxane\20110413\call.D
2	2	5	20	C:\MSDCHEM\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08001.D
3	3	10	20	C:\MSDCHEM\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08002.D
4	4	20	20	C:\MSDCHEM\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08003.D
5	5	50	20	C:\MSDCHEM\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08004.D
6	6	100	20	C:\MSDCHEM\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08005.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Apr 13 15:16 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
2	2	Apr 13 15:17 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
3	3	Apr 13 15:17 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
4	4	Apr 13 15:18 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
5	5	Apr 13 15:20 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
6	6	Apr 13 15:20 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm

1625_M_041311F2.M Wed Oct 17 12:14:14 2012

ALAB: 00304

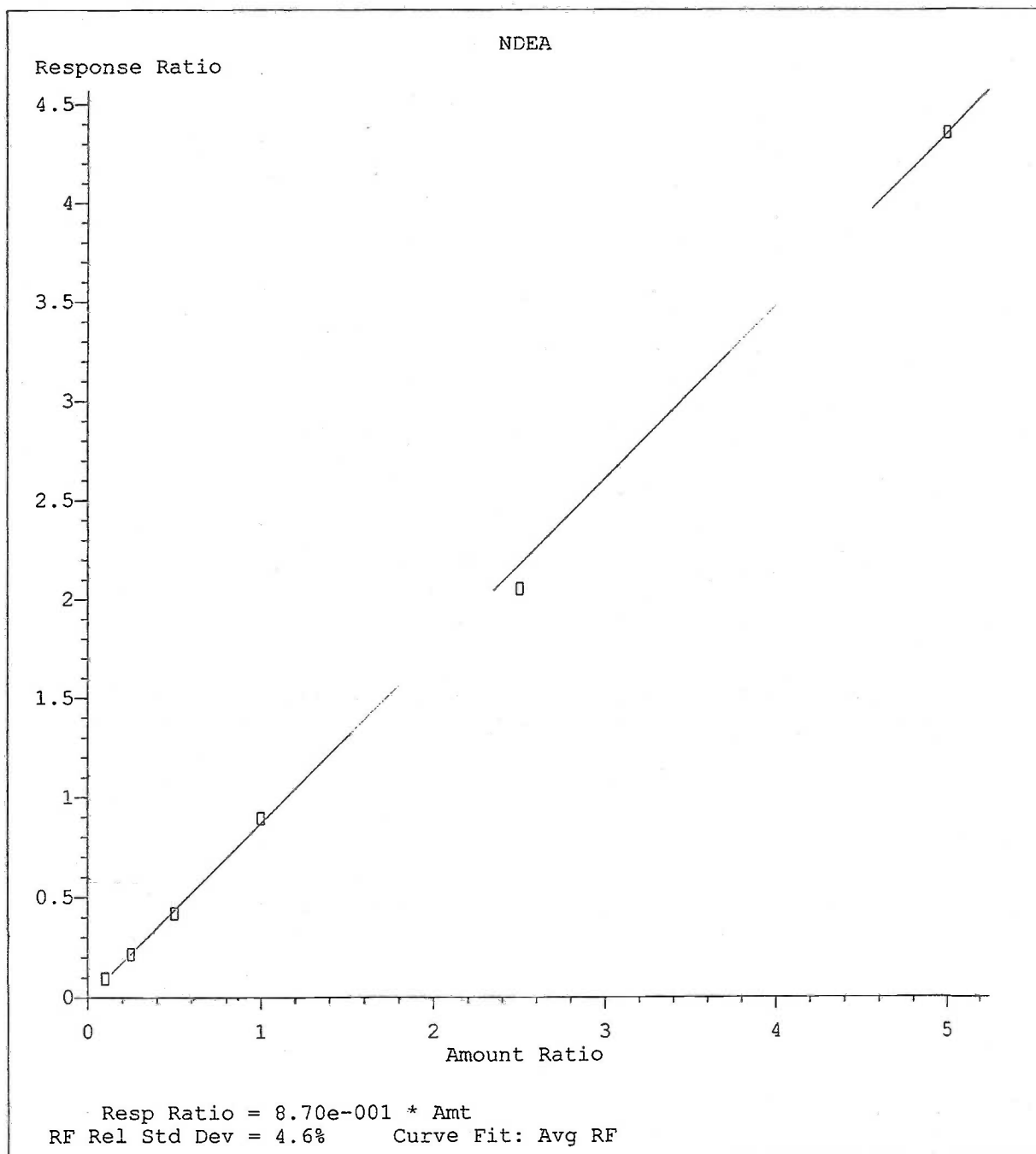


Method Name: C:\MSDCHEM\1\METHODS\1625_M 041311F2.M
Calibration Table Last Updated: Wed May 05 16:21:01 2010

ALAB: 00305

CONFIDENTIAL

LMC-PET-00001590

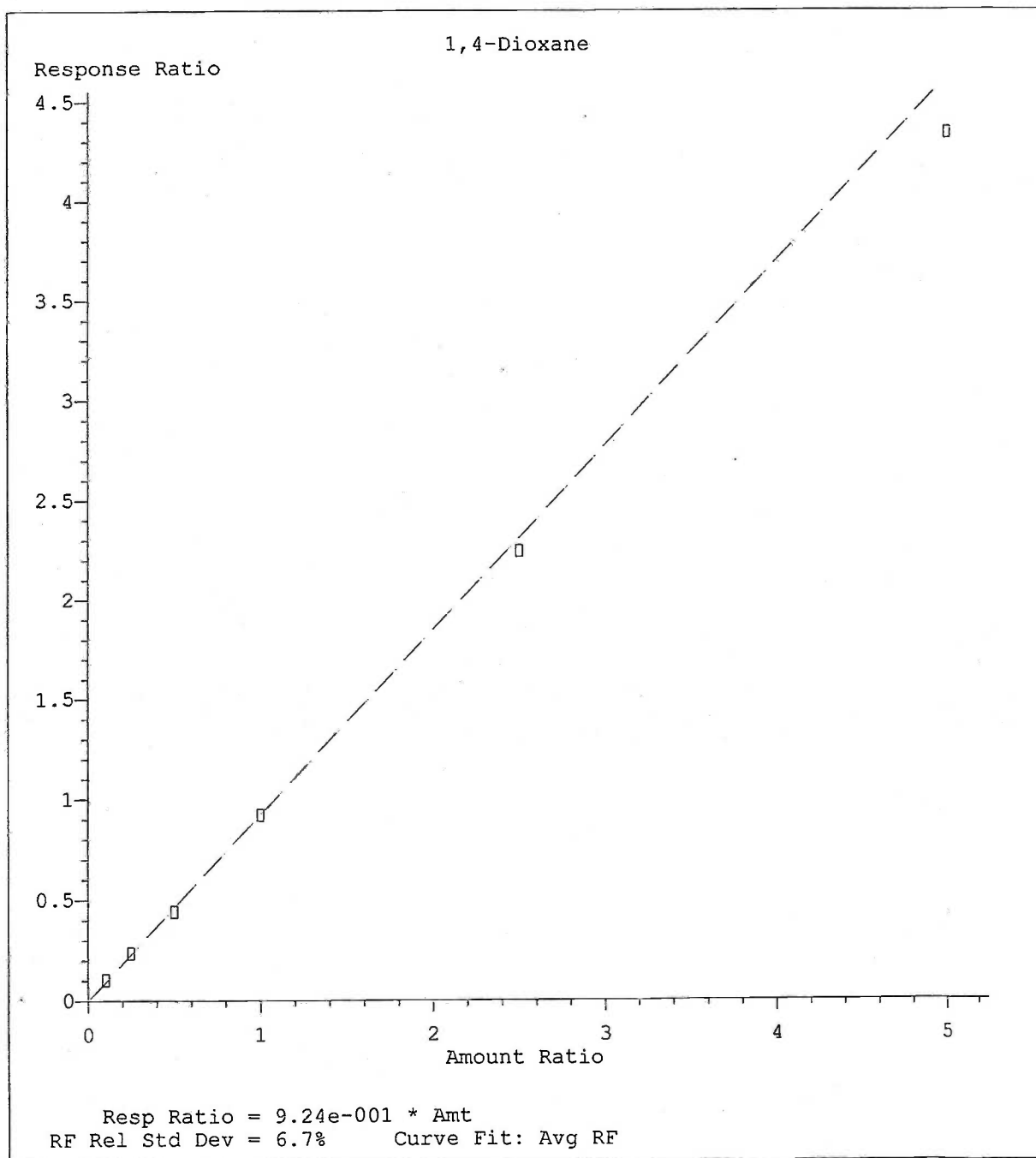


Method Name: C:\MSDCHEM\1\METHODS\1625_M 041311F2.M
Calibration Table Last Updated: Wed May 05 16:21:01 2010

ALAB: 00306

CONFIDENTIAL

LMC-PET-00001591



Method Name: C:\MSDCHEM\1\METHODS\1625_M 041311F2.M
Calibration Table Last Updated: Wed May 05 16:21:01 2010

ALAB: 00307

CONFIDENTIAL

LMC-PET-00001592

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_Dioxane\z2009_8270M_Data\20090108\
Data File : Jan08008.D
Acq On : 8 Jan 2009 9:19 pm
Operator : SD
Sample : 1625_ICV-Old_10ppm
Misc : w-5133, Spike=10, IS=20
ALS Vial : 1 Sample Multiplier: 1

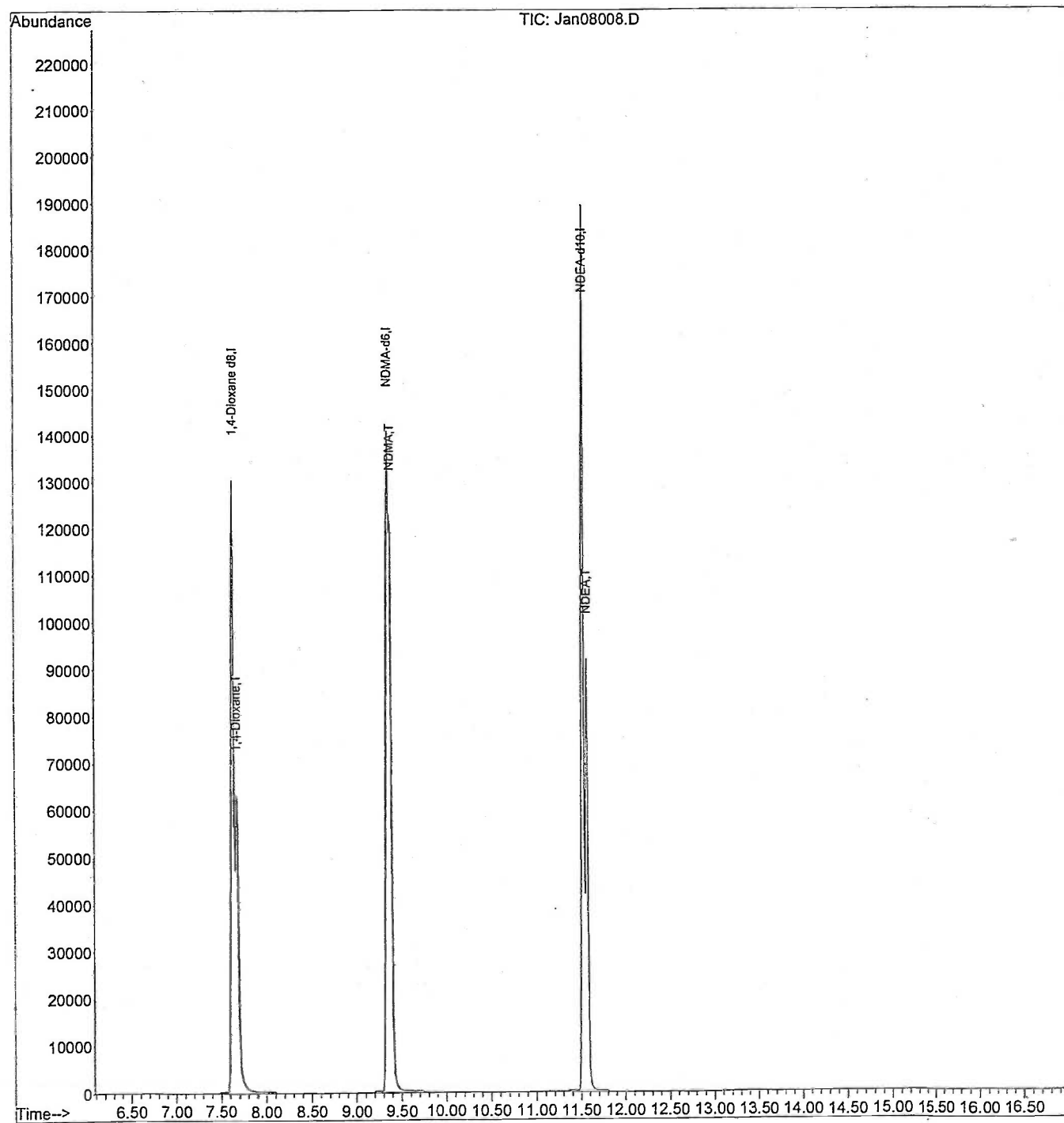
Quant Time: Jan 09 11:25:24 2009
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_010809.M
Quant Title :
QLast Update : Fri Jan 09 10:23:29 2009
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.63	96	1878033	20.00	ug/L	0.00
3) NDMA-d6	9.34	80	2920326	20.00	ug/L	0.00
5) NDEA-d10	11.52	112	2501029	20.00	ug/L	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	7.68	88	843346	9.72	ug/L	100
4) NDMA	9.38	74	1289108	9.94	ug/L	99
6) NDEA	11.57	102	1132556	10.41	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_Dioxane\z2009_8270M_Data\20090108\
Data File : Jan08008.D
Acq On : 8 Jan 2009 9:19 pm
Operator : SD
Sample : 1625_ICV-Old_10ppm
Misc : w-5133, Spike=10, IS=20
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 09 11:25:24 2009
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_010809.M
Quant Title :
QLast Update : Fri Jan 09 10:23:29 2009
Response via : Initial Calibration



Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_Dioxane\z2011_8270M_Data\20110413\
Data File : Apr13-CCV1.D
Acq On : 13 Apr 2011 5:54 pm
Operator : QN
Sample : ICV010ppb
Misc : w-5913
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Apr 14 12:32:42 2011
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title : 1ppm method
QLast Update : Wed Apr 13 15:21:31 2011
Response via : Initial Calibration

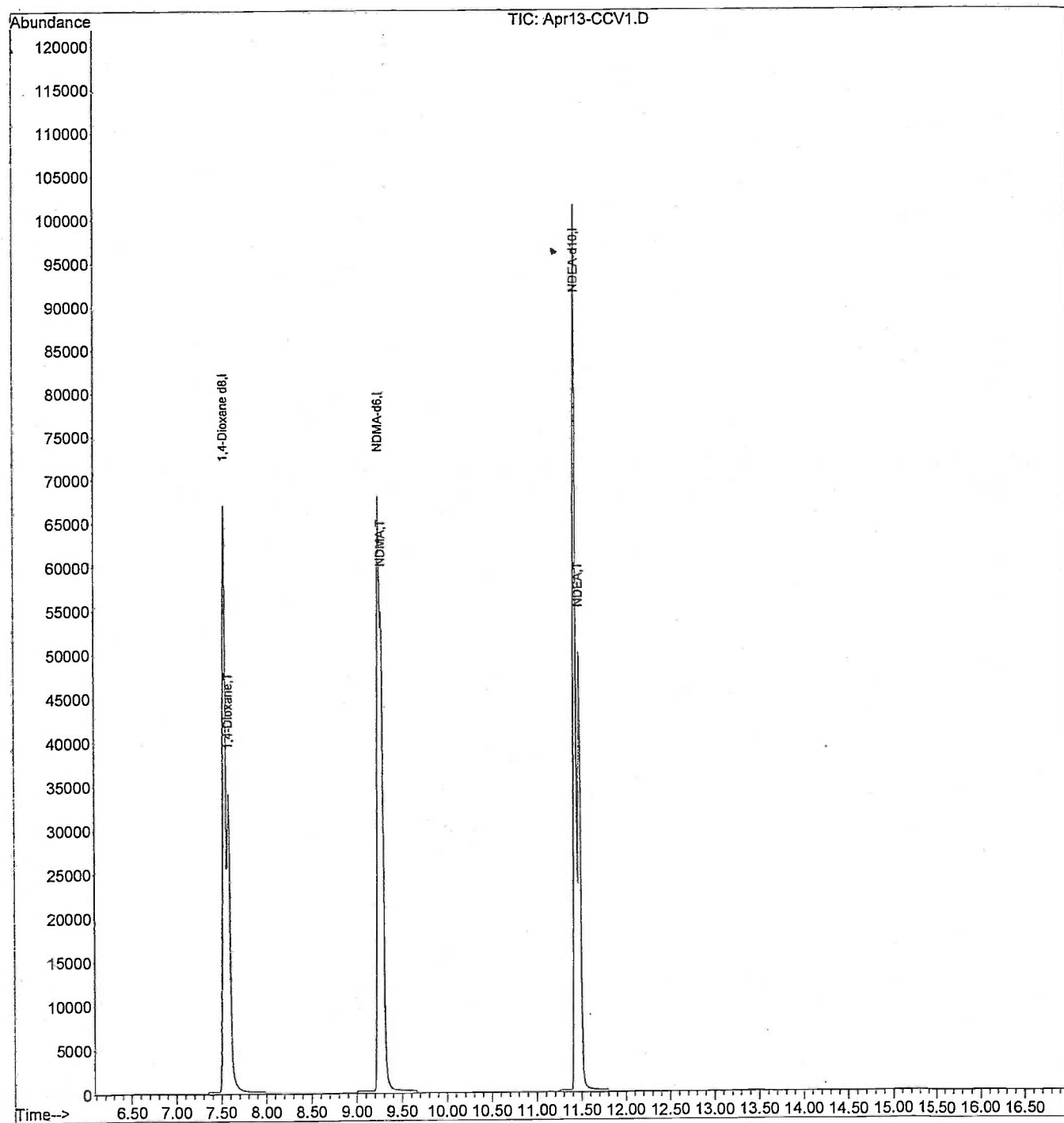
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.53	96	1010029	20.00	ug/L	-0.04
3) NDMA-d6	9.25	80	1395845	20.00	ug/L	-0.04
5) NDEA-d10	11.44	112	1411218	20.00	ug/L	-0.03

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	7.58	88	462323	9.92	ug/L	92
4) NDMA	9.29	74	650596	10.19	ug/L #	79
6) NDEA	11.48	102	662698	10.48	ug/L	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_Dioxane\z2011_8270M_Data\20110413\
Data File : Apr13-CCV1.D
Acq On : 13 Apr 2011 5:54 pm
Operator : QN
Sample : ICV@10ppb
Misc : w-5913
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Apr 14 12:32:42 2011
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title : 1ppm_method
QLast Update : Wed Apr 13 15:21:31 2011
Response via : Initial Calibration





ASSOCIATED LABORATORIES

806 North Batavia - Orange, California 92868 - 714-771-6900 FAX 714 538-1209

CLIENT: ARCADIS

LAB REQUEST: 312159

ATTN: Leah Levy

PROJECT: BOU Burbank

FULL DATAPACKAGE

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ASSOCIATED LABORATORIES

806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714 538-1209

ARCADIS
BOU Burbank Project
ALAB # 312159
Level III Data Package

ALAB Project Manger: Danielle Roberts
ALAB Laboratory Director: Ed Behare PhD
ALAB Quality Control Manager: Hongling Cao

ALAB : 00001

CONFIDENTIAL

LMC-PET-00001598



Associated Laboratories

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Client: ARCADIS
Address: 3750 Schauffele Ave., Suite 225
Long Beach, CA 90808
Attn: Leah Levy
Project: Lockheed Martin BOU
Comments: BOU Burbank
B0038189.0000.00001

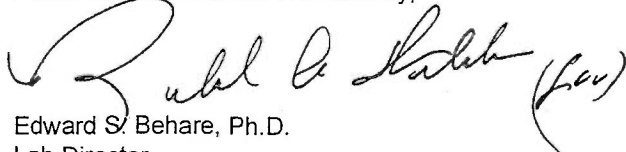
Lab Request: 312159
Report Date: 10/31/2012
Date Received: 10/16/2012
Client ID: 14099

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>
312159-001	TB101512
312159-002	B-1-CW29
312159-003	MW-4
312159-004	MW-7
312159-005	A-1-CW07
312159-006	EB101512 Equip Blank
312159-007	A-1-CW07-DUP

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,


Edward S. Behare, Ph.D.
Lab Director

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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TESTING & CONSULTING

Chemical

Microbiological

Environmental

ALAB : 000002

CONFIDENTIAL

LMC-PET-00001599

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 07:30	Site:	Notes:
Sample #: 312159-001	Client Sample #: TB101512	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8260 NELAC	Prep Method: EPA 5030B		QCBatchID: QC1130649					
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/16/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/16/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/16/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/16/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/16/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/16/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/16/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/16/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/16/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/16/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/16/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/16/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/16/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/16/12	Liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/16/12	Liaoyuanz	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/16/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/16/12	Liaoyuanz	
Chloroform	ND	1	0.044	0.5	ug/L	10/16/12	Liaoyuanz	
Chloromethane	ND	1	0.055	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/16/12	Liaoyuanz	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/16/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/16/12	Liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/16/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

Analytical Results Report

Lab Request 312159 Page 2 of 14



ALAB: 000003

CONFIDENTIAL

LMC-PET-00001600

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 07:30	Site:	Notes:
Sample #: 312159-001	Client Sample #: TB101512	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/16/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/16/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/16/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/16/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/16/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/16/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/16/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/16/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/16/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/16/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/16/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/16/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/16/12	Liaoyuanz	
Tetrachloroethene	ND	1	0.15	0.5	ug/L	10/16/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/16/12	Liaoyuanz	
Trichloroethene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/16/12	Liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	95	70-145	
4-Bromofluorobenzene (SUR)	101	70-145	
Dibromodifluoromethane (SUR)	97	70-145	
Toluene-d8 (SUR)	102	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

Analytical Results Report

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ALAB : 000004

CONFIDENTIAL

LMC-PET-00001601

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 08:27	Site:	Notes:
Sample #: 312159-002	Client Sample #: B-1-CW29	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8260 NELAC		Prep Method: EPA 5030B		QCBatchID: QC1130649				
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/16/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/16/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/16/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/16/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/16/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/16/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/16/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/16/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/16/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/16/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/16/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/16/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/16/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/16/12	Liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/16/12	Liaoyuanz	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/16/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/16/12	Liaoyuanz	
Chloroform	ND	1	0.044	0.5	ug/L	10/16/12	Liaoyuanz	
Chloromethane	ND	1	0.055	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/16/12	Liaoyuanz	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/16/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/16/12	Liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/16/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

Analytical Results Report

Lab Request 312159 Page 4 of 14



ALAB: 00005

CONFIDENTIAL

LMC-PET-00001602

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 08:27	Site:	Notes:
Sample #: 312159-002	Client Sample #: B-1-CW29	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/16/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/16/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/16/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/16/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/16/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/16/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/16/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/16/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/16/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/16/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/16/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/16/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/16/12	Liaoyuanz	
Tetrachloroethene	140	2	0.3	1	ug/L	10/16/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/16/12	Liaoyuanz	
Trichloroethene	3.4	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/16/12	Liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	96	70-145	
4-Bromofluorobenzene (SUR)	98	70-145	
Dibromodifluoromethane (SUR)	96	70-145	
Toluene-d8 (SUR)	102	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00006

CONFIDENTIAL

LMC-PET-00001603

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 11:15	Site:	Notes:
Sample #: 312159-003	Client Sample #: MW-4	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	Prep Method: EPA 218.6							QCBatchID: QC1130646
Hexavalent Chromium	1.67	1	0.1	1	ug/L	10/18/12	rybechay	
Method: EPA 300.0	Prep Method: Method							QCBatchID: QC1130694
Nitrate, as Nitrogen	15.2	2	0.12	0.2	mg/L	10/16/12	wei	
Nitrite, as Nitrogen	ND	1	0.018	0.1	mg/L	10/16/12	wei	
Method: EPA 6010 NELAC	Prep Method: EPA 3010A/Filtered							QCBatchID: QC1130580
Chromium	0.004 J	1	0.002	0.01	mg/L	10/17/12	nina	
Thallium	ND	1	0.003	0.005	mg/L	10/17/12	nina	
Method: EPA 8260 NELAC	Prep Method: EPA 5030B							QCBatchID: QC1130649
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	1.4	1	0.119	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloroethene	0.8	1	0.13	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,3-Trichloropropane	1.3	1	0.073	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/16/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/16/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/16/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/16/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/16/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/16/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/16/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/16/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/16/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/16/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/16/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/16/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/16/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/16/12	Liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/16/12	Liaoyuanz	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/16/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/16/12	Liaoyuanz	
Chloroform	1.0	1	0.044	0.5	ug/L	10/16/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 000007

CONFIDENTIAL

LMC-PET-00001604

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 11:15	Site:	Notes:
Sample #: 312159-003	Client Sample #: MW-4	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Chloromethane	ND	1	0.055	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/16/12	Liaoyuanz	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/16/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/16/12	Liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/16/12	Liaoyuanz	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/16/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/16/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/16/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/16/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/16/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/16/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/16/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/16/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/16/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/16/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/16/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/16/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/16/12	Liaoyuanz	
Tetrachloroethene	37	1	0.15	0.5	ug/L	10/16/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/16/12	Liaoyuanz	
Trichloroethene	7.8	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/16/12	Liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	97	70-145	
4-Bromofluorobenzene (SUR)	100	70-145	
Dibromodifluoromethane (SUR)	97	70-145	
Toluene-d8 (SUR)	102	70-145	

Method: EPA 8270M	Prep Method: EPA 3535	QCBatchID: QC1130645
1,4-Dioxane	0.72 J	1 0.12 1 ug/L 10/17/12 qnguyen

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 000008

CONFIDENTIAL

LMC-PET-00001605

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 14:32	Site:	Notes:
Sample #: 312159-004	Client Sample #: MW-7	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	Prep Method: EPA 218.6							QCBatchID: QC1130646
Hexavalent Chromium	1.55	1	0.1	1	ug/L	10/18/12	rybechay	
Method: EPA 300.0	Prep Method: Method							QCBatchID: QC1130694
Nitrate, as Nitrogen	15.4	2	0.12	0.2	mg/L	10/16/12	wei	
Nitrite, as Nitrogen	ND	1	0.018	0.1	mg/L	10/16/12	wei	
Method: EPA 6010 NELAC	Prep Method: EPA 3010A/Filtered							QCBatchID: QC1130580
Chromium	0.004 J	1	0.002	0.01	mg/L	10/17/12	nina	
Thallium	ND	1	0.003	0.005	mg/L	10/17/12	nina	
Method: EPA 8260 NELAC	Prep Method: EPA 5030B							QCBatchID: QC1130649
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	0.8	1	0.119	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloroethene	0.6	1	0.13	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,3-Trichloropropane	0.5	1	0.073	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/16/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/16/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/16/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/16/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/16/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/16/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/16/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/16/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/16/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/16/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/16/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/16/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/16/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/16/12	Liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/16/12	Liaoyuanz	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/16/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/16/12	Liaoyuanz	
Chloroform	0.8	1	0.044	0.5	ug/L	10/16/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB: 00009

CONFIDENTIAL

LMC-PET-00001606

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 14:32	Site:	Notes:
Sample #: 312159-004	Client Sample #: MW-7	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Chloromethane	ND	1	0.055	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/16/12	Liaoyuanz	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/16/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/16/12	Liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/16/12	Liaoyuanz	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/16/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/16/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/16/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/16/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/16/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/16/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/16/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/16/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/16/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/16/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/16/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/16/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/16/12	Liaoyuanz	
Tetrachloroethene	36	1	0.15	0.5	ug/L	10/16/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/16/12	Liaoyuanz	
Trichloroethene	6.2	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/16/12	Liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	96	70-145	
4-Bromofluorobenzene (SUR)	102	70-145	
Dibromodifluoromethane (SUR)	96	70-145	
Toluene-d8 (SUR)	102	70-145	

Method: EPA 8270M	Prep Method: EPA 3535						QCBatchID: QC1130645
1,4-Dioxane	ND	1	0.12	1	ug/L	10/17/12	qnguyen

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB: 00010

CONFIDENTIAL

LMC-PET-00001607

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 15:52	Site:	Notes:
Sample #: 312159-005	Client Sample #: A-1-CW07	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	Prep Method: EPA 218.6							QCBatchID: QC1130646
Hexavalent Chromium	0.7 J	1	0.1	1	ug/L	10/18/12	rybechay	
Method: EPA 6010 NELAC	Prep Method: EPA 3010A/Filtered							QCBatchID: QC1130580
Chromium	0.008 J	1	0.002	0.01	mg/L	10/17/12	nina	
Thallium	ND	1	0.003	0.005	mg/L	10/17/12	nina	
Method: EPA 8260 NELAC	Prep Method: EPA 5030B							QCBatchID: QC1130649
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	5.2	1	0.119	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloroethene	9.1	1	0.13	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,3-Trichloropropane	31	1	0.073	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/16/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/16/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/16/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/16/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/16/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/16/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/16/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/16/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/16/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/16/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/16/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/16/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/16/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/16/12	Liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/16/12	Liaoyuanz	
Carbon Tetrachloride	4.0	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/16/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/16/12	Liaoyuanz	
Chloroform	18	1	0.044	0.5	ug/L	10/16/12	Liaoyuanz	
Chloromethane	ND	1	0.055	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/16/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES

Analytical Results Report

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ALAB : 00011

CONFIDENTIAL

LMC-PET-00001608

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 15:52	Site:	Notes:
Sample #: 312159-005	Client Sample #: A-1-CW07	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/16/12	Liaoyuanz	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/16/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/16/12	Liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/16/12	Liaoyuanz	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/16/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/16/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/16/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/16/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/16/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/16/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/16/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/16/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/16/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/16/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/16/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/16/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/16/12	Liaoyuanz	
Tetrachloroethene	210	10	1.5	5	ug/L	10/16/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/16/12	Liaoyuanz	
Trichloroethene	340	10	0.78	5	ug/L	10/16/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/16/12	Liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	91	70-145	
4-Bromofluorobenzene (SUR)	100	70-145	
Dibromodifluoromethane (SUR)	94	70-145	
Toluene-d8 (SUR)	102	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 000012

CONFIDENTIAL

LMC-PET-00001609

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 16:40	Site:	Notes:
Sample #: 312159-006	Client Sample #: EB101512 Equip Blank	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 218.6	Prep Method: EPA 218.6							QCBatchID: QC1130646
Hexavalent Chromium	ND	1	0.1	1	ug/L	10/18/12	rybechay	
Method: EPA 300.0	Prep Method: Method							QCBatchID: QC1130694
Nitrate, as Nitrogen	0.10	1	0.06	0.1	mg/L	10/16/12	wei	
Nitrite, as Nitrogen	ND	1	0.018	0.1	mg/L	10/16/12	wei	
Method: EPA 6010 NELAC	Prep Method: EPA 3010A/Filtered							QCBatchID: QC1130580
Chromium	ND	1	0.002	0.01	mg/L	10/17/12	nina	
Thallium	ND	1	0.003	0.005	mg/L	10/17/12	nina	
Method: EPA 8260 NELAC	Prep Method: EPA 5030B							QCBatchID: QC1130649
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/16/12	Liaoyuanz	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/16/12	Liaoyuanz	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/16/12	Liaoyuanz	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/16/12	Liaoyuanz	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/16/12	Liaoyuanz	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/16/12	Liaoyuanz	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/16/12	Liaoyuanz	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/16/12	Liaoyuanz	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/16/12	Liaoyuanz	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/16/12	Liaoyuanz	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/16/12	Liaoyuanz	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/16/12	Liaoyuanz	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/16/12	Liaoyuanz	
Acetone	ND	1	0.2	10	ug/L	10/16/12	Liaoyuanz	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
Benzene	ND	1	0.071	0.5	ug/L	10/16/12	Liaoyuanz	
Bromobenzene	ND	1	0.073	1	ug/L	10/16/12	Liaoyuanz	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Bromoform	ND	1	0.053	0.5	ug/L	10/16/12	Liaoyuanz	
Bromomethane	ND	1	0.13	1	ug/L	10/16/12	Liaoyuanz	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/16/12	Liaoyuanz	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/16/12	Liaoyuanz	
Chloroethane	ND	1	0.4	0.5	ug/L	10/16/12	Liaoyuanz	
Chloroform	ND	1	0.044	0.5	ug/L	10/16/12	Liaoyuanz	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00013

CONFIDENTIAL

LMC-PET-00001610

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 16:40	Site:	Notes:
Sample #: 312159-006	Client Sample #: EB101512 Equip Blank	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Chloromethane	ND	1	0.055	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/16/12	Liaoyuanz	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/16/12	Liaoyuanz	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/16/12	Liaoyuanz	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/16/12	Liaoyuanz	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/16/12	Liaoyuanz	
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/16/12	Liaoyuanz	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/16/12	Liaoyuanz	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/16/12	Liaoyuanz	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/16/12	Liaoyuanz	
Naphthalene	ND	1	0.061	0.5	ug/L	10/16/12	Liaoyuanz	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/16/12	Liaoyuanz	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/16/12	Liaoyuanz	
o-Xylene	ND	1	0.075	0.5	ug/L	10/16/12	Liaoyuanz	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/16/12	Liaoyuanz	
Styrene	ND	1	0.088	0.5	ug/L	10/16/12	Liaoyuanz	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/16/12	Liaoyuanz	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/16/12	Liaoyuanz	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/16/12	Liaoyuanz	
Tetrachloroethene	ND	1	0.15	0.5	ug/L	10/16/12	Liaoyuanz	
Toluene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/16/12	Liaoyuanz	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/16/12	Liaoyuanz	
Trichloroethene	ND	1	0.078	0.5	ug/L	10/16/12	Liaoyuanz	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/16/12	Liaoyuanz	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/16/12	Liaoyuanz	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/16/12	Liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	95	70-145	
4-Bromofluorobenzene (SUR)	100	70-145	
Dibromodifluoromethane (SUR)	94	70-145	
Toluene-d8 (SUR)	102	70-145	

Method: EPA 8260M	Prep Method: EPA 5030B	QCBatchID: QC1130967
1,2,3-Trichloropropane	ND	1 0.005 0.005 ug/L 10/29/12 akk

Analyte	% Recovery	Limits	Notes
Toluene-d8 (SUR)	142	50-150	

Method: EPA 8270M	Prep Method: EPA 3535	QCBatchID: QC1130645
1,4-Dioxane	ND	1 0.12 1 ug/L 10/17/12 qnguyen

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

Analytical Results Report

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ALAB: 00014

CONFIDENTIAL

LMC-PET-00001611

Matrix: Water	Client: ARCADIS	Collector: Client
Sampled: 10/15/2012 15:54	Site:	Notes:
Sample #: 312159-007	Client Sample #: A-1-CW07-DUP	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8260 NELAC	Prep Method: EPA 5030B					QCBatchID: QC1130898		
1,2,3-Trichloropropane	37	1	0.073	0.5	ug/L	10/25/12	liaoyuanz	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	110	70-145	
4-Bromofluorobenzene (SUR)	104	70-145	
Dibromodifluoromethane (SUR)	102	70-145	
Toluene-d8 (SUR)	101	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

Analytical Results Report

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ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312159

QCBatchID: QC1130580	Analyst: metha	Method: EPA 6010B
Matrix: Water	Analyzed: 10/17/2012	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1130580MB1				
Chromium	ND	mg/L	0.01	
Thallium	ND	mg/L	0.005	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1130580LCS1											
Chromium	2		2.23		mg/L	112			80-120		
Thallium	2		2.15		mg/L	108			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1130580MS1, QC1130580MSD1											Source: 311995-007	
Chromium	0.004	1	1	1.02	1.03	mg/L	102	103	1.0	75-125	20	
Thallium	ND	1	1	0.958	0.958	mg/L	96	96	0.0	75-125	20	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

Analytical Results Report

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ALAB : 00015

CONFIDENTIAL

LMC-PET-00001613

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312159

QCBatchID: QC1130645	Analyst: qnguyen	Method: EPA 8270M
Matrix: Water	Analyzed: 10/16/2012	Instrument: SVOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1130645MB1				
1,4-Dioxane	ND	ug/L	1	
N-nitrosodiethylamine (NDEA)	ND	ug/L	2	
N-Nitrosodimethylamine (NDMA)	ND	ug/L	2	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1130645LCS1, QC1130645LCSD1											
1,4-Dioxane	20	20	14	14	ug/L	70	70	0	65-135	35	
N-nitrosodiethylamine (NDEA)	20	20	14	15	ug/L	70	75	7	65-135	35	
N-Nitrosodimethylamine (NDMA)	20	20	14	15	ug/L	70	75	7	65-135	35	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00016

CONFIDENTIAL

LMC-PET-00001614

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312159

QCBatchID: QC1130646	Analyst: rybechay	Method: EPA 218.6
Matrix: Water	Analyzed: 10/18/2012	Instrument: CHEM (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1130646MB1				
Hexavalent Chromium	ND	ug/L	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	
QC1130646LCS1										
Hexavalent Chromium	5		5.03		ug/L	101		80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1130646MS1, QC1130646MSD1											Source: 312205-007	
Hexavalent Chromium	ND	2	2	2.27	2.27	ug/L	114	114	0.0	75-125	20	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

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ALAB : 00017

CONFIDENTIAL

LMC-PET-00001615

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312159

QCBatchID: QC1130649	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 10/18/2012	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1130649MB1				
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	
1,1,1-Trichloroethane	ND	ug/L	0.5	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	
1,1,2-Trichloroethane	ND	ug/L	0.5	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	0.5	
1,1-Dichloroethane	ND	ug/L	0.5	
1,1-Dichloroethene	ND	ug/L	0.5	
1,1-Dichloropropene	ND	ug/L	0.5	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	
1,2,3-Trichloropropane	ND	ug/L	0.5	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	
1,2-Dibromo-3-chloropropane	ND	ug/L	0.5	
1,2-Dibromoethane	ND	ug/L	0.5	
1,2-Dichlorobenzene	ND	ug/L	0.5	
1,2-Dichloroethane	ND	ug/L	0.5	
1,2-Dichloropropane	ND	ug/L	0.5	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	
1,3-Dichlorobenzene	ND	ug/L	0.5	
1,3-Dichloropropane	ND	ug/L	0.5	
1,4-Dichlorobenzene	ND	ug/L	0.5	
2,2-Dichloropropane	ND	ug/L	0.5	
2-Butanone (MEK)	ND	ug/L	5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	
2-Chlorotoluene	ND	ug/L	0.5	
4-Chlorotoluene	ND	ug/L	0.5	
4-Isopropyltoluene	ND	ug/L	0.5	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5	
Acetone	ND	ug/L	10	
Allyl Chloride	ND	ug/L	0.5	
Benzene	ND	ug/L	0.5	
Bromobenzene	ND	ug/L	1	
Bromochloromethane	ND	ug/L	0.5	
Bromodichloromethane	ND	ug/L	0.5	
Bromoform	ND	ug/L	0.5	
Bromomethane	ND	ug/L	1	
Carbon Tetrachloride	ND	ug/L	0.5	
Chlorobenzene	ND	ug/L	0.5	
Chlorodibromomethane	ND	ug/L	0.5	
Chloroethane	ND	ug/L	0.5	
Chloroform	ND	ug/L	0.5	
Chloromethane	ND	ug/L	0.5	
cis-1,2-Dichloroethene	ND	ug/L	0.5	
cis-1,3-dichloropropene	ND	ug/L	0.5	
cis-1,4-dichloro-2-butene	ND	ug/L	5	
Dibromomethane	ND	ug/L	0.5	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00018

CONFIDENTIAL

LMC-PET-00001616

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312159

QCBatchID: QC1130649	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 10/18/2012	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	RDL	Notes
QC1130649MB1				
Dichlorodifluoromethane	ND	ug/L	0.5	
Di-isopropyl ether (DIPE)	ND	ug/L	0.5	
Ethylbenzene	ND	ug/L	0.5	
Ethyl-tertbutylether (ETBE)	ND	ug/L	0.5	
Hexachlorobutadiene	ND	ug/L	1	
Isopropylbenzene	ND	ug/L	0.5	
m and p-Xylene	ND	ug/L	0.5	
Methylene chloride	ND	ug/L	0.5	
Methyl-t-butyl Ether (MTBE)	ND	ug/L	0.5	
Naphthalene	ND	ug/L	0.5	
N-butylbenzene	ND	ug/L	0.5	
N-propylbenzene	ND	ug/L	0.5	
o-Xylene	ND	ug/L	0.5	
Sec-butylbenzene	ND	ug/L	0.5	
Styrene	ND	ug/L	0.5	
t-Butyl alcohol (TBA)	ND	ug/L	5	
Tert-amylmethylether (TAME)	ND	ug/L	0.5	
Tert-butylbenzene	ND	ug/L	0.5	
Tetrachloroethene	ND	ug/L	0.5	
Toluene	ND	ug/L	0.5	
trans-1,2-dichloroethene	ND	ug/L	0.5	
trans-1,3-dichloropropene	ND	ug/L	0.5	
trans-1,4-dichloro-2-butene	ND	ug/L	5	
Trichloroethene	ND	ug/L	0.5	
Trichlorofluoromethane	ND	ug/L	0.5	
Vinyl Chloride	ND	ug/L	0.5	
Xylenes (Total)	ND	ug/L	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary											
Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1130649LCS1											
1,1-Dichloroethene	25		24		ug/L	96			59-172		
Benzene	25		24		ug/L	96			62-137		
Chlorobenzene	25		25		ug/L	100			60-133		
Methyl-t-butyl Ether (MTBE)	25		22		ug/L	88			62-137		
Toluene	25		25		ug/L	100			59-139		
Trichloroethene	25		24		ug/L	96			66-142		

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00019

CONFIDENTIAL

LMC-PET-00001617

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312159

QCBatchID: <u>QC1130649</u>	Analyst: <u>lucy</u>	Method: <u>EPA 8260B</u>
Matrix: <u>Water</u>	Analyzed: <u>10/18/2012</u>	Instrument: <u>VOA-MS (group)</u>

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1130649MS1, QC1130649MSD1											Source: 311995-007	
1,1-Dichloroethene	ND	25	25	23	23	ug/L	92	92	0.0	59-172	22	
Benzene	ND	25	25	22	22	ug/L	88	88	0.0	62-137	24	
Chlorobenzene	ND	25	25	25	23	ug/L	100	92	8.3	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	25	25	22	22	ug/L	88	88	0.0	62-137	21	
Toluene	ND	25	25	24	23	ug/L	96	92	4.3	59-139	21	
Trichloroethene	ND	25	25	21	21	ug/L	84	84	0.0	66-142	21	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312159

QC Batch ID: <u>QC1130694</u>	Analyst: <u>wei</u>	Method: <u>EPA 300.0</u>
Matrix: <u>Water</u>	Analyzed: <u>10/16/2012</u>	Instrument: <u>CHEM (group)</u>

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1130694MB1				
Chloride	ND	mg/L	1	
Nitrate, as Nitrogen	ND	mg/L	0.1	
Nitrate, as NO3	ND	mg/L	0.44	
Nitrite, as Nitrogen	ND	mg/L	0.1	
Sulfate	ND	mg/L	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1130694LCS1											
Chloride	40		39.9		mg/L	100			90-110		
Nitrate, as Nitrogen	4.5		4.50		mg/L	100			90-110		
Nitrate, as NO3	20		20.0		mg/L	100			90-110		
Nitrite, as Nitrogen	3.1		2.90		mg/L	94			90-110		
Sulfate	40		37.8		mg/L	95			90-110		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1130694MS1, QC1130694MSD1											Source: 312158-002	
Chloride	307	200	200	507	532	mg/L	100	113	4.8	75-125	20	
Nitrate, as Nitrogen	0.08	22.6	22.6	22.6	23.0	mg/L	100	101	1.8	75-125	20	
Nitrate, as NO3	0.37	100	100	99.7	102	mg/L	99	102	2.3	75-125	20	
Sulfate	520	200	200	704	742	mg/L	92	111	5.3	75-125	20	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00019

CONFIDENTIAL

LMC-PET-00001619

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312159

QCBatchID: QC1130898	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 10/25/2012	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1130898MB1				
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	
1,1,1-Trichloroethane	ND	ug/L	0.5	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	
1,1,2-Trichloroethane	ND	ug/L	0.5	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	10	
1,1-Dichloroethane	ND	ug/L	0.5	
1,1-Dichloroethene	ND	ug/L	0.5	
1,1-Dichloropropene	ND	ug/L	0.5	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	
1,2-Dibromo-3-chloropropane	ND	ug/L	0.5	
1,2-Dibromoethane	ND	ug/L	0.5	
1,2-Dichlorobenzene	ND	ug/L	0.5	
1,2-Dichloroethane	ND	ug/L	0.5	
1,2-Dichloropropane	ND	ug/L	0.5	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	
1,3-Dichlorobenzene	ND	ug/L	0.5	
1,3-Dichloropropane	ND	ug/L	0.5	
1,4-Dichlorobenzene	ND	ug/L	0.5	
2,2-Dichloropropane	ND	ug/L	0.5	
2-Butanone (MEK)	ND	ug/L	5	
2-Chlorotoluene	ND	ug/L	0.5	
4-Chlorotoluene	ND	ug/L	0.5	
4-Isopropyltoluene	ND	ug/L	0.5	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5	
Acetone	ND	ug/L	5	
Benzene	ND	ug/L	0.5	
Bromobenzene	ND	ug/L	0.5	
Bromochloromethane	ND	ug/L	0.5	
Bromodichloromethane	ND	ug/L	0.5	
Bromoform	ND	ug/L	0.5	
Bromomethane	ND	ug/L	0.5	
Carbon Tetrachloride	ND	ug/L	0.5	
Chlorobenzene	ND	ug/L	0.5	
Chlorodibromomethane	ND	ug/L	0.5	
Chloroethane	ND	ug/L	0.5	
Chloroform	ND	ug/L	0.5	
Chloromethane	ND	ug/L	0.5	
cis-1,2-Dichloroethene	ND	ug/L	0.5	
cis-1,3-dichloropropene	ND	ug/L	0.5	
Dibromomethane	ND	ug/L	0.5	
Dichlorodifluoromethane	ND	ug/L	0.5	
Ethylbenzene	ND	ug/L	0.5	
Hexachlorobutadiene	ND	ug/L	0.5	
Isopropylbenzene	ND	ug/L	0.5	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312159

QCBatchID: QC1130898	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 10/25/2012	Instrument: VOA-MS (group)

Analyte	Blank Result	Units	RDL	Notes
QC1130898MB1				
m and p-Xylene	ND	ug/L	0.5	
Methylene chloride	ND	ug/L	0.5	
Methyl-t-butyl Ether (MTBE)	ND	ug/L	3	
Naphthalene	ND	ug/L	0.5	
N-butylbenzene	ND	ug/L	0.5	
N-propylbenzene	ND	ug/L	0.5	
o-Xylene	ND	ug/L	0.5	
Sec-butylbenzene	ND	ug/L	0.5	
Styrene	ND	ug/L	0.5	
Tert-butylbenzene	ND	ug/L	0.5	
Tetrachloroethene	ND	ug/L	0.5	
Toluene	ND	ug/L	0.5	
trans-1,2-dichloroethene	ND	ug/L	0.5	
trans-1,3-dichloropropene	ND	ug/L	0.5	
Trichloroethene	ND	ug/L	0.5	
Trichlorofluoromethane	ND	ug/L	5	
Vinyl Chloride	ND	ug/L	0.5	
Xylenes (Total)	ND	ug/L	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1130898LCS1											
1,1-Dichloroethene	25		28		ug/L	112			59-172		
Benzene	25		26		ug/L	104			62-137		
Chlorobenzene	25		26		ug/L	104			60-133		
Methyl-t-butyl Ether (MTBE)	25		24		ug/L	96			62-137		
Toluene	25		26		ug/L	104			59-139		
Trichloroethene	25		26		ug/L	104			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1130898MS1, QC1130898MSD1												
Source: 312380-017												
1,1-Dichloroethene	ND	25	25	30	30	ug/L	120	120	0.0	59-172	22	
Benzene	ND	25	25	28	28	ug/L	112	112	0.0	62-137	24	
Chlorobenzene	ND	25	25	27	27	ug/L	108	108	0.0	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	25	25	26	27	ug/L	104	108	3.8	62-137	21	
Toluene	ND	25	25	27	26	ug/L	108	104	3.8	59-139	21	
Trichloroethene	ND	25	25	27	26	ug/L	108	104	3.8	66-142	21	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 00019

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LMC-PET-00001621

ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312159

QCBatchID: QC1130967	Analyst: akk	Method: EPA 8260M
Matrix: Water	Analyzed: 10/30/2012	Instrument: VOA-MS (group)

<i>Blank Summary</i>						
Analyte	Blank Result	Units		RDL	Notes	
QC1130967MB1						
1,2,3-Trichloropropane	ND	ug/L		0.005		

Lab Control Spike/ Lab Control Spike Duplicate Summary											
Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1130967LCS1, QC1130967LCSD1											
1,2,3-Trichloropropane	0.02	0.02	0.017	0.019	ug/L	85	95	11	50-150	30	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

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ALAB : 000020

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LMC-PET-00001622

Notes and Definitions

B	Analyte was present in an associated method blank. Associated sample data was reported with qualifier.
C	Laboratory Contamination.
D	The sample duplicate RPD was not within control limits, the sample data was reported without further clarification.
DF	Dilution Factor
DW	Sample result is calculated on a dry weigh basis
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
MDL	Method Detection Limit
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
ND	Analyte was not detected or was less than the detection limit.
P	Sample was received without proper preservation according to EPA guidelines.
RDL	Reporting Detection Limit
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
T	Sample was extracted/analyzed past the holding time.

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

ASSOCIATED LABORATORIES

Analytical Results Report

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ALAB : 00021



Chain of Custody Record

Lab Job No. 312159
Page 1 of 1

CUSTOMER INFORMATION				PROJECT INFORMATION				REQUIRED TURN AROUND TIME:			
COMPANY	ALCA-015			PROJECT NAME:	BOU BURBANK			72 Hours:	48 Hours:	24 Hours:	Standard:
SEND REPORT TO:	ERIK GRISER			NUMBER:	B0038189.0000.00001			☐	☐	☒	☒
EMAIL:	enfile			ADDRESS:	Burbank CA						
ADDRESS:				PO #:							
PHONE:				SAMPLED BY:	Houmao Armstrong						
Sample ID	Date	Time	Matrix	Container Number/Size	Pres.	ANALYSIS REQUEST					
1 TB101512	10-15-12	0730	W	VOCs 3	HCl	☒	VOCs 1,2,3 TCP				
2 B-1-CU029	10-15-12	0827	W	VOCs 3	HCl	☒	Total Cr Filtered				
3 MW-4	10-15-12	1115	W	Seventon (11)	Yes/No	☒	Hex Cr				
4 MW-7	10-15-12	1432	W	Seventon (11)	Yes/No	☒	Nitrate/Nitrit				
5 A-1-CU07	10-15-12	1552	W	BB G/P	Yes/No	☒	TD S				
6 E B101512	10-15-12	1640	W	11 G/P	Yes/No	☒	GENERAL MINERALS				
7 A-1-CU07 DVD	10-15-12	1754	W	3 VOCs	Yes/No	☒	1,4 Dioxane				
8						☒	Thallium Filtered				
9							TD S				
10							Test Instructions & Comments				
11											
12											
13											
14											
15											

Total No. of Samples: _____ Method of Shipment: _____ Preservative: 1 = Ice 2 = HCl 3 = HNO₃ 4 = H₂SO₄ 5 = NaOH 6 = Other

Relinquished by		Received By:		Relinquished by		Received By:	
Signature:	<i>[Signature]</i>	Signature:	<i>[Signature]</i>	Signature:	<i>[Signature]</i>	Signature:	<i>[Signature]</i>
Printed Name:	Houmao Armstrong	Printed Name:	James Lee	Printed Name:	James Lee	Printed Name:	James Lee
Date:	10/15/12	Date:	10/15/12	Date:	10/15/12	Date:	10/15/12
Time:	1634	Time:	1635	Time:	1630	Time:	734

ALAB: 000022



ASSOCIATED LABORATORIES

806 North Batavia – Orange, California 92868 – 714-771-6900

FAX 714-538-1209

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Arcadis

Project: _____

Date Received: 10/16/12

Sampler's Name: Yes No

Sample(s) received in cooler: Yes

No (Skip Section 2)

Shipping Information: _____

Section 2

Was the cooler packed with: ☒ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam
☐ Paper ☐ None ☐ Other _____

Cooler or box temperature: 0°C

(Acceptance range is 0 to 6 Deg. C.)

Section 3

	YES	NO	N/A
Was a COC received?	☒	☐	☐
Is it properly completed? (IDs, sampling date and time, signature, test)	☒	☐	☐
Were custody seals present?	☐	☒	☐
If Yes – were they intact?	☐	☐	☒
Were all samples sealed in plastic bags?	☒	☐	☐
Did all samples arrive intact? If no, indicate below.	☒	☐	☐
Did all bottle labels agree with COC? (ID, dates and times)	☒	☐	☐
Were correct containers used for the tests required?	☒	☐	☐
Was a sufficient amount of sample sent for tests indicated?	☒	☐	☐
Was there headspace in VOA vials?	☐	☒	☐
Were the containers labeled with correct preservatives?	☒	☐	☐
Was total residual chlorine measured (Fish Bioassay samples only)? *	☐	☐	☒

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

Section 4

Explanations/Comments

Section 5

Was Project Manager notified of discrepancies: Y / N N/A

Completed By: Daniel Lee Date: 10/16/12

Created on 7/6/2012 1:29:00 PM

ALAB: 00023

CONFIDENTIAL

LMC-PET-00001625

ASSOCIATED LABORATORIES

NARRATIVE

Date: November 7, 2012

Narrative for Lab Request LR: 312159

Client Project Identification:

Client Name: ARCADIS

Project: BOU Burbank

This narrative includes all samples as shown on the attached Lab Request final report.

Data Validation:

Holding Times

Samples were received on October 15th, 2012 intact and ice was present in the cooler. All EPA recommended holding times were met for this project.

Calibration

Initial calibration criteria were met. Initial and Continuing Calibration Check samples were run at the required frequency. All results were within required limits.

Quality Control Samples

All QC results were within control limits.

Other Anomalies or Comments

1,2,3 – TCP for the Samples (ID# MW-4, MW-7, A-1-CW07 and A-1-CW07-DUP) was analyzed and reported by regular EPA 8260B.

Estimated concentrations ("J" Flags) were reported on all samples and method blanks. The following samples have reported "J" flags:

Metals: MW-4 MW-7 A-1-CW07

1,4-Dioxane: MW-4

Hex Chromium: A-1-CW07

ALAB : 00024

EPA 218.6

Hexavalent Chromium

ALAB: 00025

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LMC-PET-00001627

UV_VIS	Name	Type	Level	Position	Volume (µl)	Instrument Method	Processing Method	Status	Inject Time
	MB	Unknown		1	5000	AS7	AS7	Finished	10/18/2012 8:30:18 AM -07:
	MB	Unknown		2	5000	AS7	AS7	Finished	10/18/2012 8:42:48 AM -07:
	MB	Unknown		3	5000	AS7	AS7	Finished	10/18/2012 8:55:45 AM -07:
	STD1 0.5ppb	Calibration Stan	01	4	5000	AS7	AS7	Finished	10/18/2012 9:08:41 AM -07:
	STD2 2.5ppb	Calibration Stan	02	5	5000	AS7	AS7	Finished	10/18/2012 9:21:38 AM -07:
	STD3 5.0ppb	Calibration Stan	03	6	5000	AS7	AS7	Finished	10/18/2012 9:34:34 AM -07:
	STD4 7.5ppb	Calibration Stan	04	7	5000	AS7	AS7	Finished	10/18/2012 9:47:31 AM -07:
	STD5 10.0ppb	Calibration Stan	05	8	5000	AS7	AS7	Finished	10/18/2012 10:00:26 AM -07:
	MB	Unknown		10	5000	AS7	AS7	Finished	10/18/2012 10:33:08 AM -07:
	lev 2.5ppb	Unknown		11	5000	AS7	AS7	Finished	10/18/2012 10:46:04 AM -07:
	lcs 5.0ppb	Unknown		12	5000	AS7	AS7	Finished	10/18/2012 10:59:01 AM -07:
	312159-003/3	Unknown		15	5000	AS7	AS7	Finished	10/18/2012 11:21:36 AM -07:
	312159-004/2	Unknown		16	5000	AS7	AS7	Finished	10/18/2012 11:34:32 AM -07:
	312159-005/1	Unknown		17	5000	AS7	AS7	Finished	10/18/2012 11:47:29 AM -07:
	312159-006/3	Unknown		18	5000	AS7	AS7	Finished	10/18/2012 12:00:26 PM -07:
	312205-002/1	Unknown		19	5000	AS7	AS7	Finished	10/18/2012 12:13:22 PM -07:
	312205-004/9	Unknown		20	5000	AS7	AS7	Finished	10/18/2012 12:26:19 PM -07:
	312205-006/1	Unknown		21	5000	AS7	AS7	Finished	10/18/2012 12:39:16 PM -07:
	312205-007/10	Unknown		22	5000	AS7	AS7	Finished	10/18/2012 12:52:13 PM -07:
	312205-007ms	Unknown		23	5000	AS7	AS7	Finished	10/18/2012 1:05:09 PM -07:
	312205-007ms	Unknown		24	5000	AS7	AS7	Finished	10/18/2012 1:18:05 PM -07:
	ccv 2.5ppb	Unknown		25	5000	AS7	AS7	Finished	10/18/2012 1:31:02 PM -07:
	ccb	Unknown		26	5000	AS7	AS7	Finished	10/18/2012 1:43:58 PM -07:

Note: I moved sometime the retention time for vis to cover the peak, so it can be read because sometimes the peak amount can't be read so, that's why the word main pelated comes out

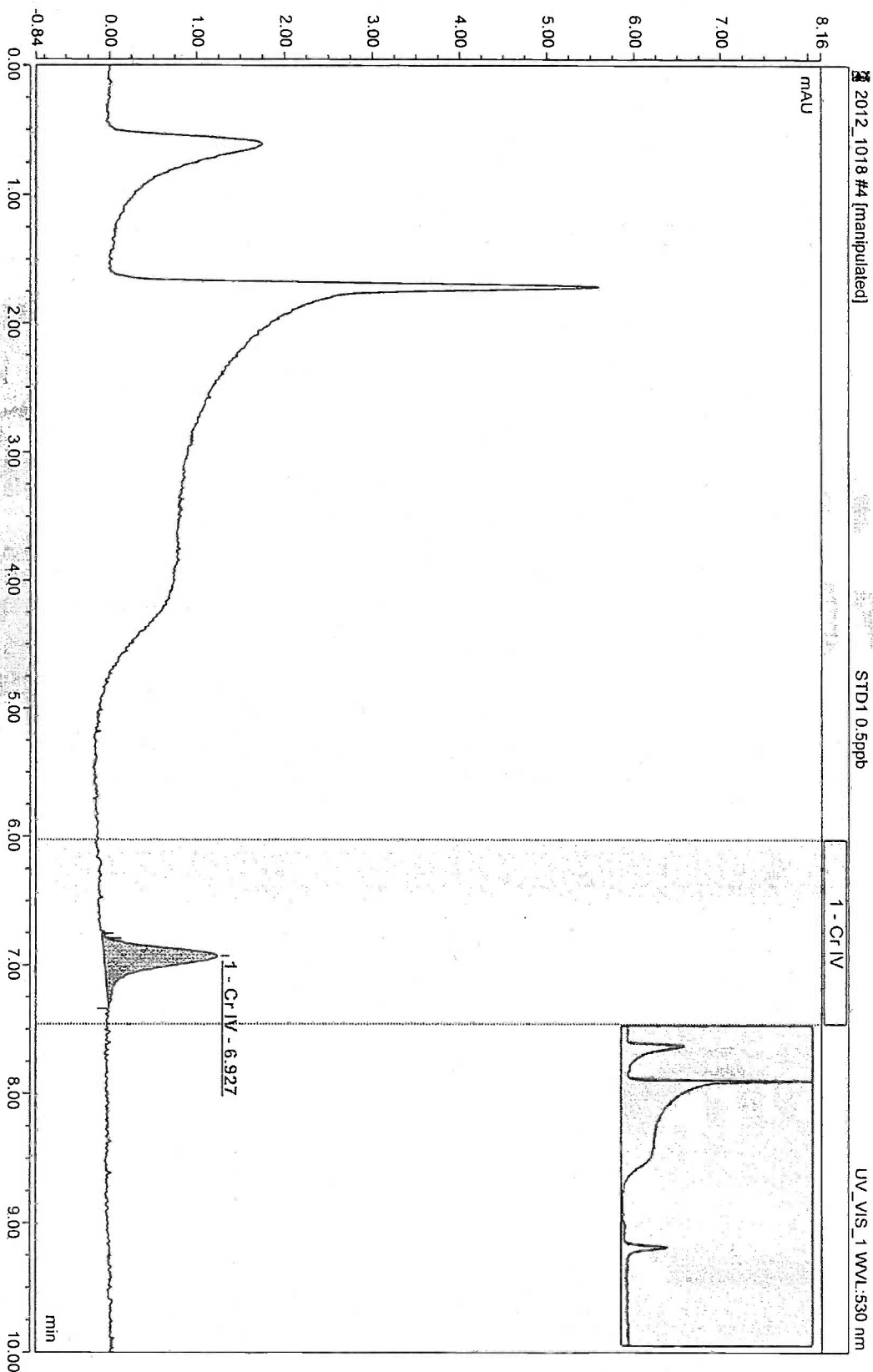
Randy Hest 11/18/12

Sequence: 2012_1018
Last Update Operator: rybechay

[illegible]

Sequence: 2012_1018
Injection #: STD1 0.5ppb

Chromatogram



ALAB : 00027

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LMC-PET-00001630

Sequence: 2012_1018
Injection #: STD1 0.5ppb

Peak Results

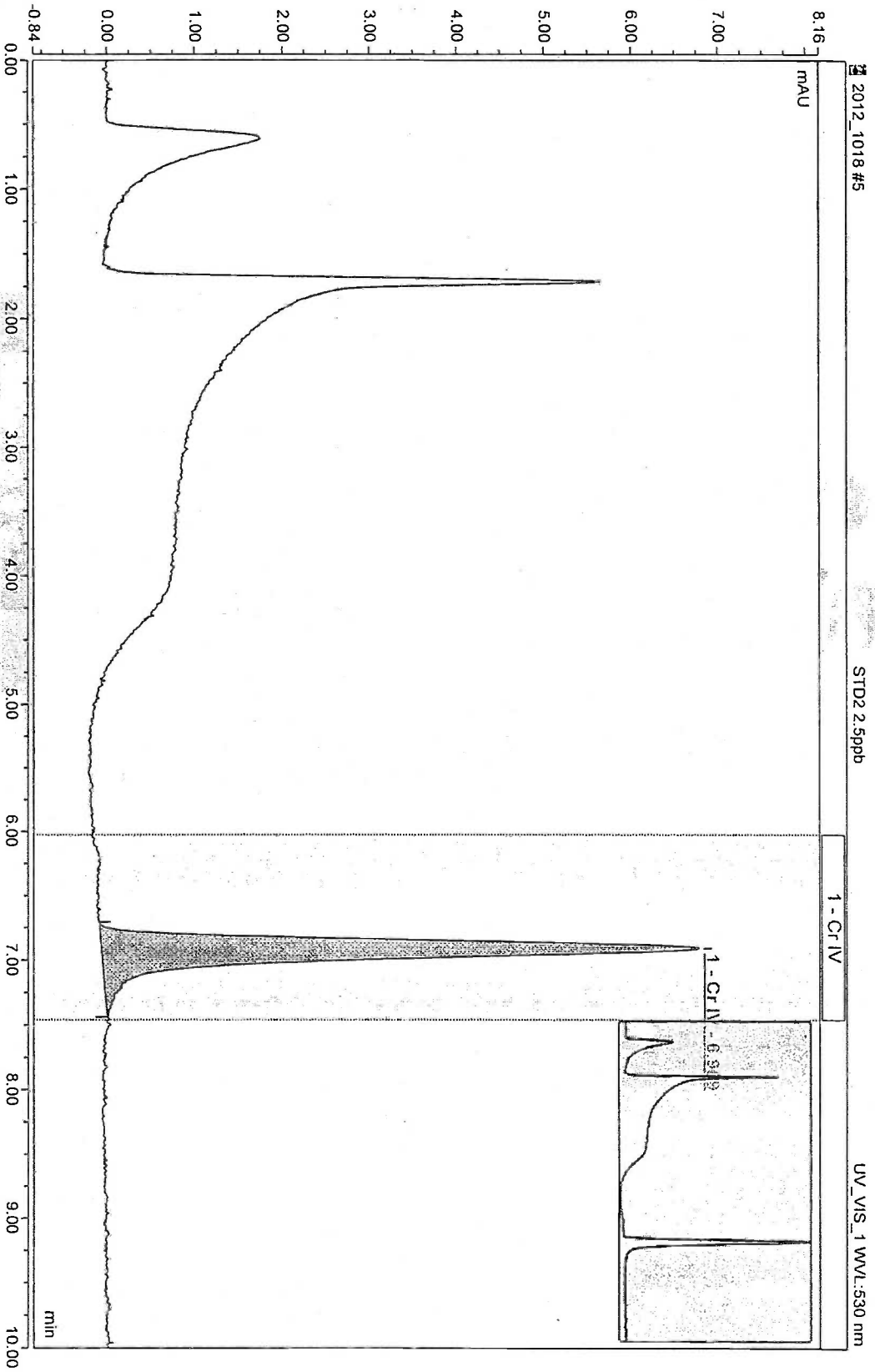
Peak No.	Peak Name	Ret. Time min	Amount ppb	Rel. Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.927	0.5092	100.00	0.2288	1.31	BMB*	0.152	1.43	n.a.	11460
	Maximum		0.5092	100.00	0.2288	1.31		0.152	1.43	0.00	11460
	Minimum		0.5092	100.00	0.2288	1.31		0.152	1.43	0.00	11460
	Sum		0.5092	100.00	0.2288	1.31					



ALAB: 000028

Sequence: 2012_1018
Injection #5: STD2 2.5ppb

Chromatogram



ALAB : 00029

Sequence: 2012_1018
Injection #5: STD2 2.5ppb

Peak Results

Peak No.	Peak Name	Ret. Time min	Amount ppb	Rel. Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plat's EP
1	Cr IV	6.909	2.5408	100.00	1.1417	6.86	M	0.147	1.33	n.a.	12256
Maximum			2.5408	100.00	1.1417	6.86		0.147	1.33	0.00	12256
Minimum			2.5408	100.00	1.1417	6.86		0.147	1.33	0.00	12256
Sum			2.5408	100.00	1.1417	6.86					

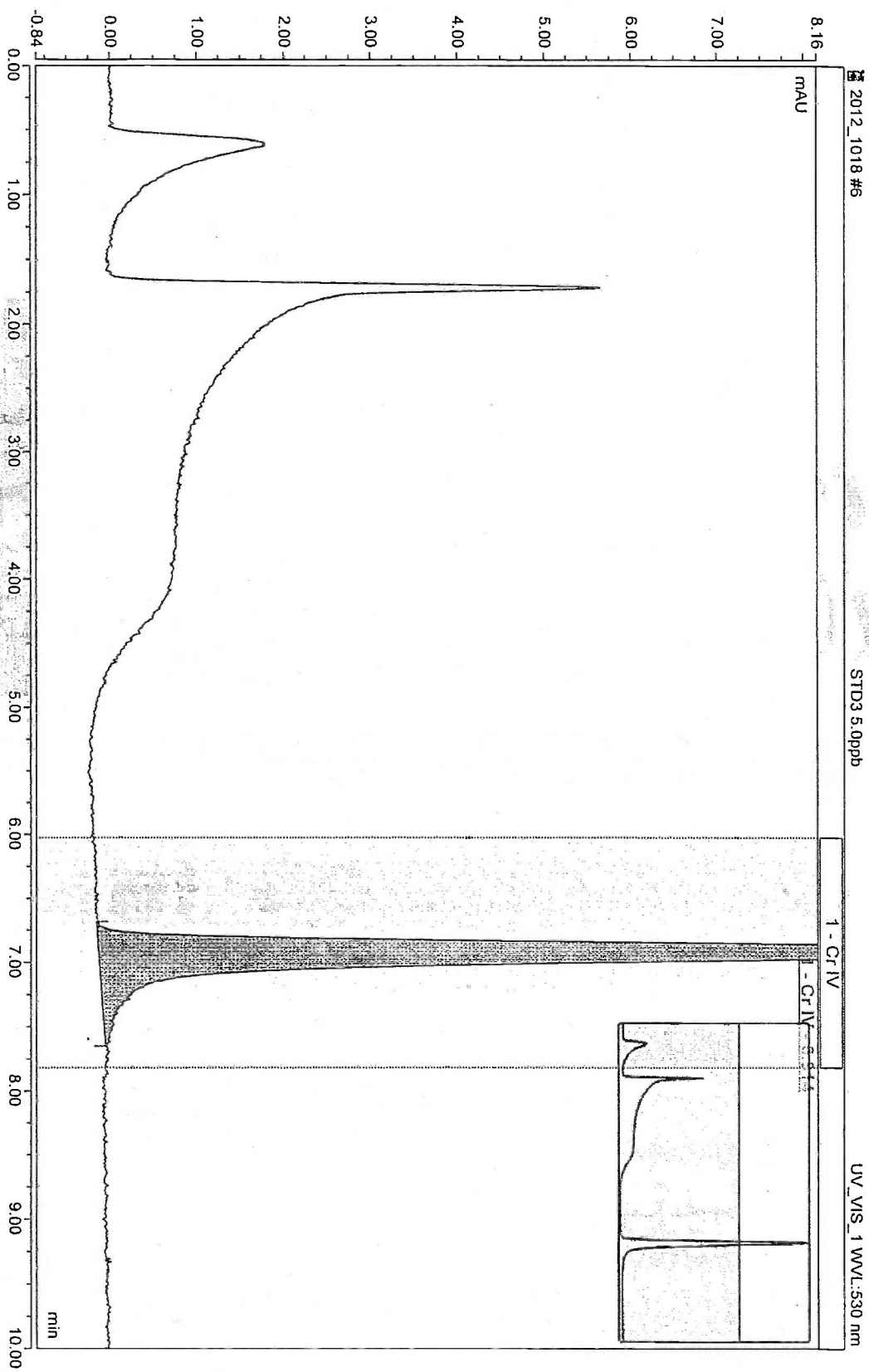
ALAB: 000000

LMC-PET-00001633



Sequence: 2012_1018
Injection #: STD3 5.0ppb

Chromatogram



Sequence: 2012_1018
Injection #6: STD3 5.0ppb

Peak Results

Peak No.	Peak Name	Ret Time min	Amount ppb	Rel Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.914	4.9634	100.00	2.2303	13.09	M	0.147	1.36	n.a.	12230
Maximum			4.9634	100.00	2.2303	13.09		0.147	1.36	0.00	12230
Minimum			4.9634	100.00	2.2303	13.09		0.147	1.36	0.00	12230
Sum			4.9634	100.00	2.2303	13.09					

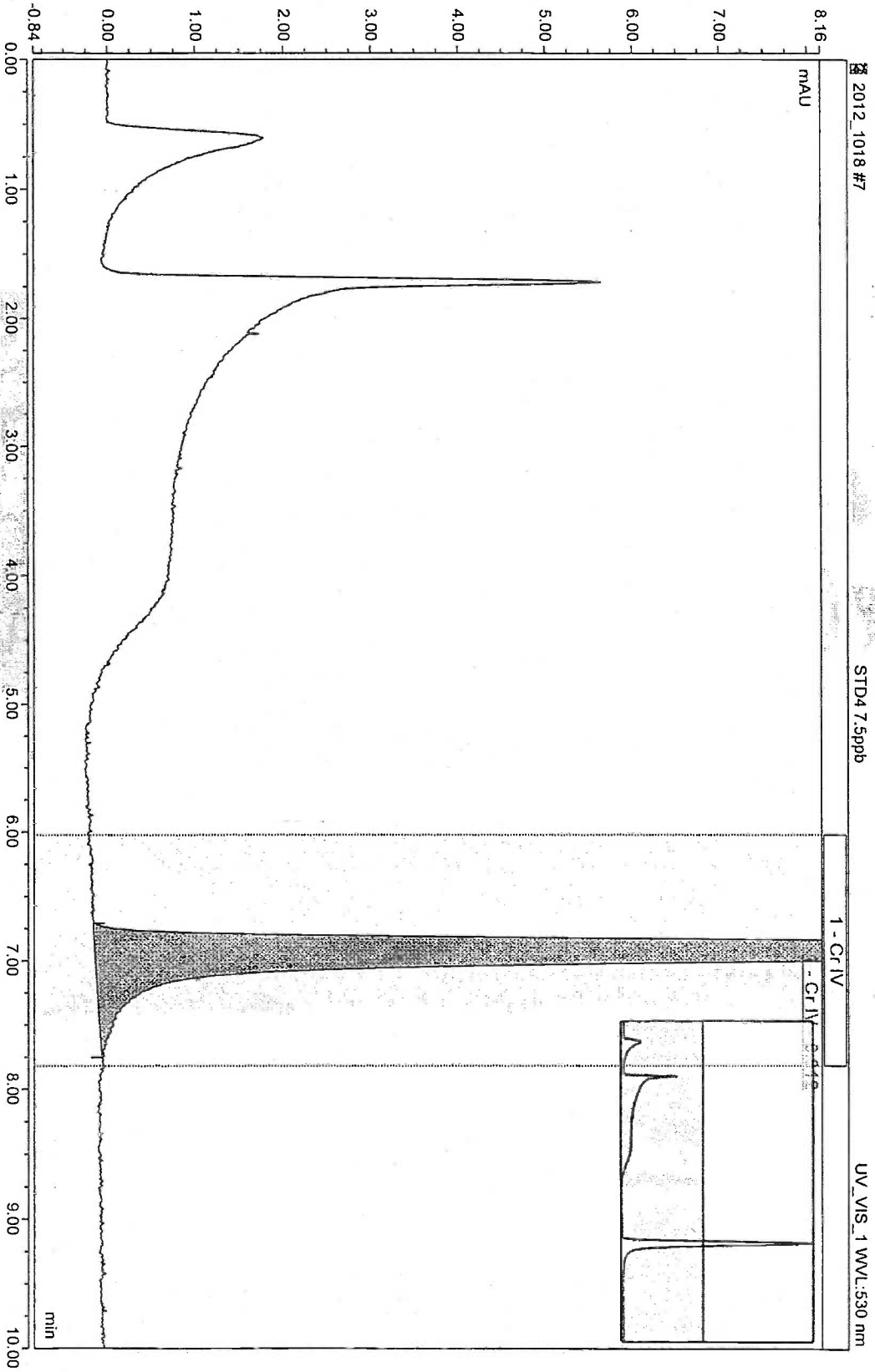


ALAB: 000001

LMC-PET-00001635

Sequence: 2012_1018
Injection #: STD4 7.5ppb

Chromatogram



ALAB : 000032

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LMC-PET-00001636

Sequence: 2012_1018
Injection #: STD4 7.5ppb

Peak Results

Peak No.	Peak Name	Ret. Time min	Amount ppb	Rel. Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.912	7.4097	100.00	3.3295	19.47	M	0.147	1.38	n.a.	12241
	Maximum		7.4097	100.00	3.3295	19.47		0.147	1.38	0.00	12241
	Minimum		7.4097	100.00	3.3295	19.47		0.147	1.38	0.00	12241
	Sum		7.4097	100.00	3.3295	19.47					

ALAB : 000003

LMC-PET-00001637

Sequence: 2012_1018
Injection #8: STD5 10.0ppb

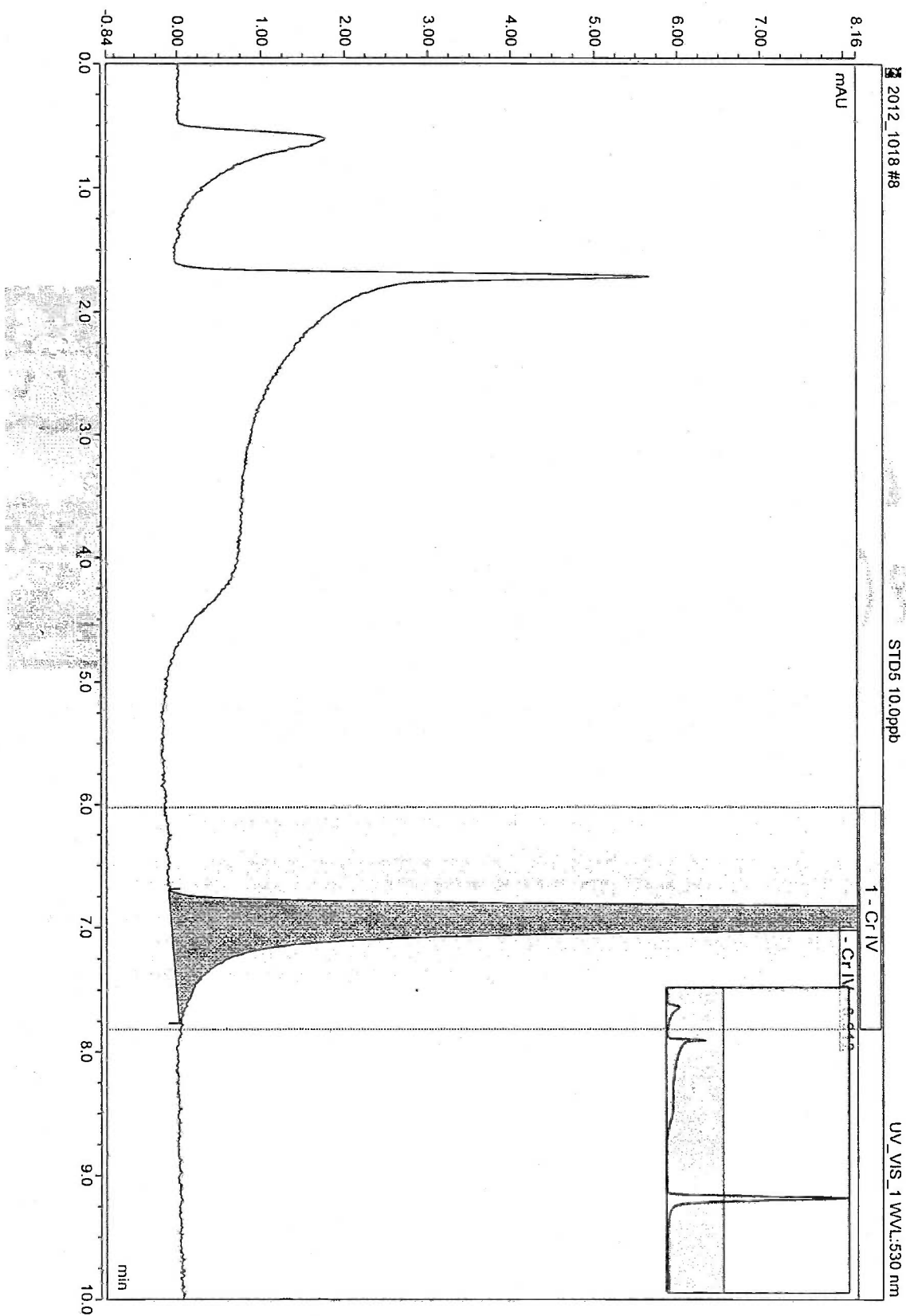
Chromatogram



ALAB : 00004

Sequence: 2012_1018
Injection #8: STD5 10.0ppb

Chromatogram



ALAB : 000035

Sequence: 2012_1018
Injection #8: STD5 10.0ppb

Peak Results

Peak No.	Peak Name	Ret. Time min	Amount ppb	Rel. Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.912	10.0753	100.00	4.5272	26.54	M	0.14	1.39	n.a.	2275
	Maximum		10.0753	100.00	4.5272	26.54		0.147	1.39	0.00	12275
	Minimum		10.0753	100.00	4.5272	26.54		0.147	1.39	0.00	12275
Sum			10.0753	100.00	4.5272	26.54					

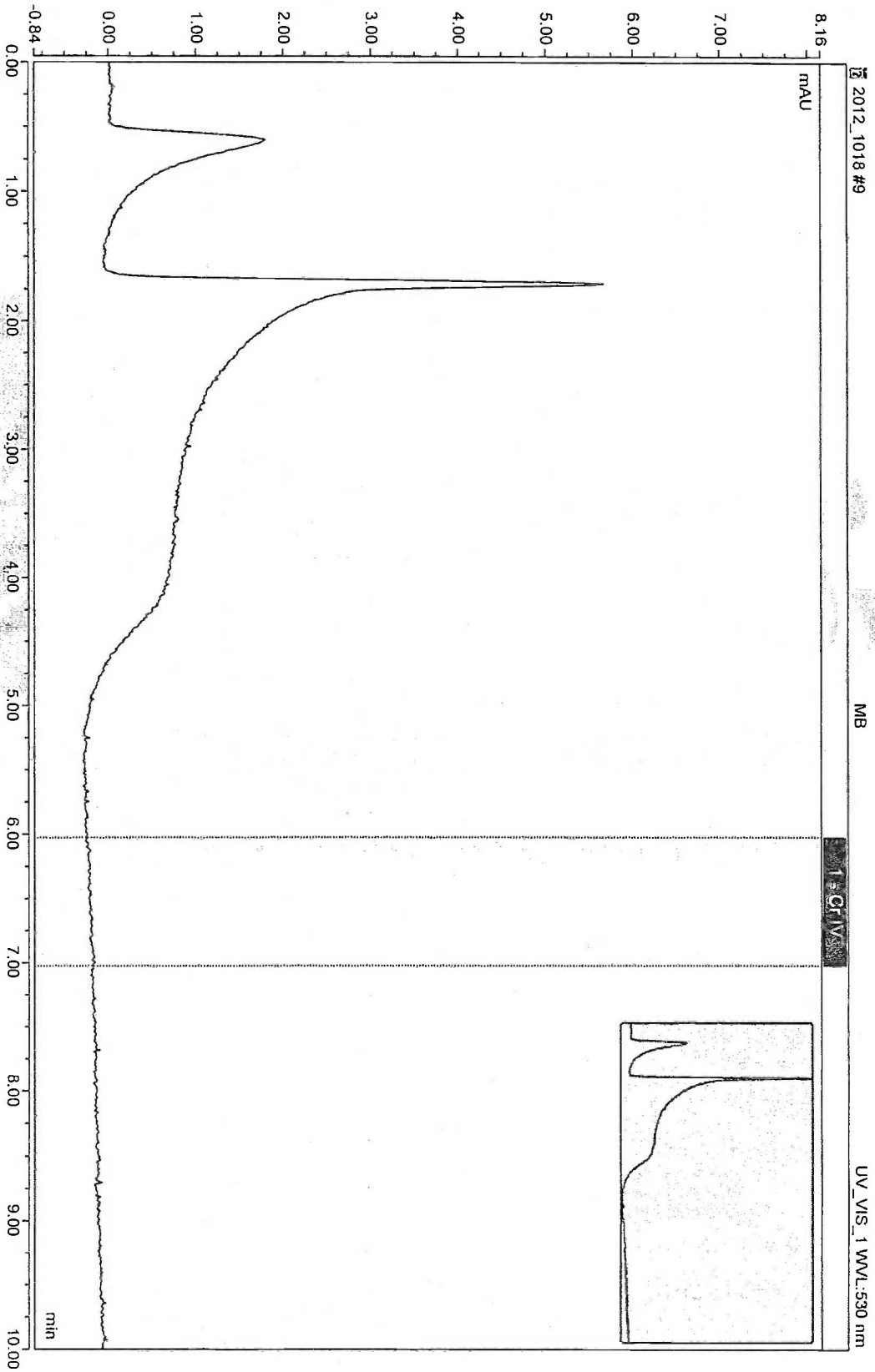
ALAD : 000036

LMC-PET-00001640



Sequence: 2012_1018
Injection #9: MB

Chromatogram



ALAB: 00037

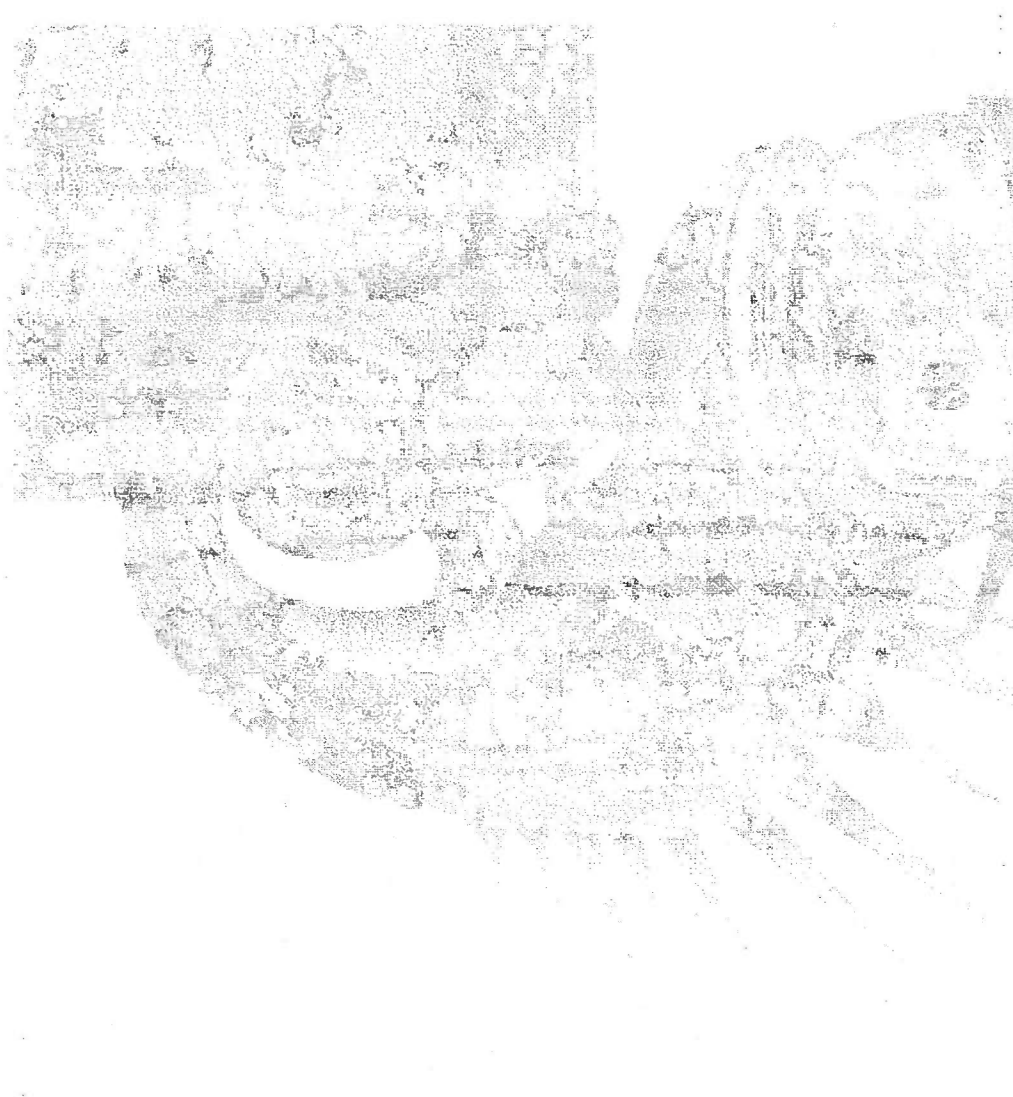
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LMC-PET-00001641

Sequence: 2012_1018
Injection #:9: MB

Peak Results

Peak No.	Peak Name	Ret Time min	Amount n.a.	Rel Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
Maximum			0.0000	0.00	0.0000	0.00		0.000	0.00	0.00	0
Minimum			0.0000	0.00	0.0000	0.00		0.000	0.00	0.00	0
Sum			0.0000	0.00	0.0000	0.00					

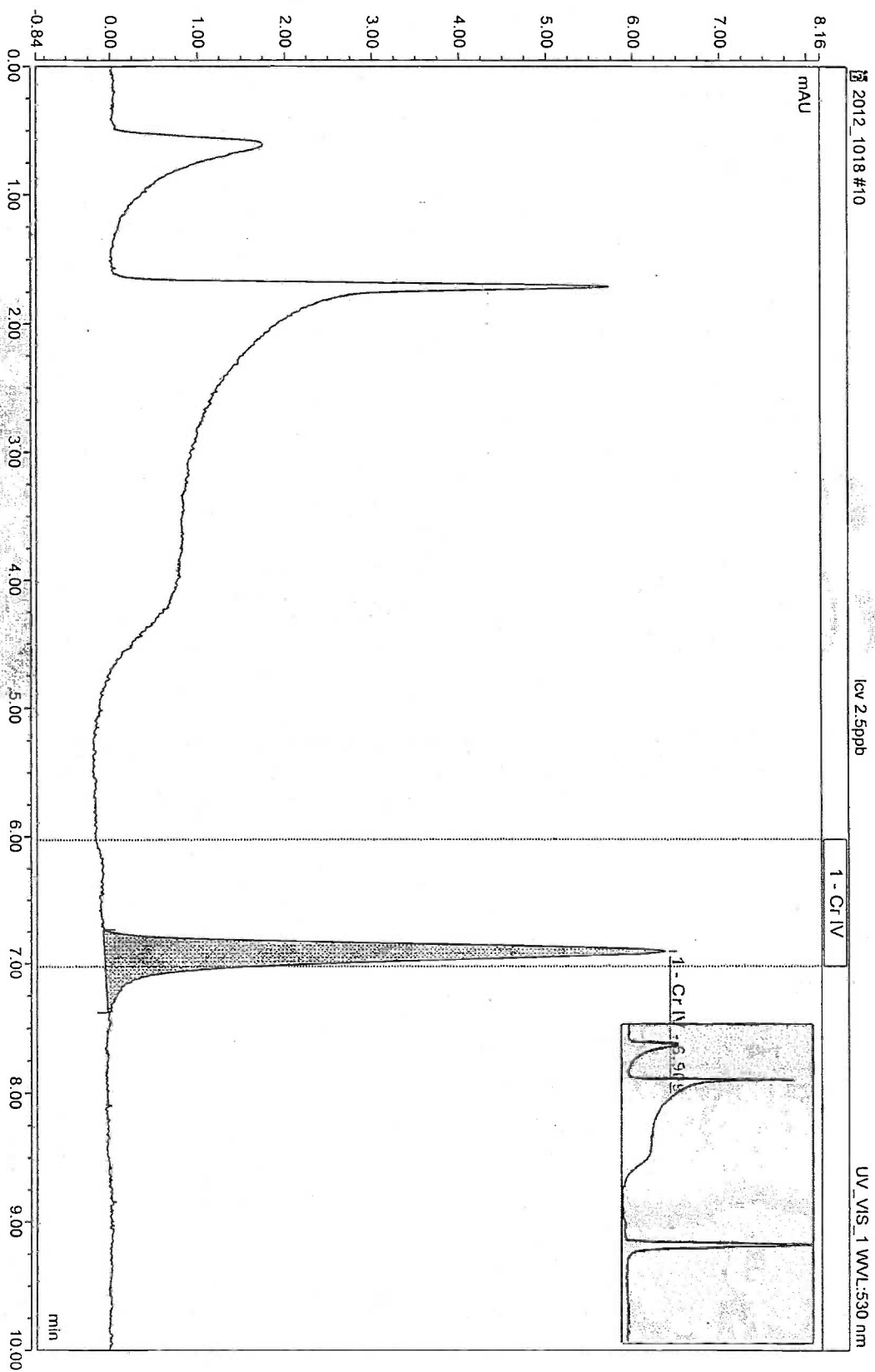


ALAB : 000008

LMC-PET-00001642

Sequence: 2012_1018
Injection #10: lcv 2.5ppb

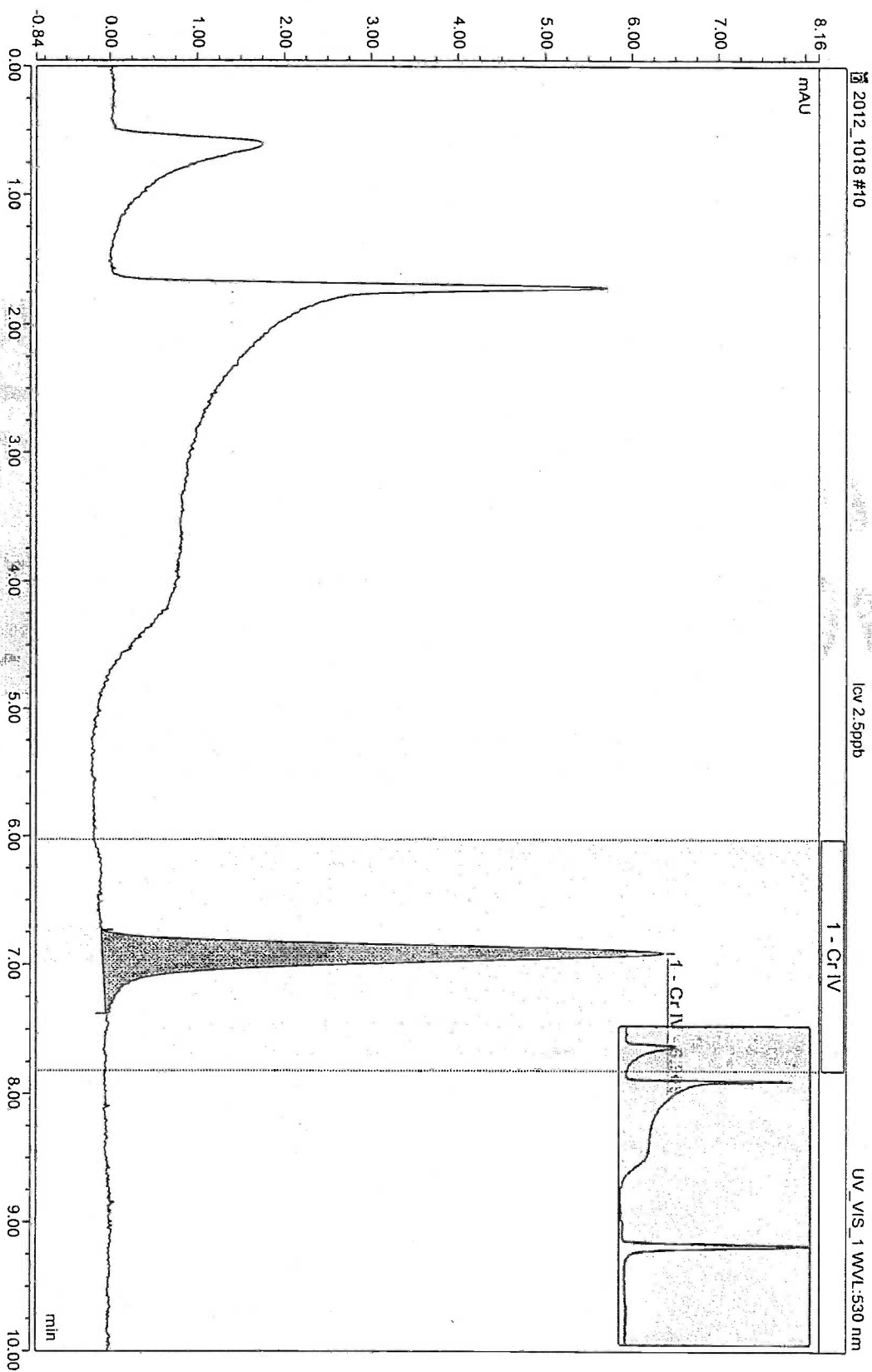
Chromatogram



ALAB : 00039

Sequence: 2012_1018
Injection #10: lcv 2.5ppb

Chromatogram



ALAB: 00040

Sequence: 2012_1018
Injection #10: lcv 2.5ppb

Peak Results

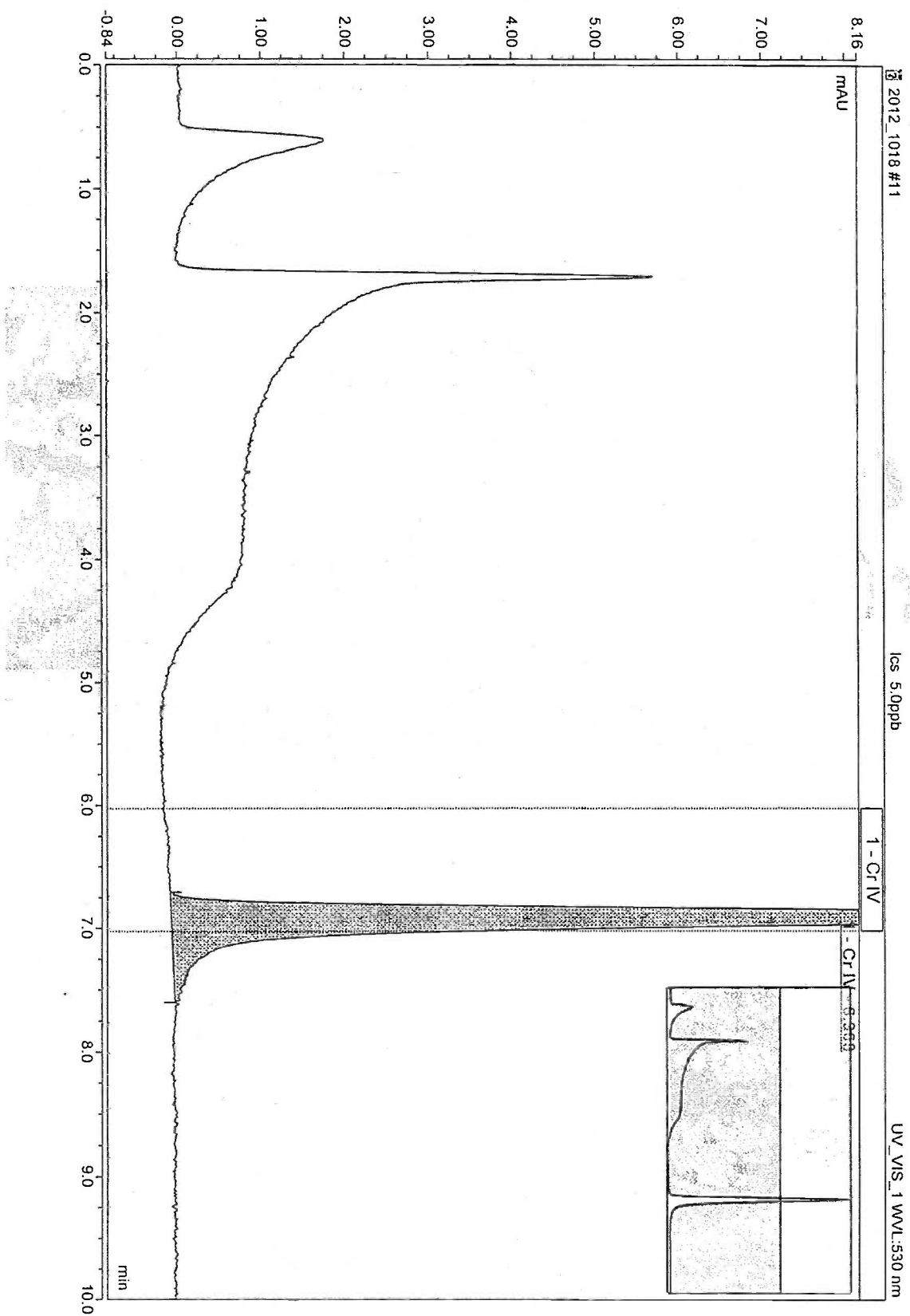
Peak No.	Peak Name	Ret. Time min	Amount ppb	Rel. Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.909	2.3474	100.00	1.0548	6.44	M	0.145	1.33	n.a.	12498
Maximum			2.3474	100.00	1.0548	6.44		0.145	1.33	0.00	12498
Minimum			2.3474	100.00	1.0548	6.44		0.145	1.33	0.00	12498
Sum			2.3474	100.00	1.0548	6.44					



ALAB: 00041

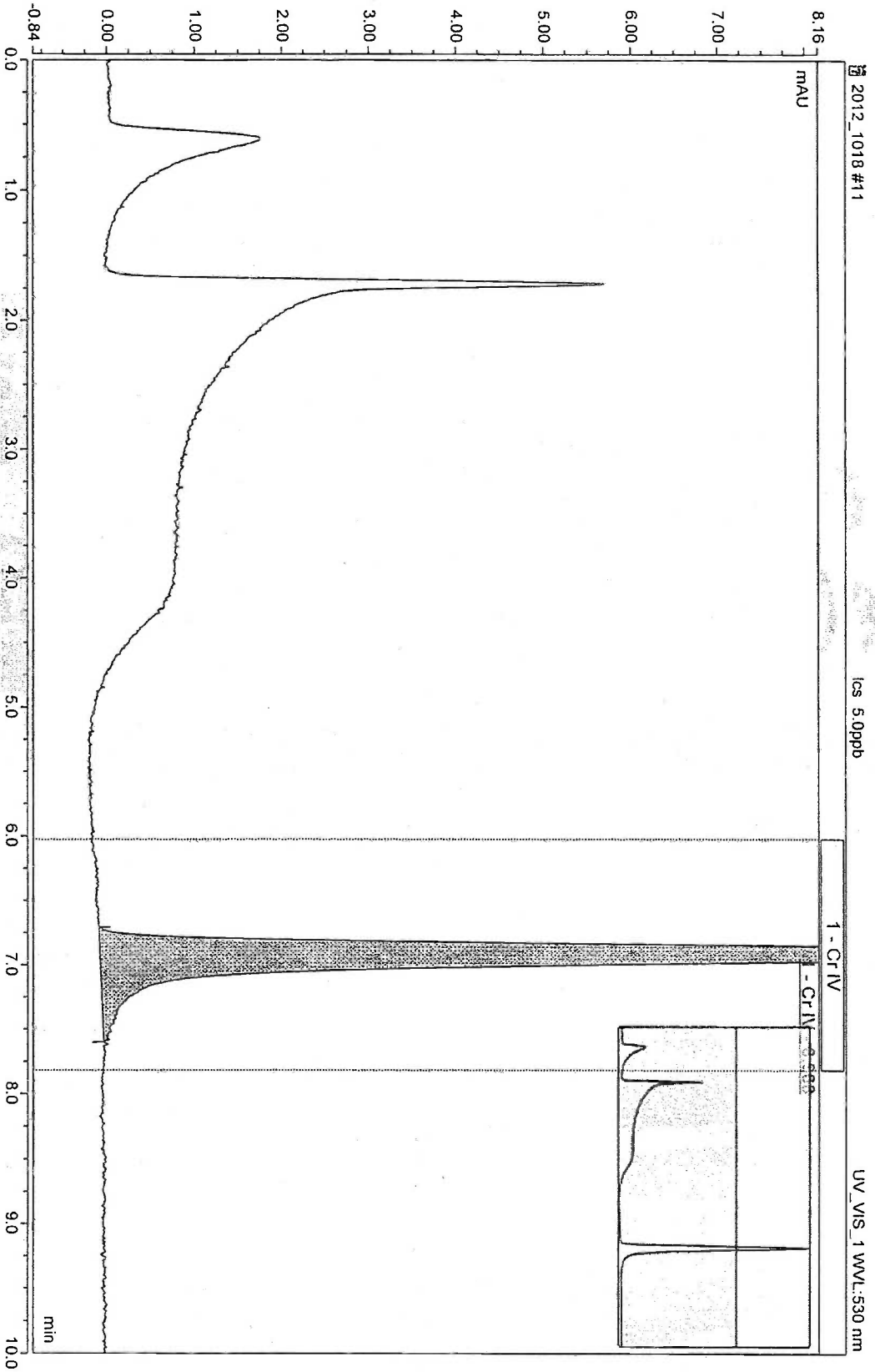
Sequence: 2012_1018
Injection #11: lcs 5.0ppb

Chromatogram



Sequence: 2012_1018
Injection #11: ICS 5.0ppb

Chromatogram



ALAB: 00042

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LMC-PET-00001647

Sequence: 2012_1018
Injection #11: lcs 5.0ppb

Peak Results

Peak No.	Peak Name	Ret. Time min	Amount pbb	Rel. Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
1	Cr IV	6.908	5.0348	100.00	2.2623	13.38	M	0.146	1.39	n.a.	12354
Maximum			5.0348	100.00	2.2623	13.38		0.146	1.39	0.00	12354
Minimum			5.0348	100.00	2.2623	13.38		0.146	1.39	0.00	12354
Sum			5.0348	100.00	2.2623	13.38					

ALAB: 000043

LMC-PET-00001648