

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\031905\P0319010.D  
 Acq On : 19 Mar 2005 11:26 am  
 Sample : 2.0 PPB CAL  
 Misc : 1X 10ML  
 MS Integration Params: DIOXANE.P  
 Quant Time: Mar 19 13:43 2005

Vial: 10  
 Operator: JG/MS/CLS  
 Inst : GCMS1  
 Multiplr: 1.00

Quant Results File: DX021605.RES

Quant Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Wed Feb 16 15:53:54 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX021605

*M 3/14/05*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.57	99	45768	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	5185	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0NT	0.00	ug/L	-15.08
System Monitoring Compounds						
2) Dibromofluoromethane (SU1)	10.07	113	7585	0.21	ug/L	0.00
Spiked Amount	1.000	Range 80 - 120	Recovery	=	21.00%#	
Target Compounds						
4) 1,4-DIOXANE	12.43	88	1028	2.69	ug/L	Qvalue 94

*2/15/05*

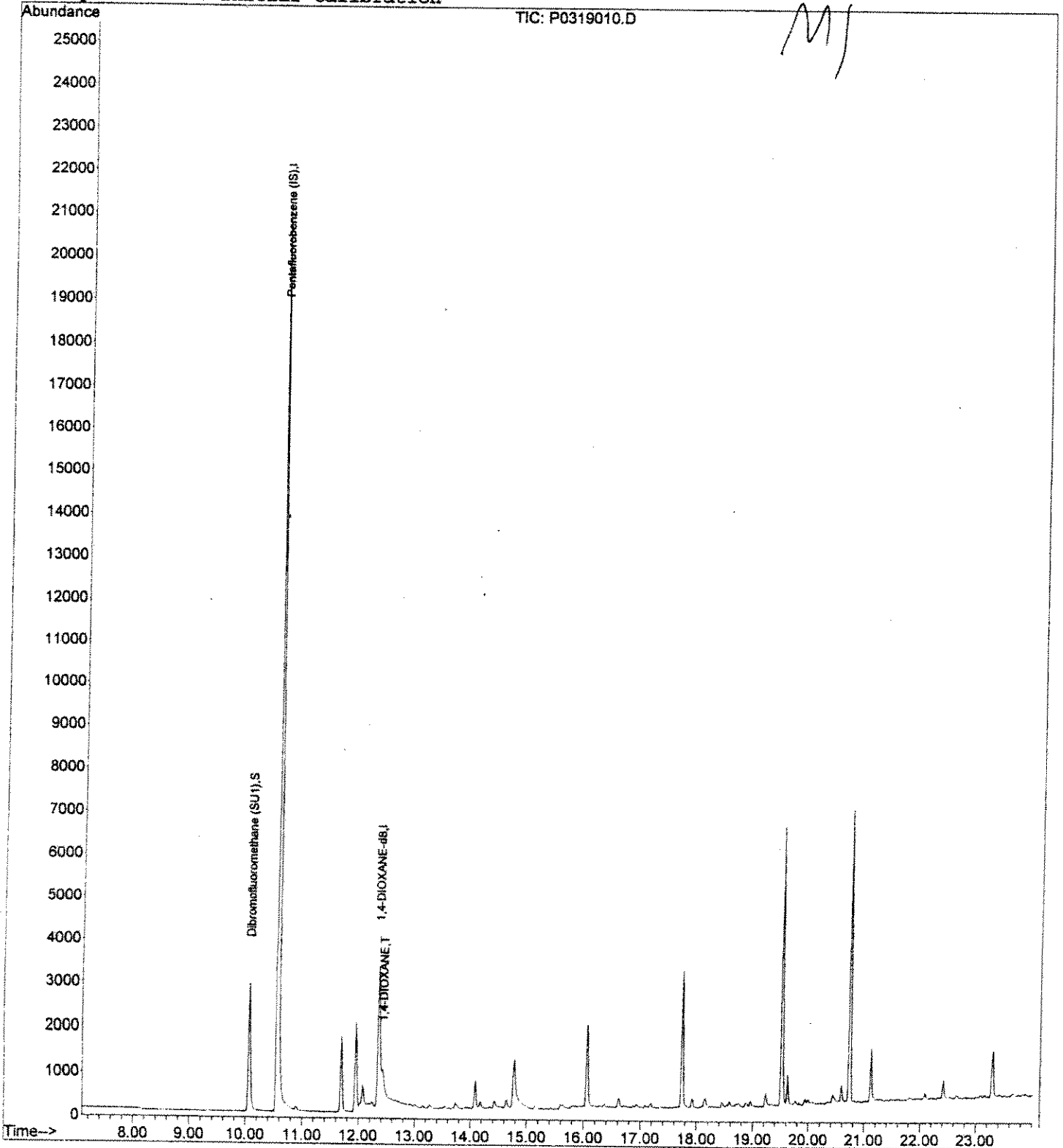
Quantitation Report

Data File : D:\HPCHEM\1\DATA\031905\P0319010.D  
Acq On : 19 Mar 2005 11:26 am  
Sample : 2.0 PPB CAL  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Mar 19 13:43 2005

Vial: 10  
Operator: JG/MS/CLS  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX021605.RES

Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Wed Feb 16 15:53:54 2005  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\031905\P0319011.D  
 Acq On : 19 Mar 2005 11:59 am  
 Sample : 5.0 PPB CAL  
 Misc : 1X 10ML  
 MS Integration Params: DIOXANE.P  
 Quant Time: Mar 19 13:43 2005

Vial: 11  
 Operator: JG/MS/CLS  
 Inst : GCMS1  
 Multiplr: 1.00

Quant Results File: DX021605.RES

Quant Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Wed Feb 16 15:53:54 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX021605

*MC 3/19/05*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	47558	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	5263	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0NT	0.00	ug/L	-15.08
System Monitoring Compounds						
2) Dibromofluoromethane (SU1)	10.06	113	19072	0.52	ug/L	0.00
Spiked Amount	1.000	Range 80 - 120	Recovery	=	52.00%#	
Target Compounds						
4) 1,4-DIOXANE	12.43	88	2211	6.25	ug/L	Qvalue 99

*3/21/05*

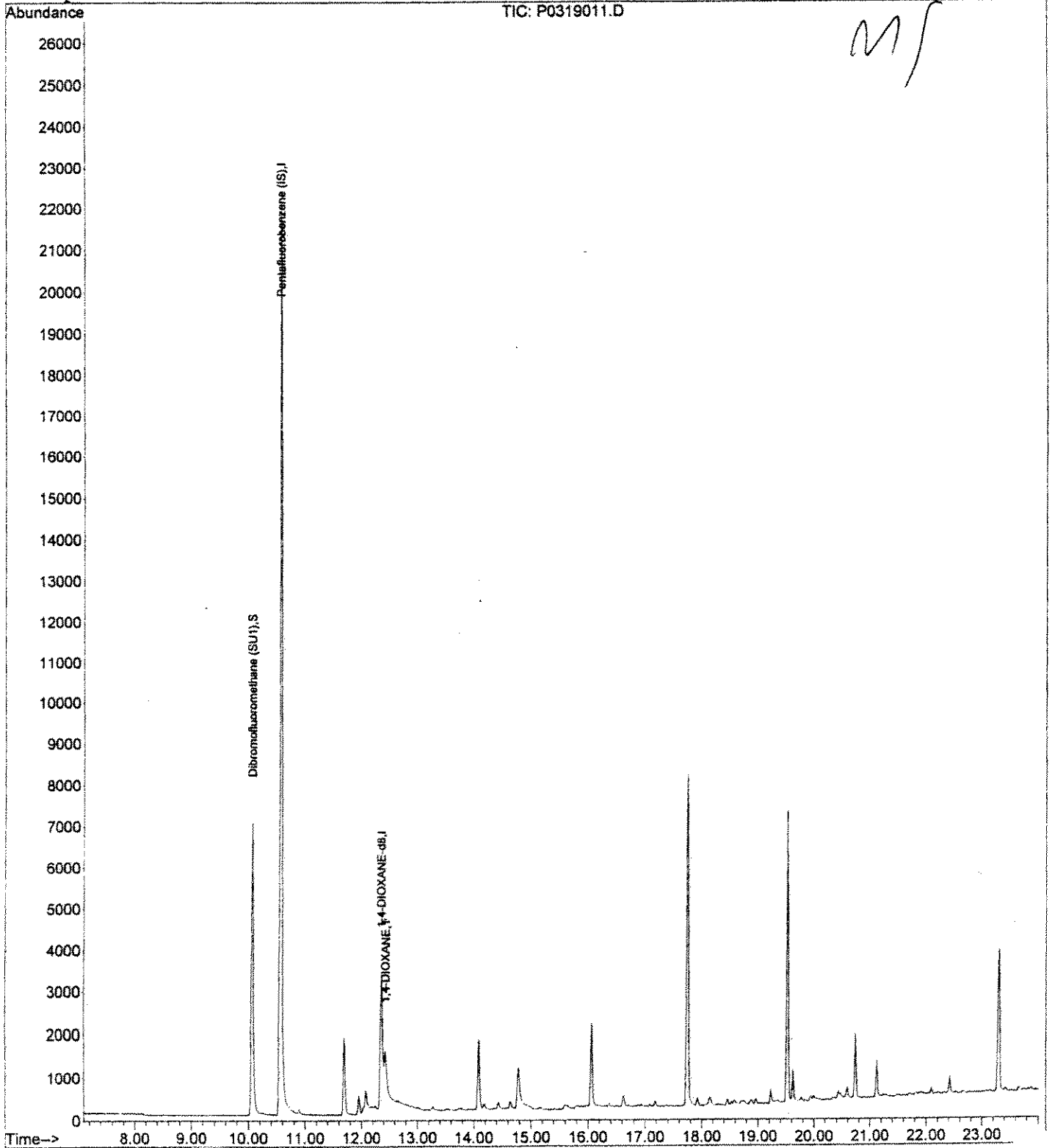
Quantitation Report

Data File : D:\HPCHEM\1\DATA\031905\P0319011.D  
Acq On : 19 Mar 2005 11:59 am  
Sample : 5.0 PPB CAL  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Mar 19 13:43 2005

Vial: 11  
Operator: JG/MS/CLS  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX021605.RES

Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Wed Feb 16 15:53:54 2005  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\031905\0319012.D  
 Acq On : 19 Mar 2005 12:32 pm  
 Sample : 10.0 PPB CAL  
 Misc : 1X 10ML

Vial: 12  
 Operator: JG/MS/CLS  
 Inst : GCMS1  
 Multiplr: 1.00

MS Integration Params: DIOXANE.P  
 Quant Time: Mar 19 13:37 2005

Quant Results File: DX021605.RES

Quant Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Wed Feb 16 15:53:54 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX021605

*M 13/19/05*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.57	99	47071	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	5034	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	<i>0.2</i>	0.00	ug/L	-15.08

System Monitoring Compounds

2) Dibromofluoromethane (SU1) 10.07 113 34373 0.95 ug/L 0.00  
 Spiked Amount 1.000 Range 80 - 120 Recovery = 95.00%

Target Compounds

4) 1,4-DIOXANE 12.43 88 3835 11.74 ug/L Qvalue 99

*3/21/05*

(#) = qualifier out of range (m) = manual integration  
 P0319012.D DX021605.M Sat Mar 19 13:43:38 2005

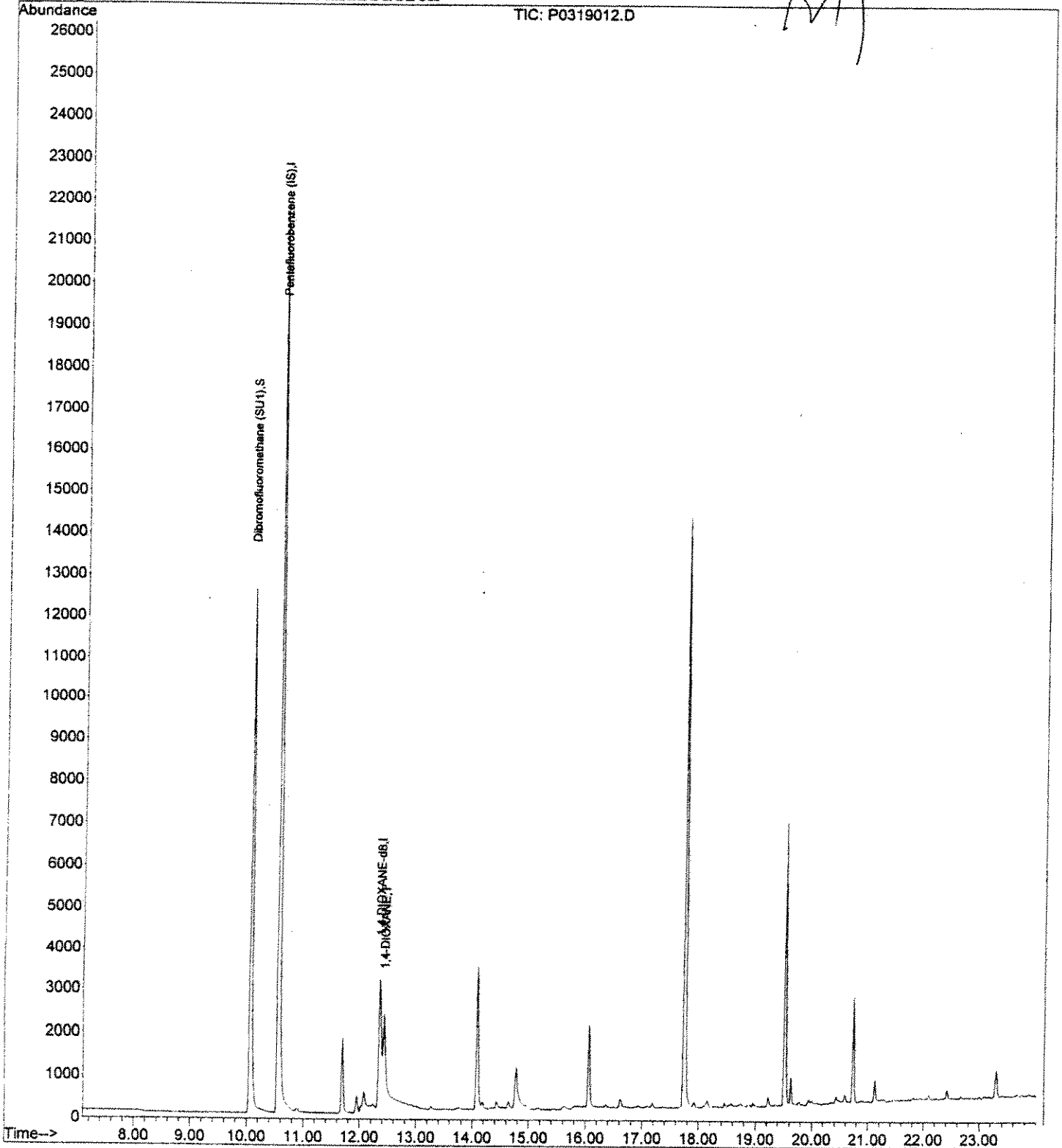
Quantitation Report

Data File : D:\HPCHEM\1\DATA\031905\P0319012.D  
Acq On : 19 Mar 2005 12:32 pm  
Sample : 10.0 PPB CAL  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Mar 19 13:37 2005

Vial: 12  
Operator: JG/MS/CLS  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX021605.RES

Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Wed Feb 16 15:53:54 2005  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\031905\PO319013.D  
 Acq On : 19 Mar 2005 1:05 pm  
 Sample : 20.0 PPB CAL  
 Misc : 1X 10ML

Vial: 13  
 Operator: JG/MS/CLS  
 Inst : GCMS1  
 Multiplr: 1.00

MS Integration Params: DIOXANE.P  
 Quant Time: Mar 19 13:37 2005

Quant Results File: DX021605.RES

Quant Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Wed Feb 16 15:53:54 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX021605

*M (3/19/05)*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	47635	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	4790	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0 <sub>ST</sub>	0.00	ug/L	-15.08

System Monitoring Compounds

2) Dibromofluoromethane (SU1) 10.07 113 68573 1.86 ug/L 0.00  
 Spiked Amount 1.000 Range 80 - 120 Recovery = 186.00%#

Target Compounds

4) 1,4-DIOXANE 12.43 88 7646 25.14 ug/L Qvalue 97

*3/21/05*

(#) = qualifier out of range (m) = manual integration

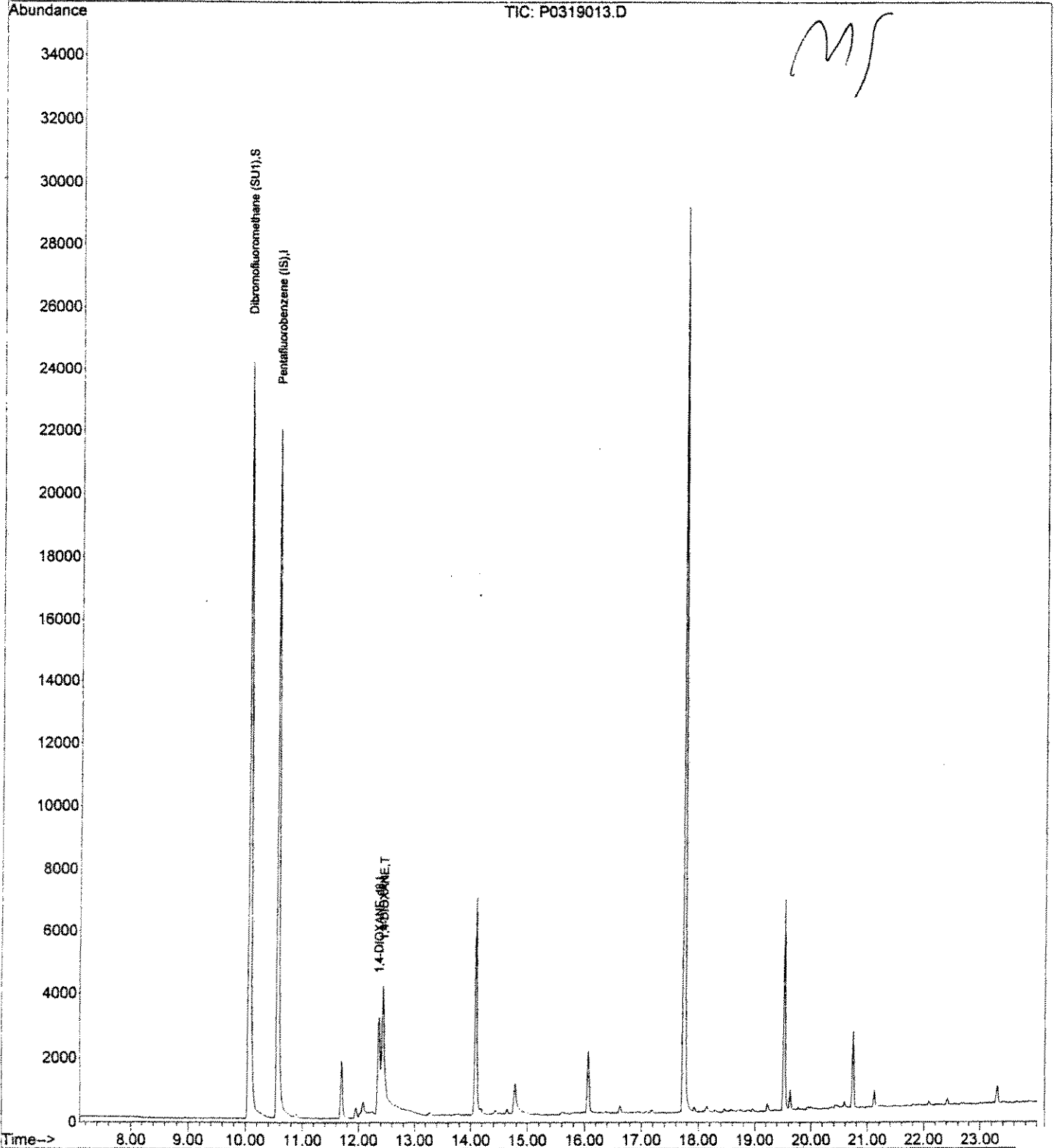
Quantitation Report

Data File : D:\HPCHEM\1\DATA\031905\0319013.D  
Acq On : 19 Mar 2005 1:05 pm  
Sample : 20.0 PPB CAL  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Mar 19 13:37 2005

Vial: 13  
Operator: JG/MS/CLS  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX021605.RES

Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Wed Feb 16 15:53:54 2005  
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\031905\P0319014.D  
 Acq On : 19 Mar 2005 1:38 pm  
 Sample : 50.0 PPB CAL  
 Misc : 1X 10ML  
 MS Integration Params: DIOXANE.P  
 Quant Time: Mar 19 14:18 2005

Vial: 14  
 Operator: JG/MS/CLS  
 Inst : GCMS1  
 Multiplr: 1.00

Quant Results File: DX021605.RES

Quant Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Wed Feb 16 15:53:54 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX021605

*MS 3/19/05*

Internal Standards	R.T.	QIOn	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	47704	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	5034	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0NT	0.00	ug/L	-15.08

System Monitoring Compounds

2) Dibromofluoromethane (SU1) 10.07 113 164450 4.46 ug/L 0.00  
 Spiked Amount 1.000 Range 80 - 120 Recovery = 446.00%#

Target Compounds

4) 1,4-DIOXANE 12.43 88 18344 58.04 ug/L Qvalue 99

*Jub*

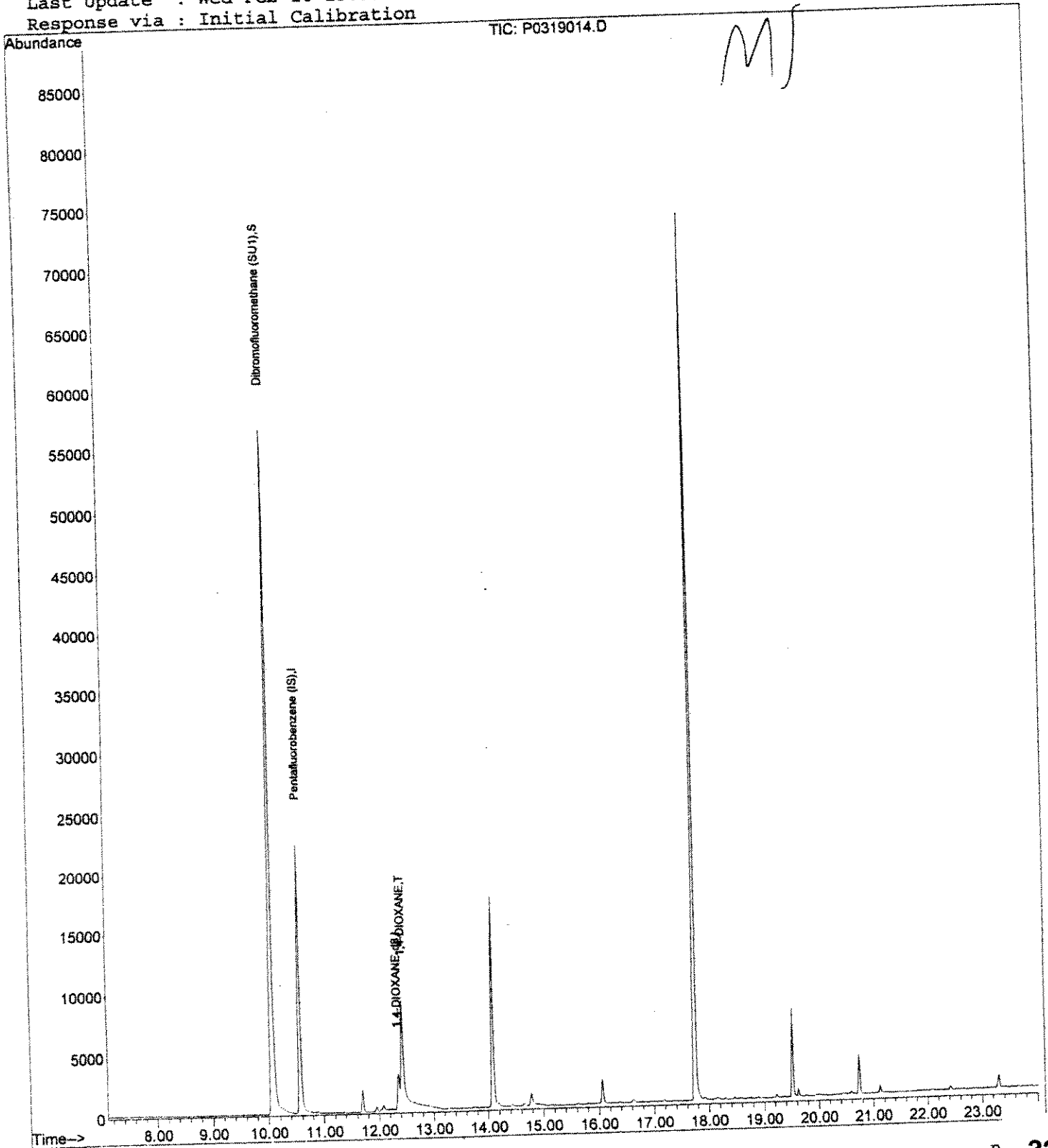
Quantitation Report

Data File : D:\HPCHEM\1\DATA\031905\PO319014.D  
Acq On : 19 Mar 2005 1:38 pm  
Sample : 50.0 PPB CAL  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Mar 19 14:18 2005

Vial: 14  
Operator: JG/MS/CLS  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX021605.RES

Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Wed Feb 16 15:53:54 2005  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\031905\0319015.D  
 Acq On : 19 Mar 2005 2:11 pm  
 Sample : 100.0 PPB CAL  
 Misc : 1X 10ML

Vial: 15  
 Operator: JG/MS/CLS  
 Inst : GCMS1  
 Multiplr: 1.00

MS Integration Params: DIOXANE.P  
 Quant Time: Mar 19 14:54 2005

Quant Results File: DX021605.RES

Quant Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Wed Feb 16 15:53:54 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX021605

*M 17/19/05*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	48150	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	5834	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0√	0.00	ug/L	-15.08

System Monitoring Compounds

2) Dibromofluoromethane (SU1) 10.07 113 307967 8.28 ug/L 0.00  
 Spiked Amount 1.000 Range 80 - 120 Recovery = 828.00%#

Target Compounds

4) 1,4-DIOXANE 12.43 88 44445 121.87 ug/L Qvalue 98

*3/21/05*

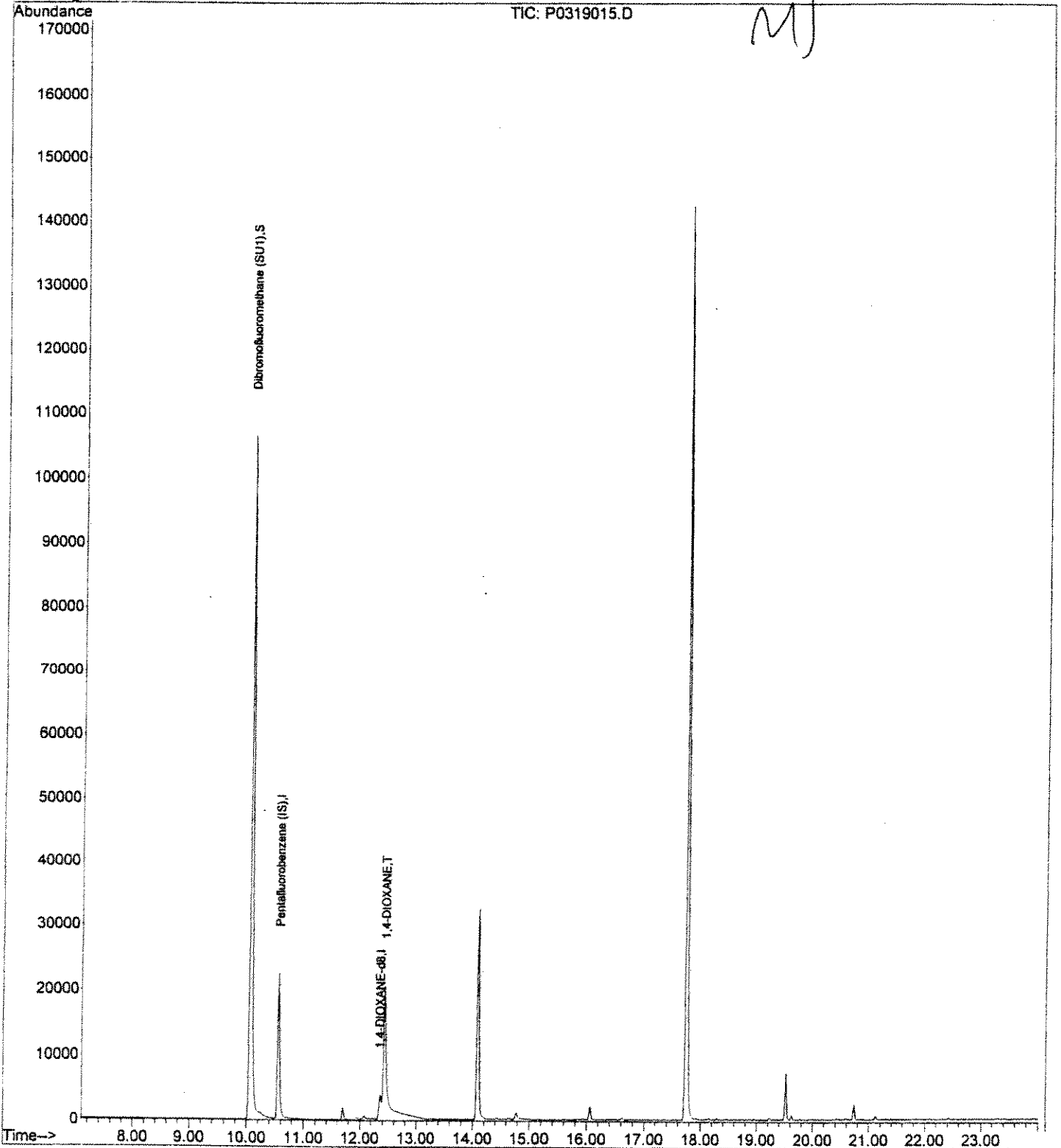
Quantitation Report

Data File : D:\HPCHEM\1\DATA\031905\0319015.D  
Acq On : 19 Mar 2005 2:11 pm  
Sample : 100.0 PPB CAL  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Mar 19 14:54 2005

Vial: 15  
Operator: JG/MS/CLS  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX021605.RES

Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Wed Feb 16 15:53:54 2005  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\031905\0319016.D  
Acq On : 19 Mar 2005 2:44 pm  
Sample : CLEAN OUT BLANK/TUNE  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Mar 21 7:48 2005

Vial: 16  
Operator: JG/MS/CLS  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX021605.RES

Quant Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Wed Feb 16 15:53:54 2005  
Response via : Initial Calibration  
DataAcq Meth : W072903

3/21/05  
JG

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	168438	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.36	64	64	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	15.15	79	57	500.00	ug/L	0.07

System Monitoring Compounds

2) Dibromofluoromethane (SU1) 10.06 113 129670 1.00 ug/L 0.00  
Spiked Amount 1.000 Range 80 - 120 Recovery = 100.00%

Target Compounds

Qvalue

DMLU

Q

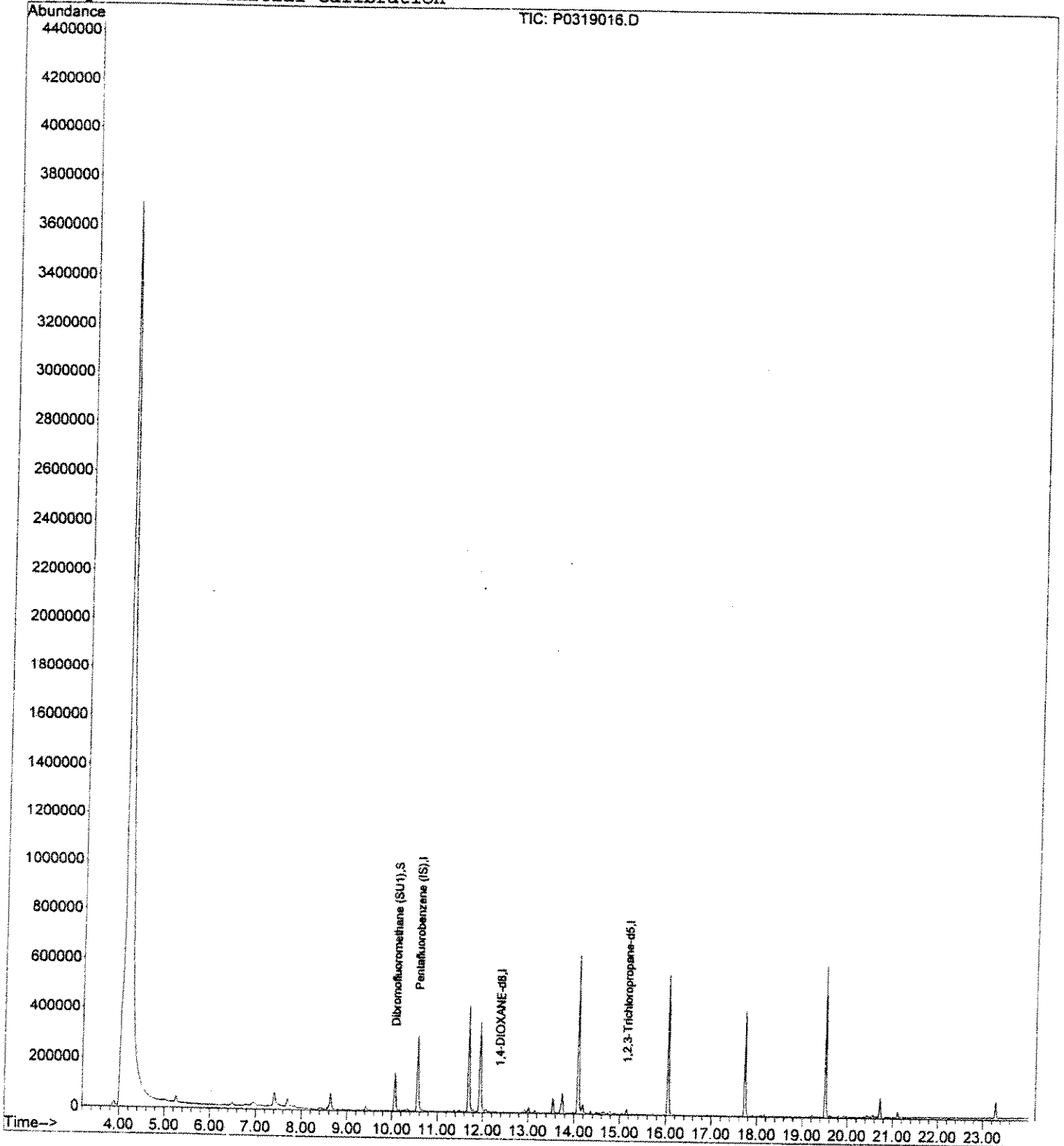
Quantitation Report

Data File : D:\HPCHEM\1\DATA\031905\P0319016.D  
Acq On : 19 Mar 2005 2:44 pm  
Sample : CLEAN OUT BLANK/TUNE  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Mar 21 7:48 2005

Vial: 16  
Operator: JG/MS/CLS  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX021605.RES

Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Wed Feb 16 15:53:54 2005  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\031905\0319017.D  
 Acq On : 19 Mar 2005 3:21 pm  
 Sample : BLANK  
 Misc : 1X 10ML

Vial: 17  
 Operator: JG/MS/CLS  
 Inst : GCMS1  
 Multiplr: 1.00

MS Integration Params: DIOXANE.P  
 Quant Time: Mar 21 7:48 2005

Quant Results File: DX021605.RES

Quant Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Wed Feb 16 15:53:54 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX021605

*3/21/05  
JG*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	41664	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	6641	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0	0.00	ug/L	-15.08

System Monitoring Compounds

2) Dibromofluoromethane (SU1) 10.07 113 34219 1.06 ug/L 0.00  
 Spiked Amount 1.000 Range 80 - 120 Recovery = 106.00%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
4) 1,4-DIOXANE	12.43	88	233	N.D.		
6) 1,2,3-Trichloropropane	0.00	75	0	N.D.		

*gsk*

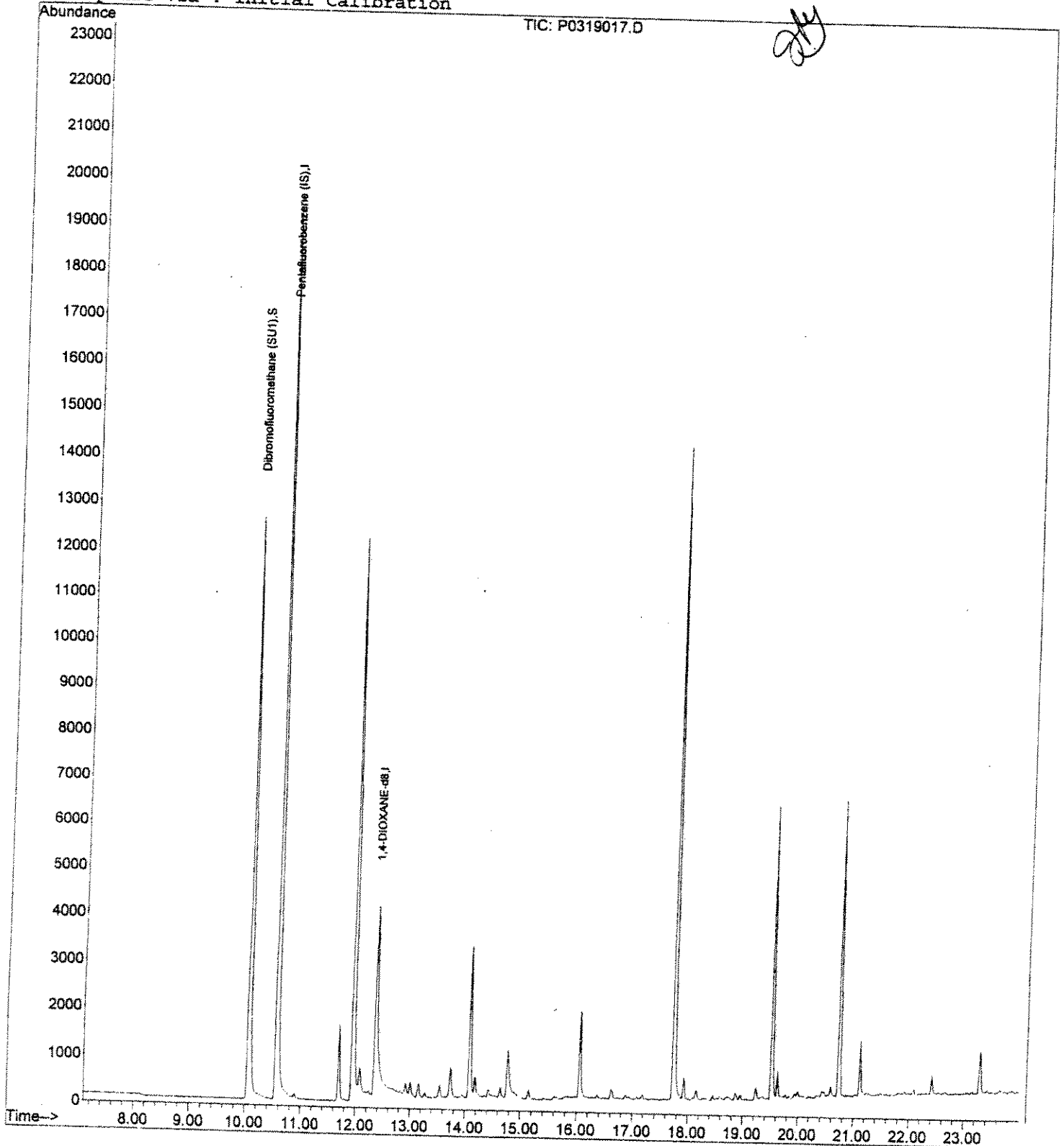
Quantitation Report

Data File : D:\HPCHEM\1\DATA\031905\PO319017.D  
Acq On : 19 Mar 2005 3:21 pm  
Sample : BLANK  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Mar 21 7:48 2005

Vial: 17  
Operator: JG/MS/CLS  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX021605.RES

Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Mon Mar 21 07:49:30 2005  
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\031905\P0319018.D  
 Acq On : 19 Mar 2005 3:54 pm  
 Sample : 1.0 PPB CAL  
 Misc : 1X 10ML  
 MS Integration Params: DIOXANE.P  
 Quant Time: Mar 21 7:48 2005

Vial: 18  
 Operator: JG/MS/CLS  
 Inst : GCMS1  
 Multiplr: 1.00

Quant Results File: DX021605.RES

Quant Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Wed Feb 16 15:53:54 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX021605

*3/21/05  
JG*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	42387	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	6173	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0	0.00	ug/L	-15.08

System Monitoring Compounds

2) Dibromofluoromethane (SU1) 10.07 113 3733 0.11 ug/L 0.00  
 Spiked Amount 1.000 Range 80 - 120 Recovery = 11.00%#

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
4) 1,4-DIOXANE	12.43	88	668	1.24	ug/L	97
6) 1,2,3-Trichloropropane	0.00	75	0	N.D.		

*3/21/05  
JG*

Quantitation Report

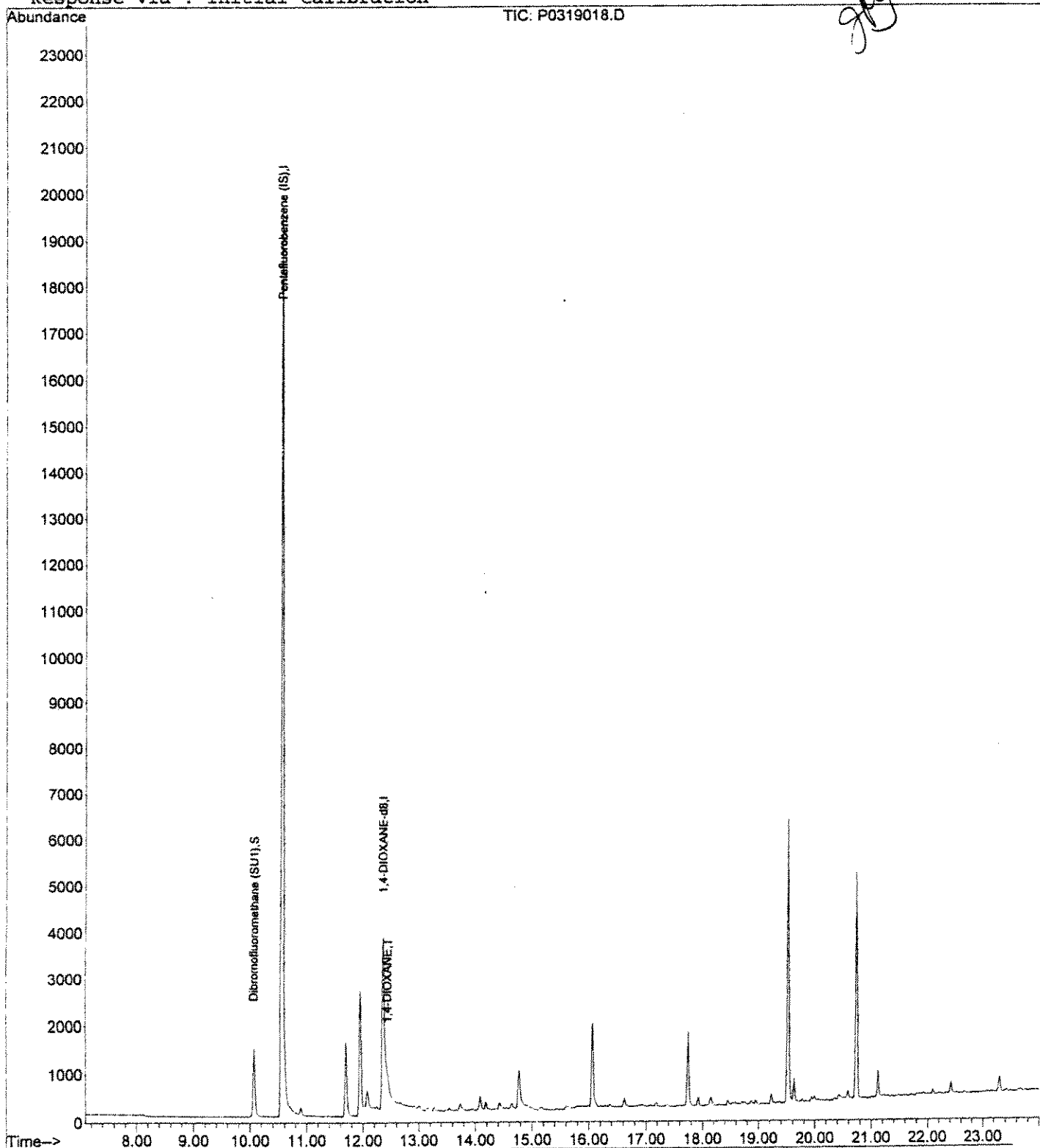
Data File : D:\HPCHEM\1\DATA\031905\0319018.D  
Acq On : 19 Mar 2005 3:54 pm  
Sample : 1.0 PPB CAL  
Misc : 1X 10ML

Vial: 18  
Operator: JG/MS/CLS  
Inst : GCMS1  
Multiplr: 1.00

MS Integration Params: DIOXANE.P  
Quant Time: Mar 21 7:48 2005

Quant Results File: DX021605.RES

Method : D:\HPCHEM\1\METHODS\DX021605.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Wed Feb 16 15:53:54 2005  
Response via : Initial Calibration



Calibration Status Report GCMS1

Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Mon Mar 21 12:54:07 2005  
 Response via : Initial Calibration

*3/21/05  
 JH*

#	ID	Conc	ISTD Conc	Path\File
1	1	0	1	D:\HPCHEM\1\DATA\031905\P0319018.D
2	2	0	1	D:\HPCHEM\1\DATA\031905\P0319010.D
3	5	1	1	D:\HPCHEM\1\DATA\031905\P0319011.D
4	10	1	1	D:\HPCHEM\1\DATA\031905\P0319012.D
5	20	2	1	D:\HPCHEM\1\DATA\031905\P0319013.D
6	50	5	1	D:\HPCHEM\1\DATA\031905\P0319014.D
7	100	10	1	D:\HPCHEM\1\DATA\031905\P0319015.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Mar 21 07:49 2005	Mar 21 07:48 19105	19 Mar 2005 3:54 pm
2	2	Mar 19 14:55 2005	Mar 19 13:43 19105	19 Mar 2005 11:26 am
3	5	Mar 19 14:55 2005	Mar 19 13:43 19105	19 Mar 2005 11:59 am
4	10	Mar 19 14:55 2005	Mar 19 13:37 19105	19 Mar 2005 12:32 pm
5	20	Mar 19 14:55 2005	Mar 19 13:37 19105	19 Mar 2005 1:05 pm
6	50	Mar 19 14:55 2005	Mar 19 14:18 19105	19 Mar 2005 1:38 pm
7	100	Mar 19 14:55 2005	Mar 19 14:54 19105	19 Mar 2005 2:11 pm

DX031905.M

Mon Mar 21 12:55:30 2005

GCMS1

*3/22/05  
 JH*

Compound List Report GCMS1

Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Mon Mar 21 12:54:07 2005  
 Response via : Initial Calibration  
 Total Cpnds : 6

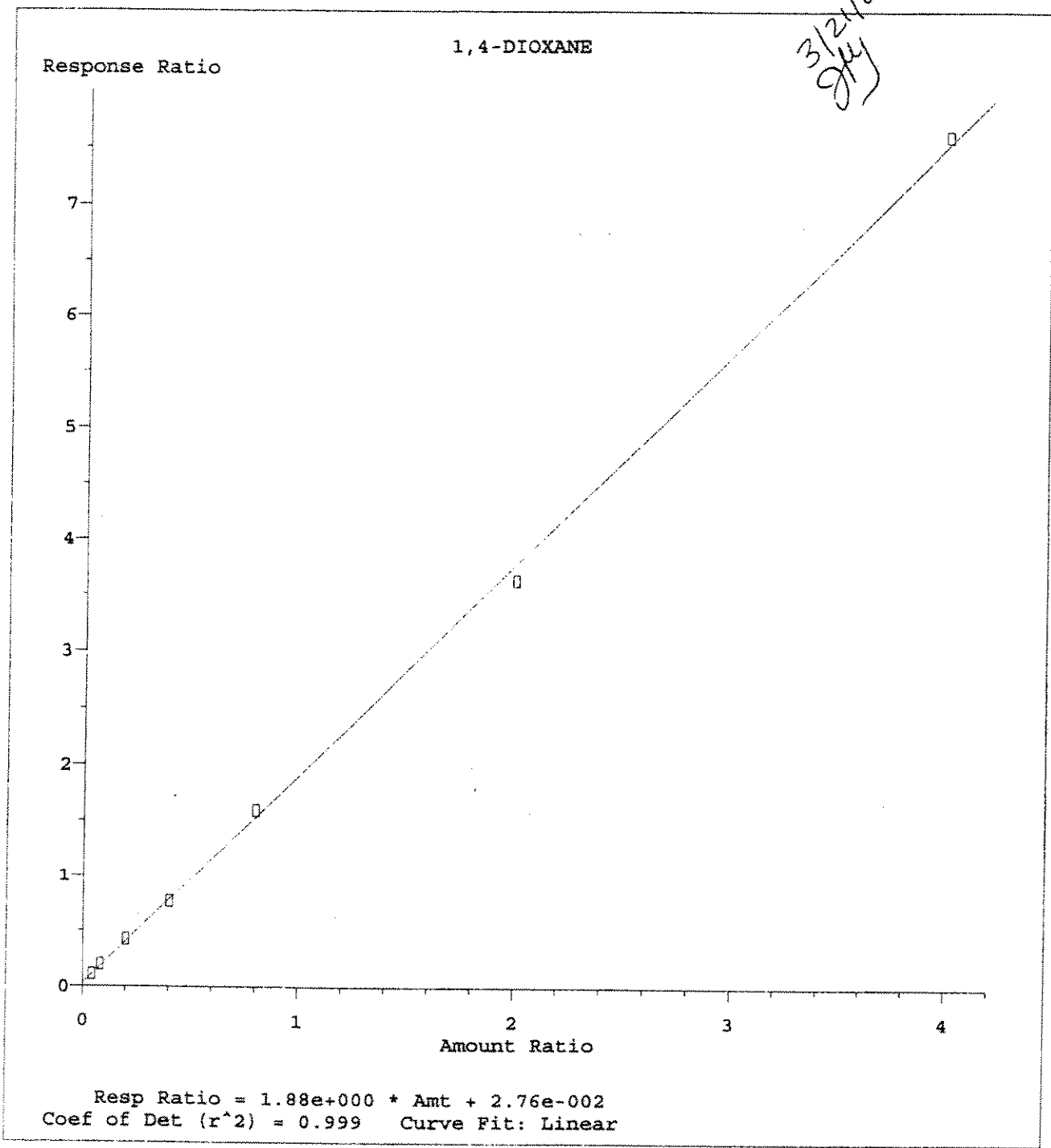
3/21/05  
 Jky

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1 I	Pentafluorobenzene (IS)	99	10.57	1.000	A	1	A	B
2 S	Dibromofluoromethane (SU1)	113	10.07	0.953	A	0	A	B
3 I	1,4-DIOXANE-d8	64	12.35	1.000	A	1	A	B
4 T	1,4-DIOXANE	88	12.43	1.007	L	2	A	B
5 I	1,2,3-Trichloropropane-d5	79	15.08	1.000	A	2	A	B
6 T	1,2,3-Trichloropropane	75	15.08	1.000	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
 #Qual = number of qualifiers  
 A/H = Area or Height  
 ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

DX031905.M Mon Mar 21 12:55:24 2005 GCMS1

3/21/05  
 Jky



Method Name: D:\HPCHEM\1\METHODS\DX031905.M  
 Calibration Table Last Updated: Mon Mar 21 12:54:07 2005

3/22/05

Response Factor Report GCMS1

Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Mon Mar 21 12:54:07 2005  
 Response via : Initial Calibration

3/21/05  
*Jly*

Calibration File

1 =P0319018.D 2 =P0319010.D 5 =P0319011.D 10 =P0319012.D  
 20 =P0319013.D 50 =P0319014.D 100 =P0319015.D

Compound	1	2	5	10	20	50	100	Avg	%RSD
1) I Pentafluorobenzene (IS)									
2) S Dibromofluoromethane (S01)			0.881	0.829	0.802	0.730	0.720	0.689	0.640
3) I 1,4-DIOXANE-d8									
4) T 1,4-DIOXANE			2.705	2.478	2.101	1.905	1.995	1.822	1.905
5) I 1,2,3-Trichloropropane-d5									
6) T 1,2,3-Trichloropropane								0.000#	-1.00

DX031905.M

Tue Mar 22 12:15:58 2005 GCMS1

3/21/05  
*[Signature]*

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\031905\0319018.D  
 Acq On : 19 Mar 2005 3:54 pm  
 Sample : 1.0 PPB CAL  
 Misc : 1X 10ML  
 MS Integration Params: DIOXANE.P  
 Quant Time: Mar 21 12:54 2005

Vial: 18  
 Operator: JG/MS/CLS  
 Inst : GCMS1  
 Multiplr: 1.00

Quant Results File: DX031905.RES

Quant Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Int. Cal. (05/02/02)  
 Last Update : Mon Mar 21 12:54:07 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX021605

*Re-Calc*

*3/21/05  
JG*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	42387	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	6173	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0	0.00	ug/L	-15.08

System Monitoring Compounds

2) Dibromofluoromethane (SU1) 10.07 113 3733 0.12 ug/L 0.00  
 Spiked Amount 1.000 Range 80 - 120 Recovery = 12.00%#

Target Compounds

4) 1,4-DIOXANE 12.43 88 668 1.07 ug/L ✓ Qvalue 96  
 6) 1,2,3-Trichloropropane 0.00 75 0 N.D.

*1.5 - 1.5*

*3/21/05 JG*

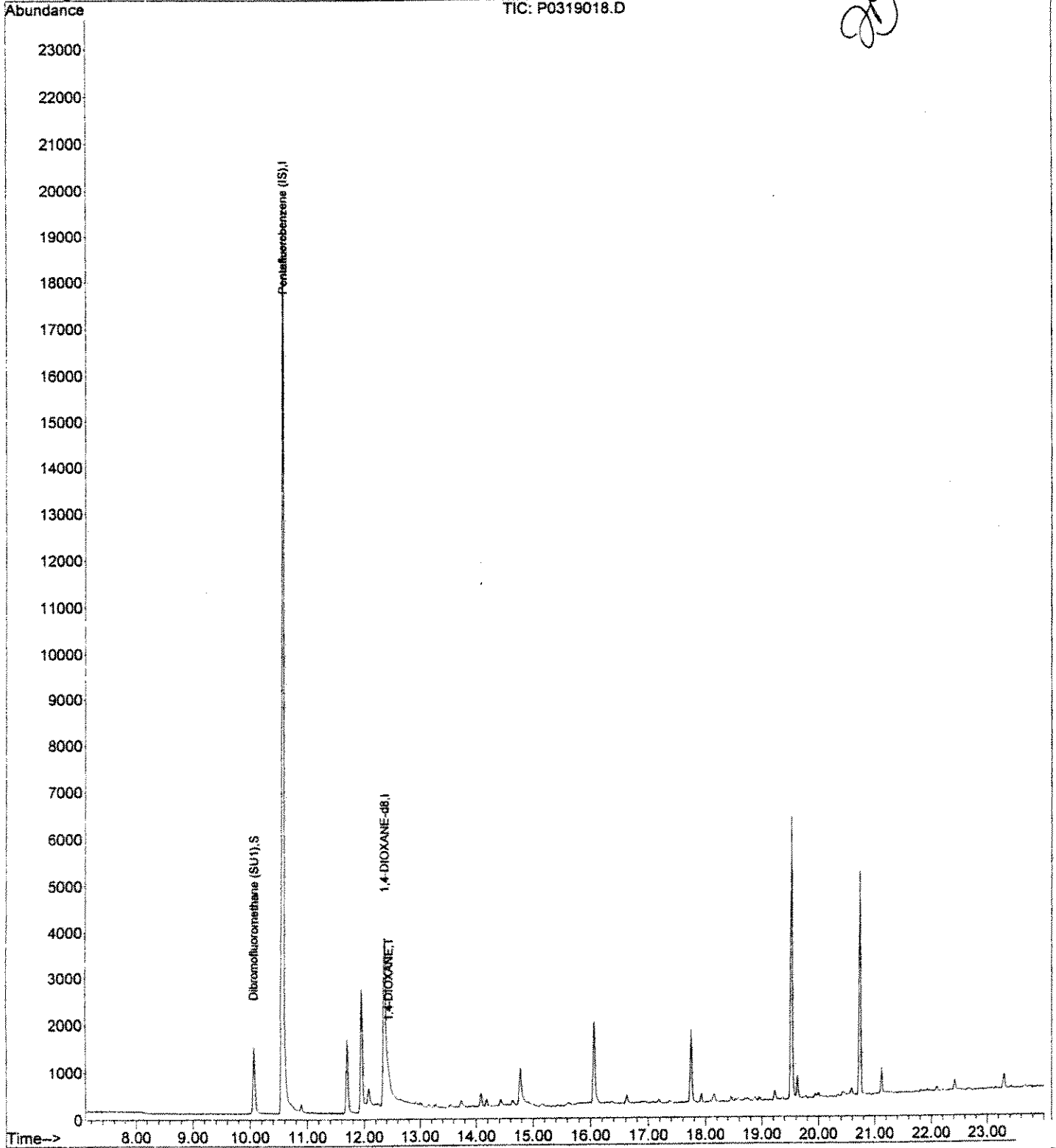
Quantitation Report

Data File : D:\HPCHEM\1\DATA\031905\P0319018.D  
Acq On : 19 Mar 2005 3:54 pm  
Sample : 1.0 PPB CAL  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Mar 21 12:54 2005

Vial: 18  
Operator: JG/MS/CLS  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX031905.RES

Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Mon Mar 21 12:54:07 2005  
Response via : Initial Calibration





1,4-DIOXANE BY METHOD 8260B SIM

Data File Name P0319019.D  
Data File Path D:\HPCHEM\1\DATA\031905\  
Sample Name SS/CCV  
  
Date Acquired 3/19/2005 4:27  
Operator JG/MS/CLS  
Acq. Method File DX021605  
GCMS1

*3/21/05  
JG*

INTERNAL STANDARDS	CAL RESPONSE	TARGET RESPONSE	LOW LIMIT	HIGH LIMIT	T/F
Pentafluorobenzene (IS)	47071	46539	23536	94142	TRUE
1,4-DIOXANE-d8	5034	4918	2517	10068	TRUE

SURROGATE	AMOUNT	% RECOVERY	Low	High	T/F
Dibromofluoromethane (SU1)	1.08	107.7	80	125	TRUE

TARGET ANALYTE	AMOUNT	TRUE VALUE	RECOVER	Low	High	T/F
1,4-DIOXANE	9.75	10.00	97.48	70	130	TRUE

*3/21/05  
JG*

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\031905\F0319019.D  
 Acq On : 19 Mar 2005 4:27 pm  
 Sample : SS/CCV  
 Misc : 1X 10ML

Vial: 19  
 Operator: JG/MS/CLS  
 Inst : GCMS1  
 Multiplr: 1.00

MS Integration Params: DIOXANE.P  
 Quant Time: Mar 21 12:54 2005

Quant Results File: DX031905.RES

Quant Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Mon Mar 21 12:54:07 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX021605

*3/21/05  
JG*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	46539 ✓	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	4918 ✓	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0	0.00	ug/L	-15.08

System Monitoring Compounds

2) Dibromofluoromethane (SU1) 10.07 113 37865 1.08 ug/L 0.00  
 Spiked Amount 1.000 Range 80 - 120 Recovery = 108.00% ✓

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
4) 1,4-DIOXANE	12.43	88	3745	9.75	ug/L /	93
6) 1,2,3-Trichloropropane	0.00	75	0	N.D.		

*3/22/05*

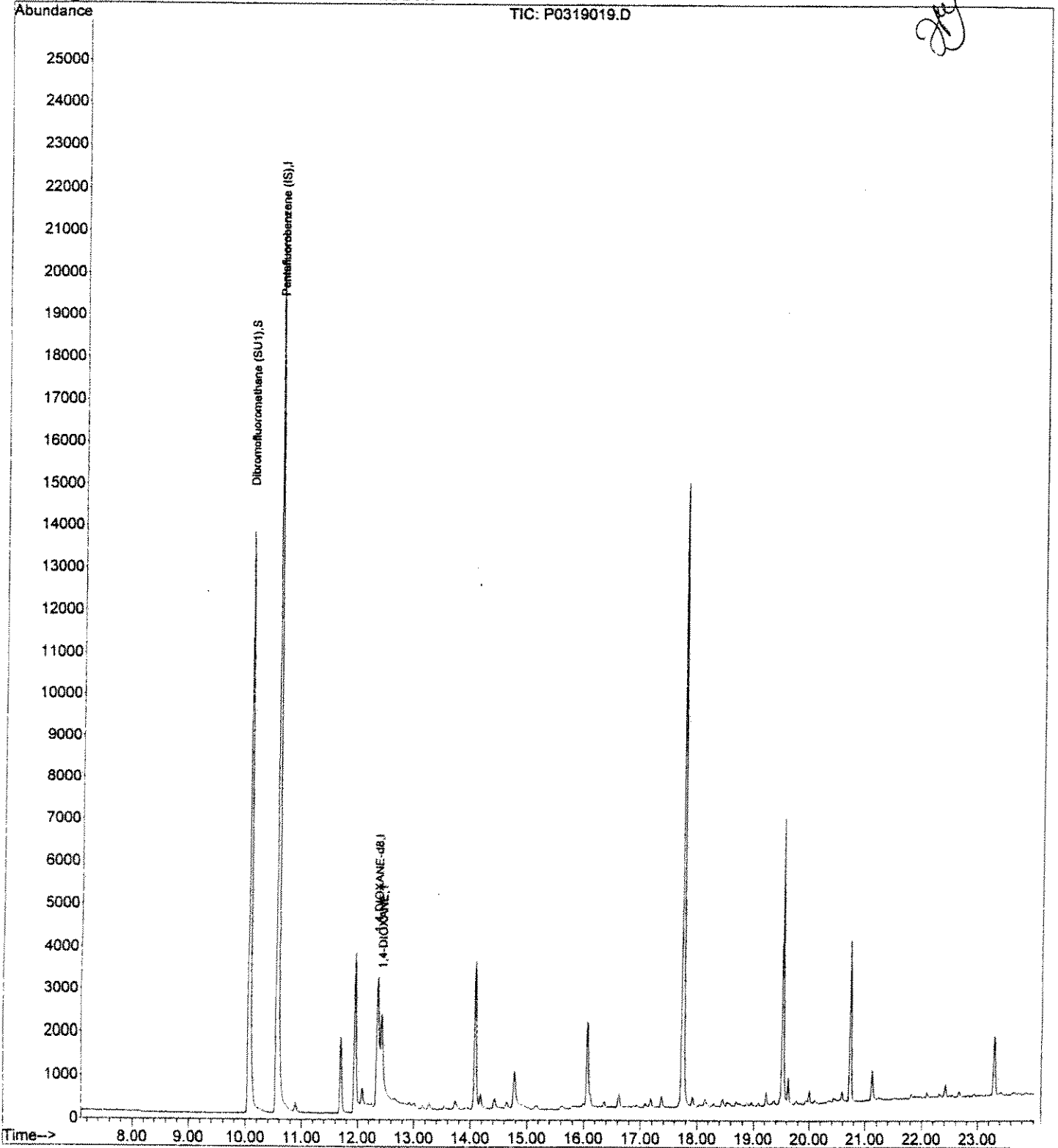
Quantitation Report

Data File : D:\HPCHEM\1\DATA\031905\PO319019.D  
Acq On : 19 Mar 2005 4:27 pm  
Sample : SS/CCV  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Mar 21 12:54 2005

Vial: 19  
Operator: JG/MS/CLS  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX031905.RES

Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Mon Mar 21 12:54:07 2005  
Response via : Initial Calibration



CMS #: \_\_\_\_\_

Date Analyzed: 6/2/5

ANALYST  
REVIEW

METHOD CRITERIA

PEER  
REVIEW

1. Sequence File is printed and in the file folder?  
Standard IDs and analyst's initials are present?
2. Initial Calibration met criteria?
  - a. Print calibration as Average Response Factor  
(624: RSD ≤ 35%)  
(8260B: ≤ 30% for CCCs, ≤ 15% for all other compounds, SPCCs met Criteria)  
(524.2: RSD ≤ 20%)
  - b. If non CCC RSD > 15%, print out the curve as Linear Regression  
 $r \geq 0.995$  or  $r^2 \geq 0.99$  (do not force through zero for 8260B)
  - c. If non CCC RSD > 15%, print out the curve as Quadratic  
 $r \geq 0.995$  or  $r^2 \geq 0.99$  (do not force through zero for 8260B)
  - d. Choose option (b or c) with the least negative intercept
  - e. Requant the low (RL) standard against the curve  
must be ± 30%, file with the calibration for reference
  - f. If samples contain negative values then:  
compare the area counts with the low standard on file  
if <, then report as N.D. with no flag  
if >, then report from RSD curve and flag that curve is out  
or report at an elevated RL as compared to a curve standard
3. Initial Midpoint / LCS / BFB Tune  
(624: use Table 5) (524.2: ±30%) (8260B: see control chart)  
SPCCs met criteria? CCCs met criteria (±20%)?
4. Checked integration of all peaks in Midpoint?
5. Method Blank < Report Limit, if not is data flagged?  
(624: every 20 samples) (524.2: every 12 hours) (8260B: every 12 hours)
6. MS/MSD (every 20 samples)  
(624: use Table 5) (524.2: N/A) (8260B: see Control Chart)
7. All samples met holding time? (Soil 72hr ext, 7/14days water)
8. All water samples checked to be pH < 2? (Note this on the sequence file)
9. LCS every 20 samples  
(624: See Table 5) (524.2: ±30%) (8260B: See Control Chart)
10. Cont. Midpoint / LCS / BFB Tune done every 12 hours  
(624: use Table 5) (524.2: ±30%) (8260B: see control chart)  
SPCCs met criteria? CCCs met criteria (±20%)?
11. Surrogates within acceptance limits  
(624 / 524.2 / 8260B: See Control Chart)
12. Internal Standards within acceptance limits  
(624 / 524.2 / 8260B: response must be -50 to +100%).
13. Manual re-integration(s) performed?  
yes: \_\_\_\_\_ no: \_\_\_\_\_
14. Corrective Action Report required?  
yes: \_\_\_\_\_ (Attached) no: \_\_\_\_\_
15. Reports impacted by the Corrective Action Report

NA

AB

yst: ADW

6/3/5

Reviewer / Date: AB 6/6/5

9/13/01

# Injection Log

Directory: D:\HPCHEM\1\DATA\060205

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	P0602001.D	1.	TUNE/BLANK		
2	2	P0602002.D	1.	p5f0311-bs1	1X 10ML	2 Jun 2005 09:03
3	3	P0602003.D	1.	p5f0311-bsd1	1X 10ML	2 Jun 2005 09:29
4	4	P0602004.D	1.	p5f0311-blk1	1X 10ML	2 Jun 2005 10:02
5	5	P0602005.D	1.	poe0713-01	1X 10ML	2 Jun 2005 10:35
6	6	P0602006.D	1.	poe0714-01	1X 10ML	2 Jun 2005 11:08
7	7	P0602007.D	1.	pof0007-04	1X 10ML	2 Jun 2005 11:41
8	8	P0602008.D	1.	p3f0311-ms1	1X 10ML	2 Jun 2005 12:13
9	9	P0602009.D	1.	p5f0311-msd1	1X 10ML	2 Jun 2005 12:46
10	10	P0602010.D	1.	poe0715-01	1X 10ML	2 Jun 2005 13:19
11	11	P0602011.D	1.	poe0772-01	1X 10ML	2 Jun 2005 13:51
12	12	P0602012.D	1.	poe0772-02	1X 10ML	2 Jun 2005 14:24
13	13	P0602013.D	1.	poe0673-01	1X 10ML	2 Jun 2005 14:57
14	14	P0602014.D	1.	pof0007-01	1X 10ML	2 Jun 2005 15:30
15	15	P0602015.D	1.	pof0007-02	1X 10ML	2 Jun 2005 16:03
16	16	P0602016.D	1.	pof0007-03	1X 10ML	2 Jun 2005 16:36
17	17	P0602017.D	1.	pof0007-05	1X 10ML	2 Jun 2005 17:08
18	18	P0602018.D	1.	pof0007-06	1X 10ML	2 Jun 2005 17:41
19	19	P0602019.D	1.	pof0007-07	1X 10ML	2 Jun 2005 18:14
20	20	P0602020.D	1.	pof0007-08	1X 10ML	2 Jun 2005 18:47
21	21	P0602021.D	1.	pof0007-09	1X 10ML	2 Jun 2005 19:20
22	22	P0602022.D	1.	pof0007-10	1X 10ML	2 Jun 2005 19:52
23	23	P0602023.D	1.	<del>pof0007-11</del>	1X 10ML	2 Jun 2005 20:25
						2 Jun 2005 20:58

/ CCV

/ Blank

pof0007-04  
I

Re-run is low

DNU PRELOX

# DMAP GC/MS 1 DAILY LOG SUMMARY

DATE: 06/02/05

QC BATCH # (s): P5FO311<sup>#6</sup>

ANALYST: CC

SEQUENCE FILE: C:\GCMS\DATA\060205.S

CALIBRATION METHOD(S): D1031905.M

POS #	FILENAME	SAMPLE ID.CLIENT	SAMPLE VOL.	pH	EPA METHOD	MATRIX	COMMENTS
1	P2602001	time	1ul	NA	5260	H2O	
2	02	CCV	1X10ML				P5FO311-BS1
3	03	LCS					-BS1
4	04	BLK					-BLK
5	05	P050713-01 A					
6	06	P050714-01 A					
7	07	P0F0007-04 A					
8	08	P5FO3-11-04 MS					P0F007-04A
9	09	-04 MSO					
10	10	P020715-01 A					
11	11	P050772-01 A					
12	12	-02 A					
13	13	P050673-01 C					
14	14	P0F0007-01 A					
15	15	-02 A					
16	16	-03 A					
17	17	-05 A					
18	18	-06 A					
19	19	-07 A					
20	20	-08 A					
21	21	-09 A					
22	22	-10 A					
23	23	-11 A					-DNA PREP

CCV / H<sub>2</sub>O LCS / H<sub>2</sub>O SPIKE: 5050010

Internal Std: NA

CALIBRATION STD: NA

IS / Surrogate / BFB: 5050007

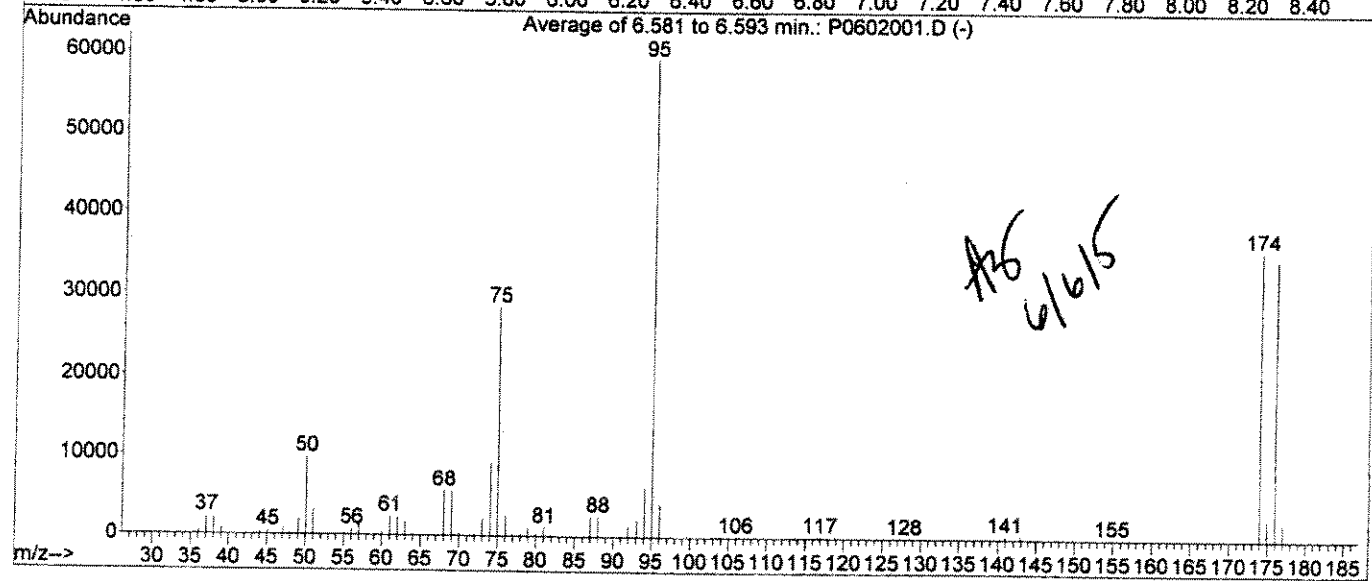
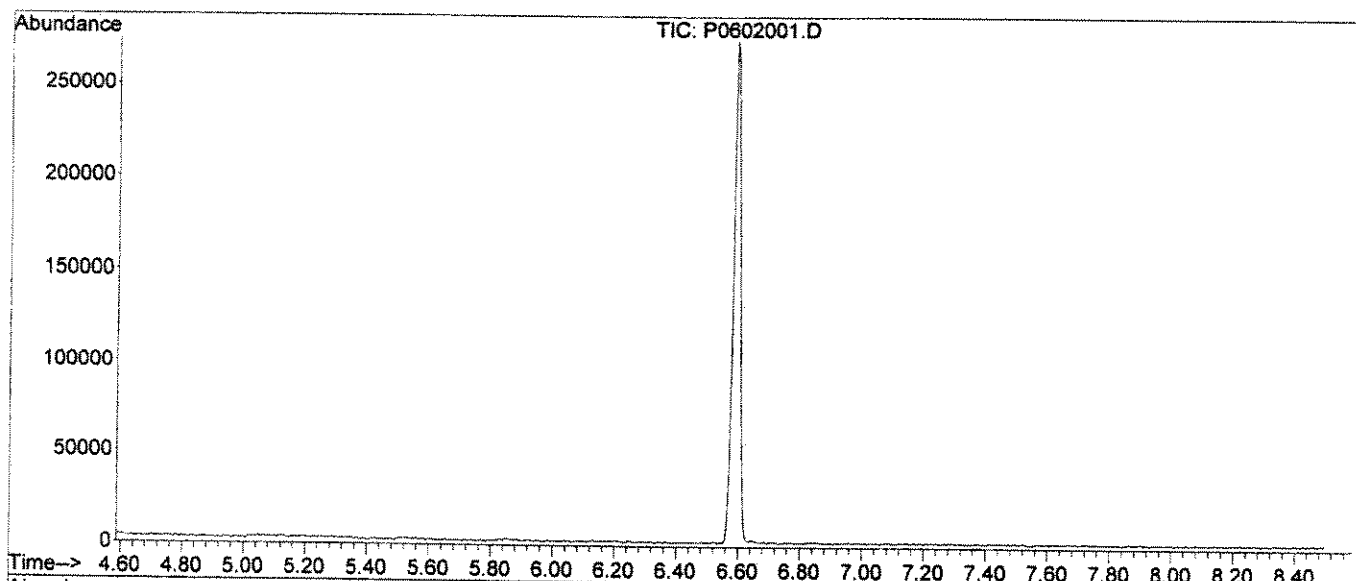
REVIEWER / DATE: AP 6/6/05

5050261

BFB

Data File : D:\HPCHEM\1\DATA\060205\PO602001.D Vial: 1  
Acq On : 2 Jun 2005 9:03 am Operator: cs  
Sample : TUNE/BLANK Inst : GCMS1  
Misc : 1X 10ML Multiplr: 1.00  
MS Integration Params: DIOXANE.P  
Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)

*CSW*  
*6/3/5*



*174*  
*6/6/5*

AutoFind: Scans 410, 411, 412; Background Corrected with Scan 395

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.4	9691	PASS
75	95	30	60	48.0	28451	PASS
95	95	100	100	100.0	59219	PASS
96	95	5	9	7.0	4130	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	60.4	35747	PASS
175	174	5	9	7.0	2510	PASS
176	174	95	101	97.1	34717	PASS
177	176	5	9	6.1	2135	PASS

1,4-DIOXANE BY METHOD 8260B SIM

Data File Name P0602002.D  
 Data File Path D:\HPCHEM1\DATA\060205\  
 Sample Name ccv  
 Date Acquired 6/2/2005 9:29  
 Operator cs  
 Acq. Method File DX031905  
 GCMS1

*75F0311-BS7*  
*CON*  
*6/3/5*

INTERNAL STANDARDS	CAL RESPONSE	TARGET RESPONSE	LOW LIMIT	HIGH LIMIT	T/F
Pentafluorobenzene (IS)	47071	40215	23536	94142	TRUE
1,4-DIOXANE-d8	5034	6461	2517	10068	TRUE

SURROGATE	AMOUNT	% RECOVERY	Low	High	T/F
Dibromofluoromethane (SU1)	0.97	97.1	80	125	TRUE

TARGET ANALYTE	AMOUNT	TRUE VALUE	RECOVER	Low	High	T/F
1,4-DIOXANE	10.91	10.00	109.14	70	130	TRUE

*AS*  
*6/6/5*



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\060205\0602002.D Vial: 2  
 Acq On : 2 Jun 2005 9:29 am Operator: cs  
 Sample : ccv Inst : GCMS1  
 Misc : 1X 10ML Multiplr: 1.00

MS Integration Params: DIOXANE.P

Quant Time: Jun 2 10:07 2005

Quant Results File: DX031905.RES

Quant Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)

Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)

Last Update : Mon Mar 21 07:49:30 2005

Response via : Initial Calibration

DataAcq Meth : DX031905

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.55	99	40215	1.00	ug/L	-0.01
3) 1,4-DIOXANE-d8	12.34	64	6461	25.00	ug/L	-0.01
5) 1,2,3-Trichloropropane-d5	0.00	79	0	0.00	ug/L	-15.08

System Monitoring Compounds

2) Dibromofluoromethane (SU1) 10.06 113 29517 0.97 ug/L 0.00  
 Spiked Amount 1.000 Range 80 - 120 Recovery = 97.00%

Target Compounds

4) 1,4-DIOXANE 12.43 88 5337 10.91 ug/L Qvalue 90

*CSW  
6/3/05*

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\060205\P0602002.D

Acq On : 2 Jun 2005 9:29 am

Sample : ccv

Misc : 1X 10ML

MS Integration Params: DIOXANE.P

Quant Time: Jun 2 10:07 2005

Vial: 2

Operator: cs

Inst : GCMS1

Multiplr: 1.00

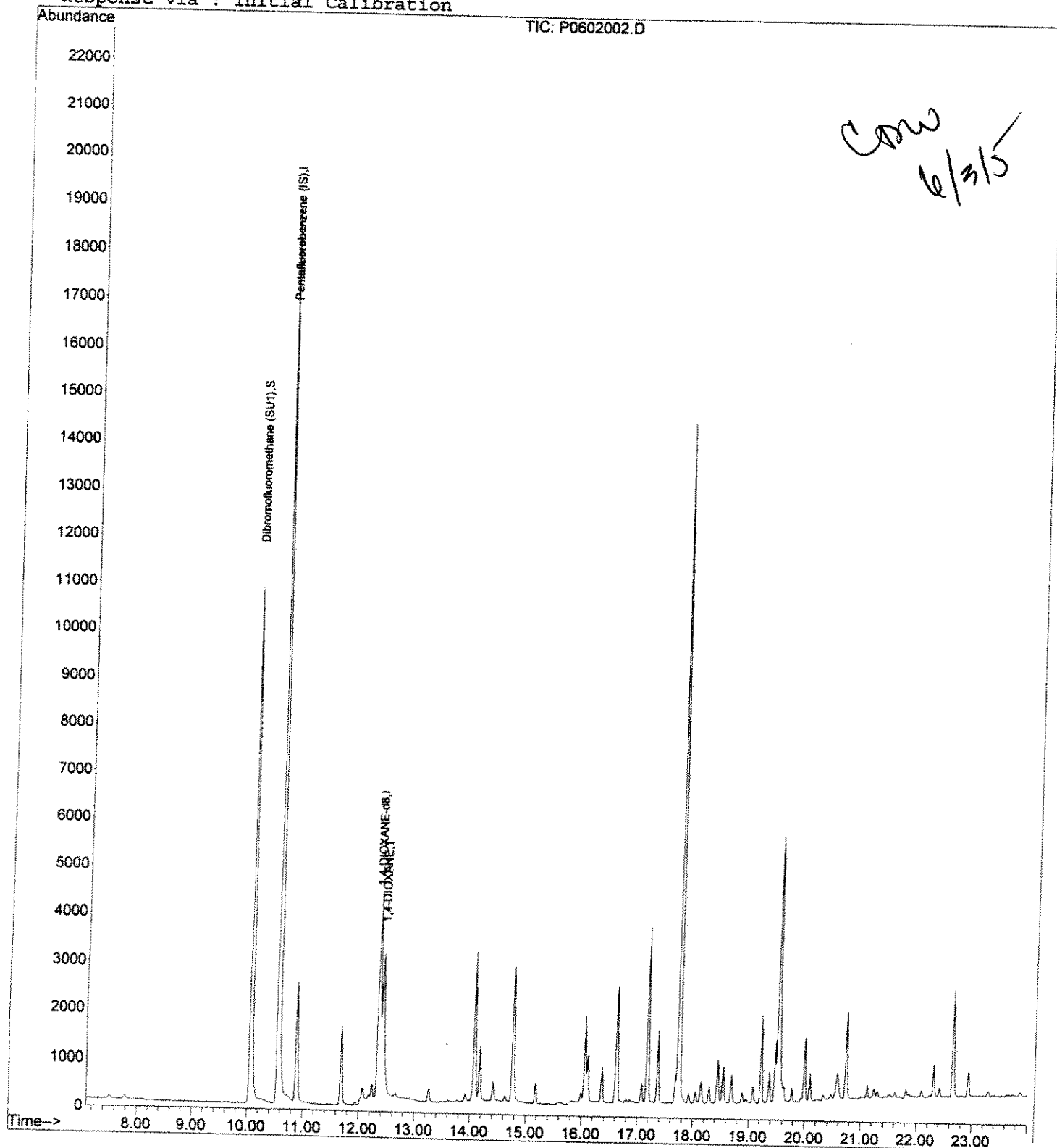
Quant Results File: DX031905.RES

Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)

Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)

Last Update : Mon Mar 21 07:49:30 2005

Response via : Initial Calibration



1,4-DIOXANE BY METHOD 8260B SIM

Data File Name P0602003.D  
 Data File Path D:\HPCHEM\1\DATA\060205\  
 Sample Name lcs  
 Date Acquired 6/2/2005 10:02  
 Operator cs  
 Acq. Method File DX031905  
 GCMS1

*P5F0311-BSDI*

INTERNAL STANDARDS	CAL RESPONSE	TARGET RESPONSE	LOW LIMIT	HIGH LIMIT	T/F
Pentafluorobenzene (IS)	47071	42557	23536	94142	TRUE
1,4-DIOXANE-d8	5034	8020	2517	10068	TRUE

SURROGATE	AMOUNT	% RECOVERY	Low	High	T/F
Dibromofluoromethane (SU1)	0.99	98.6	80	125	TRUE

TARGET ANALYTE	AMOUNT	TRUE VALUE	RECOVER	Low	High	T/F
1,4-DIOXANE	10.36	10.00	103.56	70	130	TRUE

*CDW  
6/9/5*

*ABG  
6/6/5*

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\060205\0602003.D  
 Acq On : 2 Jun 2005 10:02 am  
 Sample : lcs  
 Misc : 1X 10ML  
 MS Integration Params: DIOXANE.P  
 Quant Time: Jun 3 10:46 2005

Vial: 3  
 Operator: cs  
 Inst : GCMS1  
 Multiplr: 1.00

Quant Results File: DX031905.RES

Quant Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Mon Mar 21 07:49:30 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX031905

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	42557	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	8020	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0	0.00	ug/L	-15.08

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	10.06	113	31709	0.99	ug/L	0.00
Spiked Amount	1.000	Range	80 - 120	Recovery	=	99.00%

Target Compounds

4) 1,4-DIOXANE	12.43	88	6286m	10.36	ug/L	Qvalue
----------------	-------	----	-------	-------	------	--------

*6/3/05*  
*QAM*

(#) = qualifier out of range (m) = manual integration

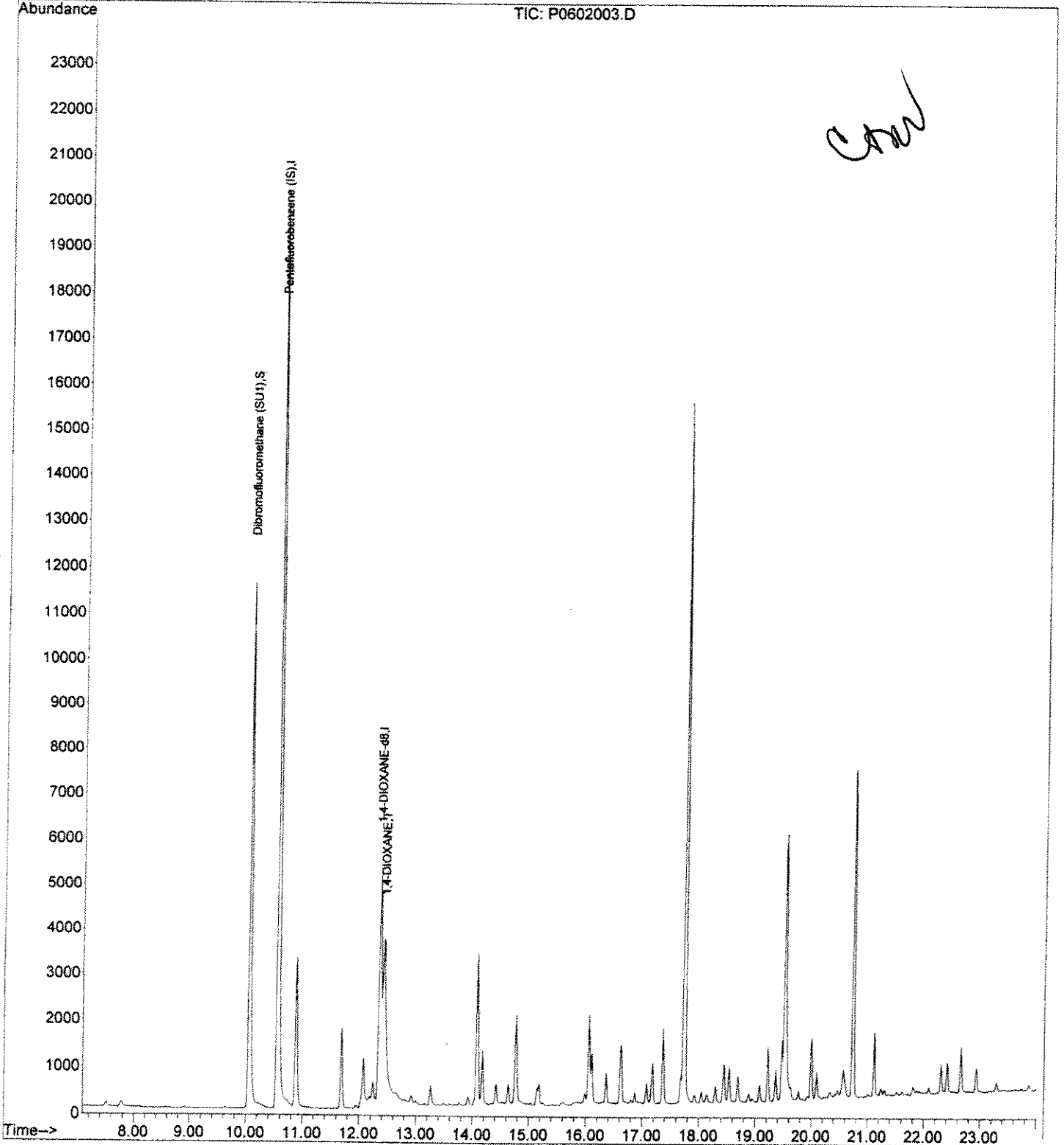
Quantitation Report

Data File : D:\HPCHEM\1\DATA\060205\0602003.D  
Acq On : 2 Jun 2005 10:02 am  
Sample : lcs  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Jun 3 10:46 2005

Vial: 3  
Operator: cs  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX031905.RES

Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Mon Mar 21 07:49:30 2005  
Response via : Initial Calibration



Data File : D:\HPCHEM\1\DATA\060205\0602004.D Vial: 4  
 Acq On : 2 Jun 2005 10:35 am Operator: cs  
 Sample : blk Inst : GCMS1  
 Misc : 1X 10ML Multiplr: 1.00

*PSF0311-BIK*

MS Integration Params: DIOXANE.P  
 Quant Time: Jun 2 10:51 2005 Quant Results File: DX031905.RES

Quant Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Mon Mar 21 07:49:30 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX031905

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	41750	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	7641	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0	0.00	ug/L	-15.08
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane (SU1)	10.06	113	30682	0.97	ug/L	0.00
Spiked Amount	1.000	Range 80 - 120	Recovery	=	97.00%	
<b>Target Compounds</b>						
4) 1,4-DIOXANE	12.43	88	148	0.26	ug/L	Qvalue 93

*ADW  
6/3/05*

*AS  
6/6/05*

(#) = qualifier out of range (m) = manual integration

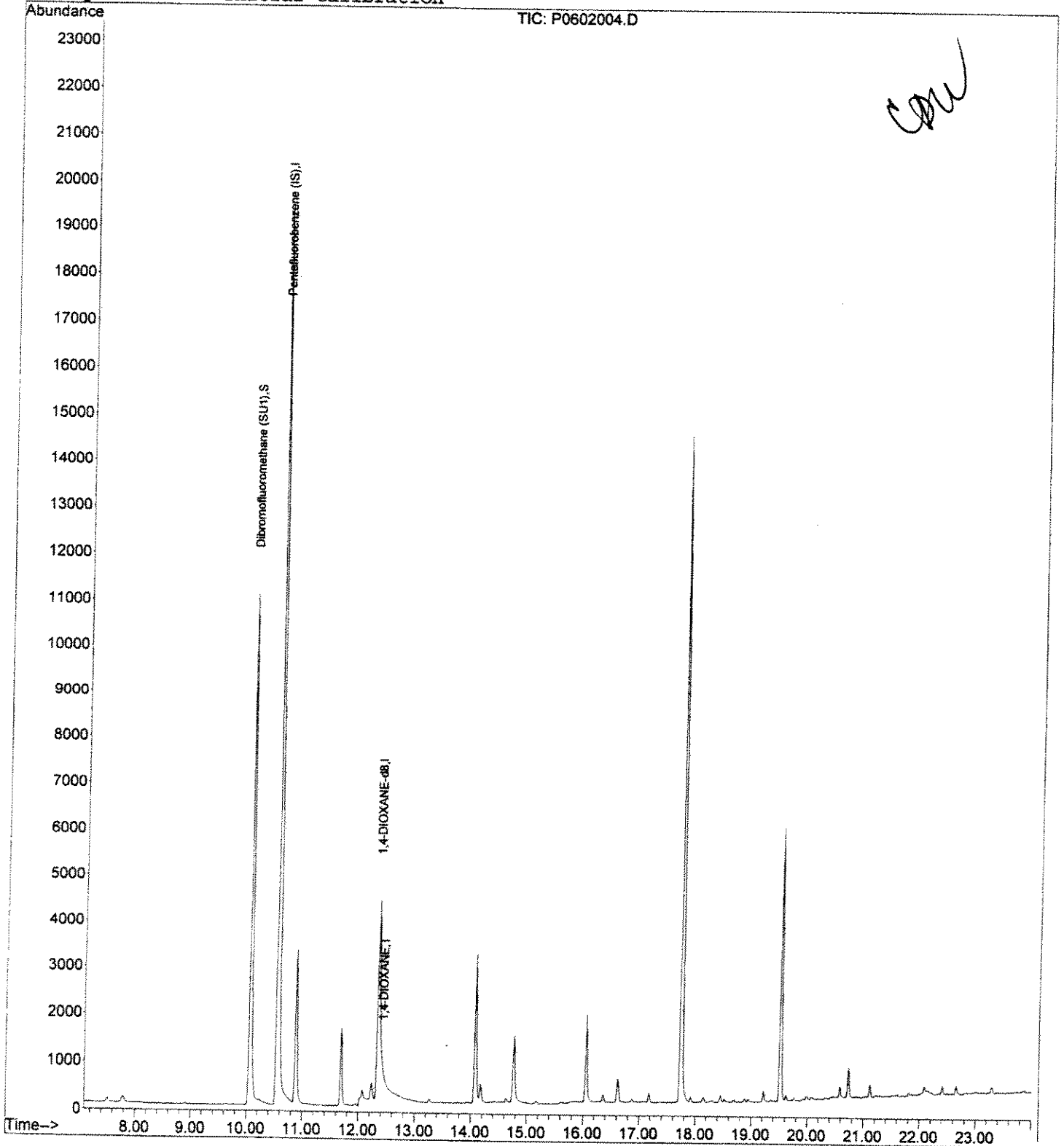
Quantitation Report

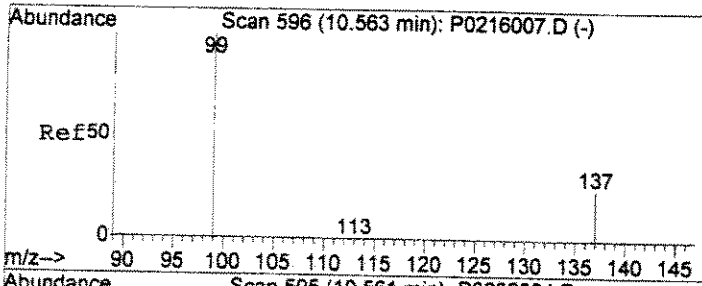
Data File : D:\HPCHEM\1\DATA\060205\P0602004.D  
Acq On : 2 Jun 2005 10:35 am  
Sample : blk  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Jun 2 10:51 2005

Vial: 4  
Operator: cs  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX031905.RES

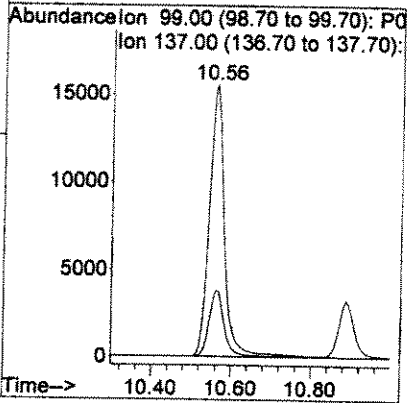
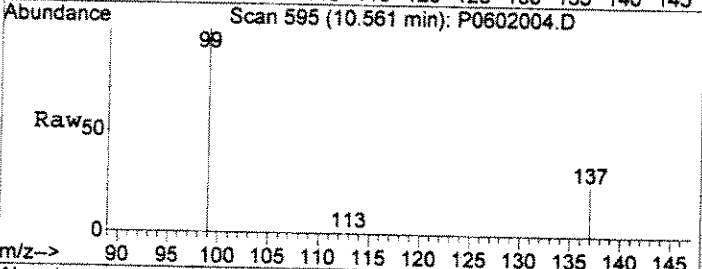
Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Mon Mar 21 07:49:30 2005  
Response via : Initial Calibration



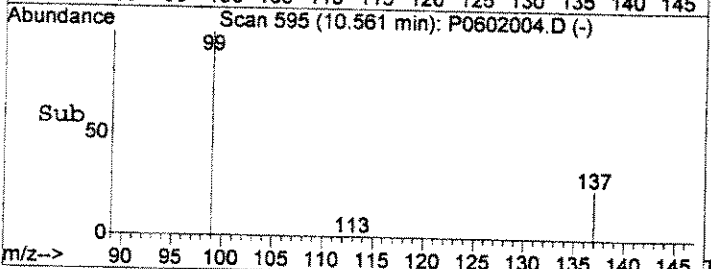


#1  
 Pentafluorobenzene (IS)  
 Concen: 1.00 ug/L  
 RT: 10.56 min Scan# 595  
 Delta R.T. -0.00 min  
 Lab File: P0602004.D  
 Acq: 2 Jun 2005 10:35 am

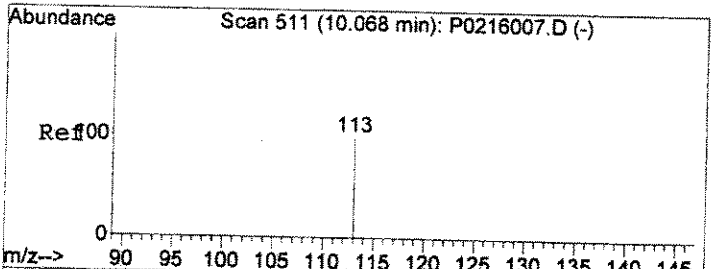
Tgt Ion: 99 Resp: 41750  
 Ion Ratio Lower Upper  
 99 100  
 137 24.2 3.8 43.8



*CDW*

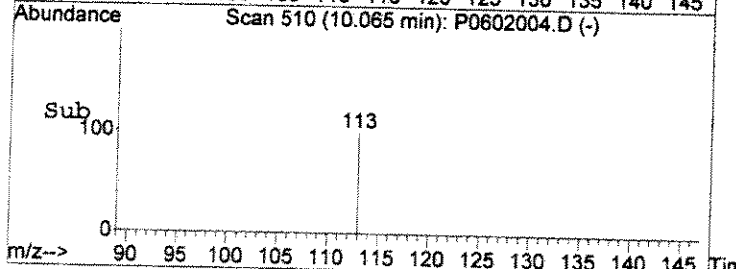
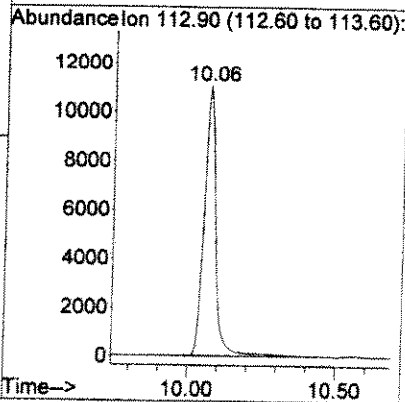
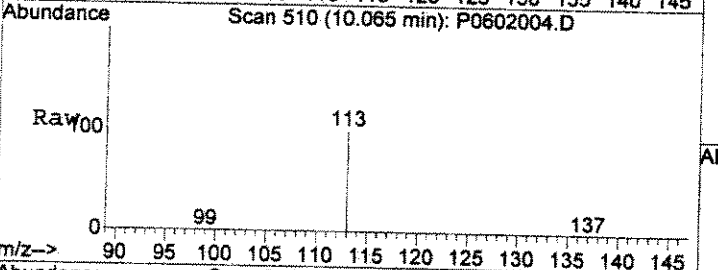


*AR6*

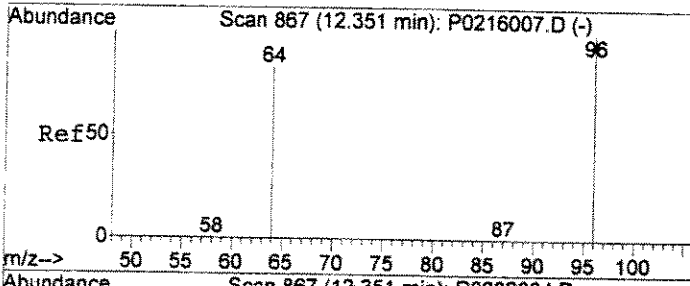


#2  
 Dibromofluoromethane (SUL)  
 Concen: 1.00 ug/L  
 RT: 10.06 min Scan# 510  
 Delta R.T. -0.00 min  
 Lab File: P0602004.D  
 Acq: 2 Jun 2005 10:35 am

Tgt Ion: 113 Resp: 30682



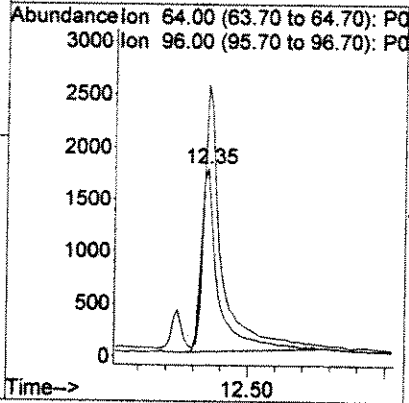
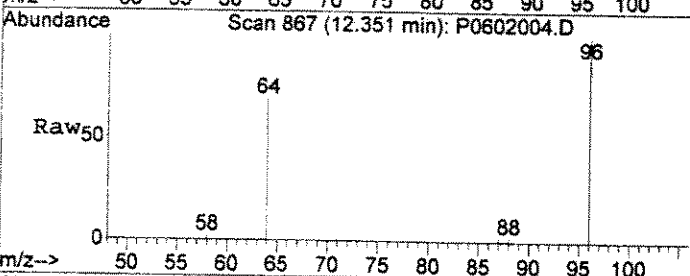




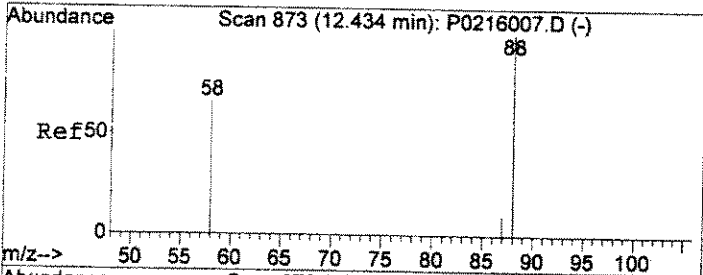
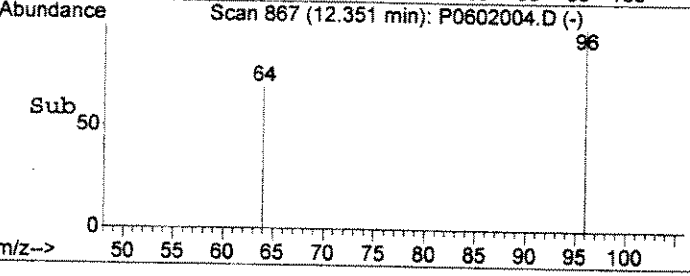
#3  
 1,4-DIOXANE-d8  
 Concen: 25.00 ug/L  
 RT: 12.35 min Scan# 867  
 Delta R.T. 0.00 min  
 Lab File: P0602004.D  
 Acq: 2 Jun 2005 10:35 am

Tgt Ion: 64 Resp: 7641

Ion	Ratio	Lower	Upper
64	100		
96	141.3	72.7	172.7



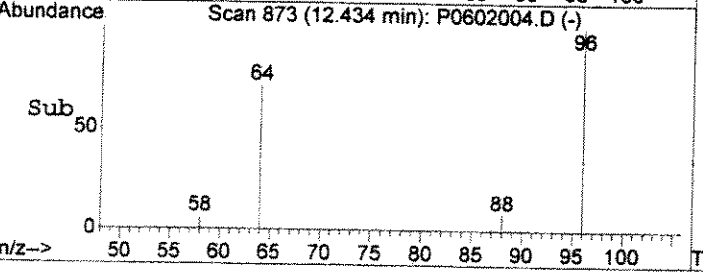
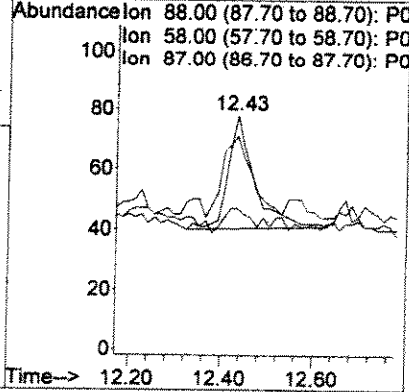
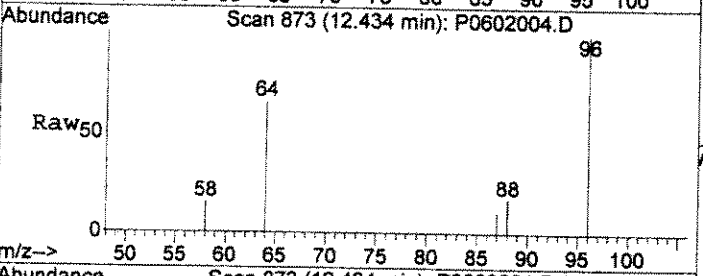
*CPW*

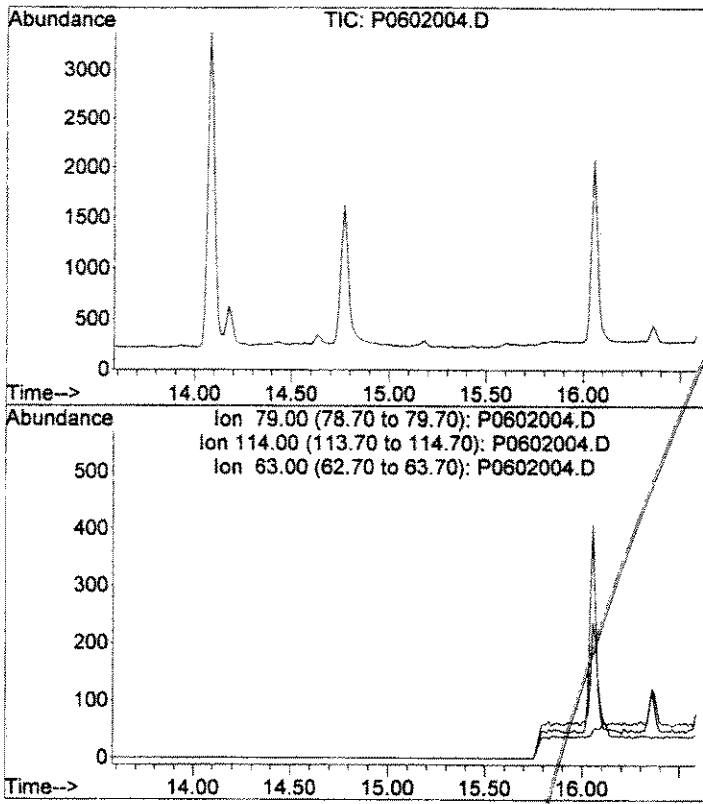


#4  
 1,4-DIOXANE  
 Concen: 0.26 ug/L  
 RT: 12.43 min Scan# 873  
 Delta R.T. 0.00 min  
 Lab File: P0602004.D  
 Acq: 2 Jun 2005 10:35 am

Tgt Ion: 88 Resp: 148

Ion	Ratio	Lower	Upper
88	100		
58	71.1	15.8	115.8
87	13.2	0.0	59.5





#5  
 1,2,3-Trichloropropane-d5  
 Concen: 0.00 ug/L  
 Expected RT: 15.08 min

Lab File: P0602004.D  
 Acq: 2 Jun 2005 10:35 am

Sig	Exp Ratio
79	100
114	0.0
63	98.0

*Handwritten signature*

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\060205\0602007.D Vial: 7  
 Acq On : 2 Jun 2005 12:13 pm Operator: cs  
 Sample : pof0007-04 Inst : GCMS1  
 Misc : 1X 10ML Multiplr: 1.00  
 MS Integration Params: DIOXANE.P  
 Quant Time: Jun 2 15:17 2005 Quant Results File: DX031905.RES

Quant Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Mon Mar 21 07:49:30 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX031905

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	39958	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	6752	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0	0.00	ug/L	-15.08
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane (SU1)	10.06	113	28997	0.96	ug/L	0.00
Spiked Amount	1.000	Range 80 - 120	Recovery	=	96.00%	
<b>Target Compounds</b>						
4) 1,4-DIOXANE	12.43	88	29124	56.99	ug/L	Qvalue 92

*Handwritten notes:*  
 AB 6/6/05  
 COW 6/2/05

(#) = qualifier out of range (m) = manual integration

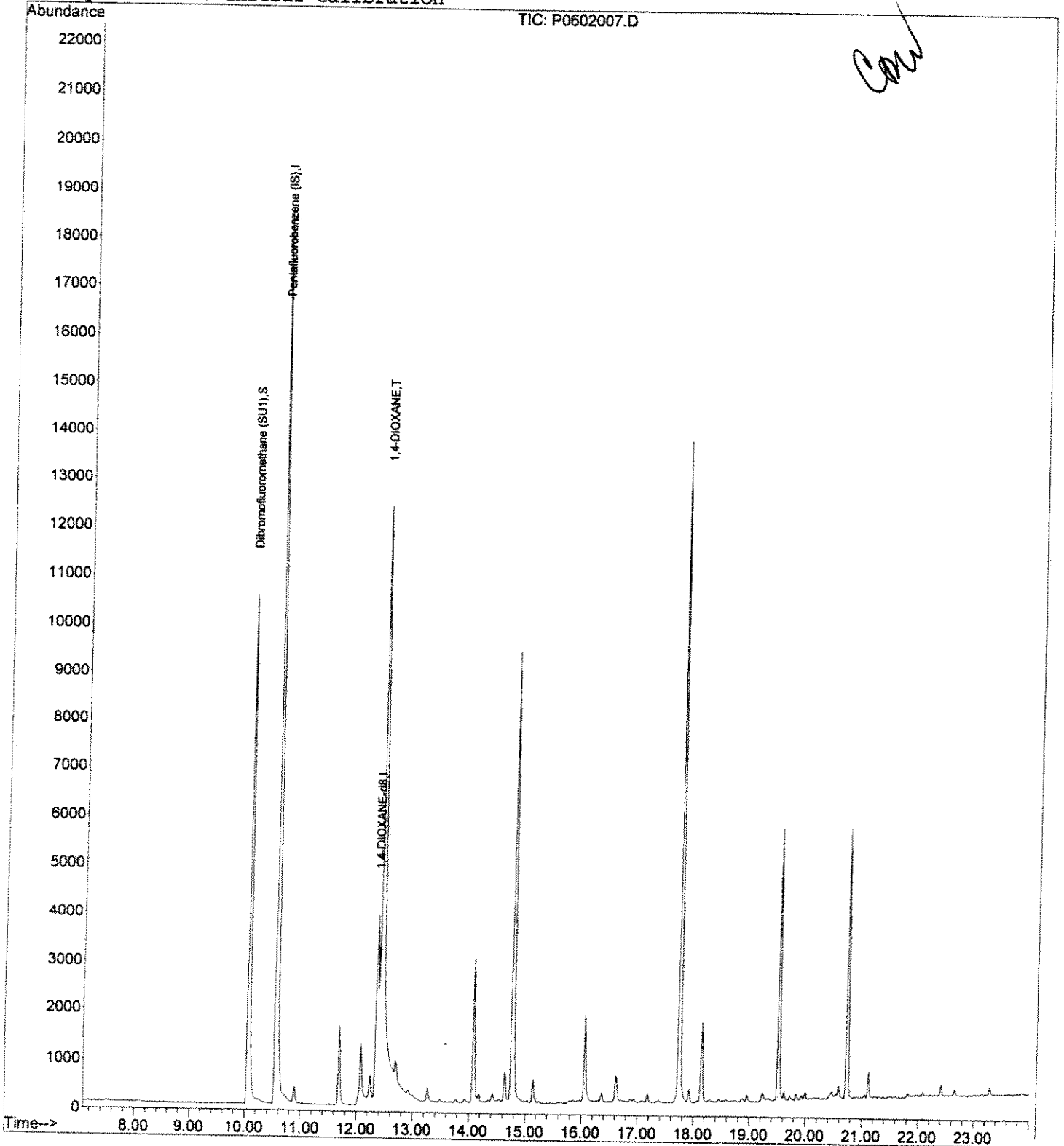
Quantitation Report

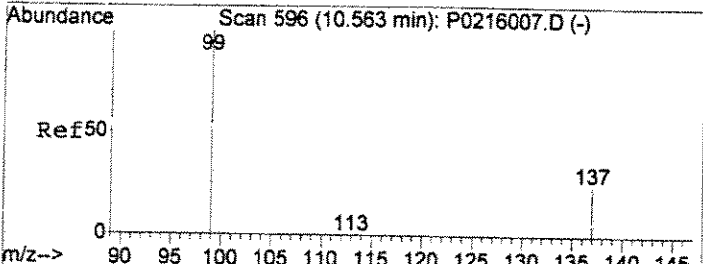
Data File : D:\HPCHEM\1\DATA\060205\P0602007.D  
Acq On : 2 Jun 2005 12:13 pm  
Sample : pof0007-04  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Jun 2 15:17 2005

Vial: 7  
Operator: cs  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX031905.RES

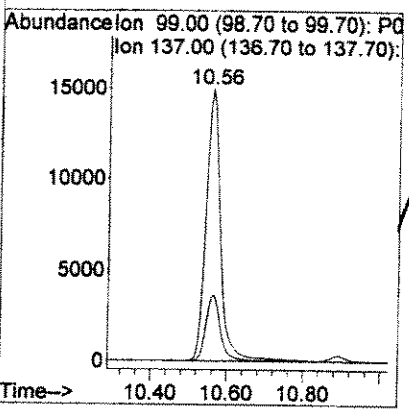
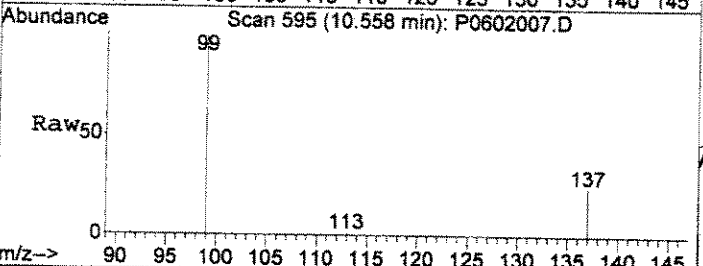
Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Mon Mar 21 07:49:30 2005  
Response via : Initial Calibration



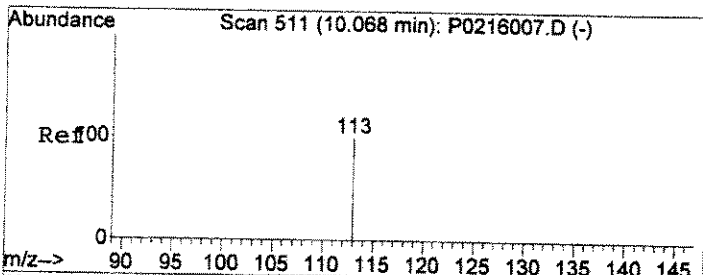
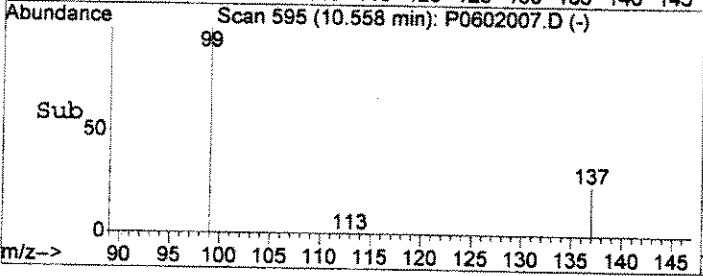


#1  
 Pentafluorobenzene (IS)  
 Concen: 1.00 ug/L  
 RT: 10.56 min Scan# 595  
 Delta R.T. -0.01 min  
 Lab File: P0602007.D  
 Acq: 2 Jun 2005 12:13 pm

Tgt Ion	Resp	Lower	Upper
99	39958	100	
137	24.0	3.8	43.8

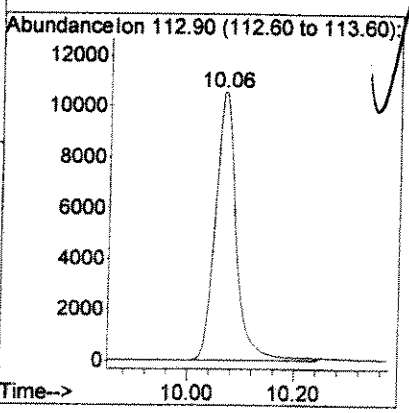
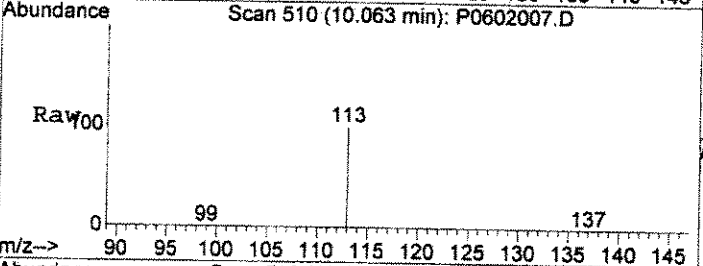


*COW*

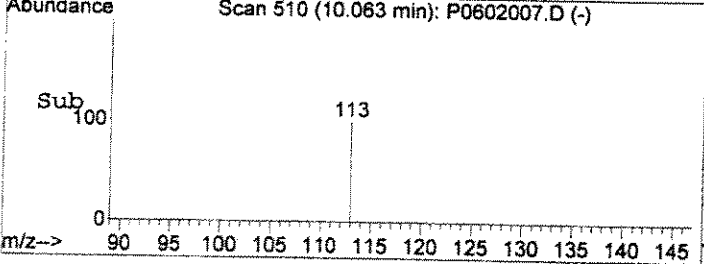


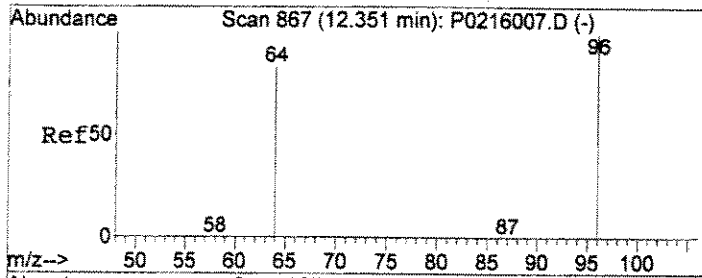
#2  
 Dibromofluoromethane (SU1)  
 Concen: 1.00 ug/L  
 RT: 10.06 min Scan# 510  
 Delta R.T. -0.01 min  
 Lab File: P0602007.D  
 Acq: 2 Jun 2005 12:13 pm

Tgt Ion: 113 Resp: 28997



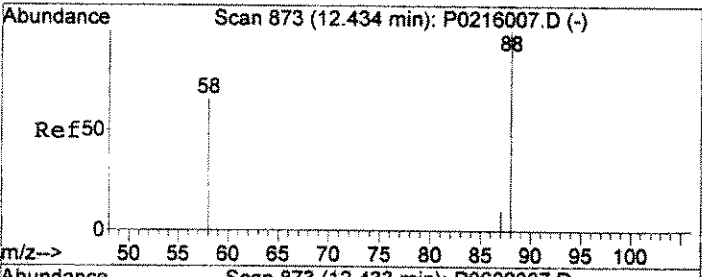
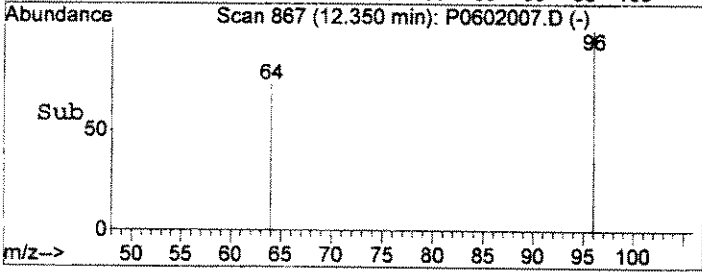
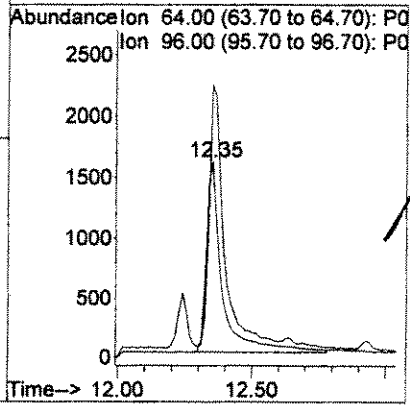
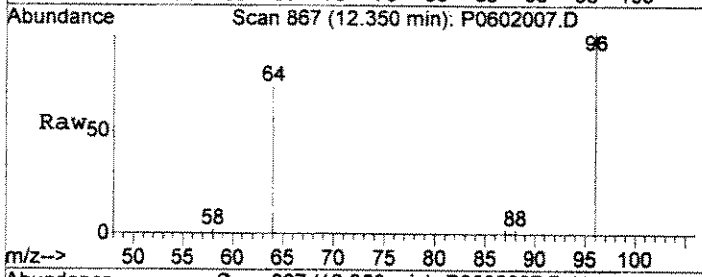
*AS*





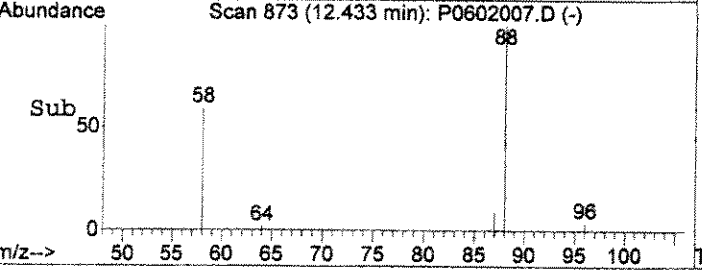
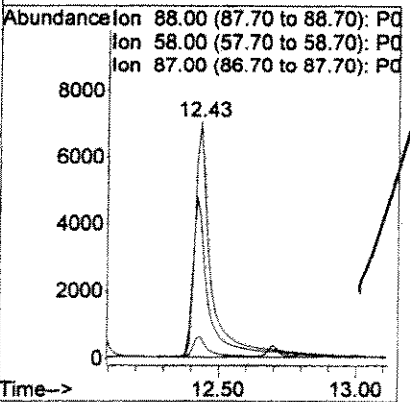
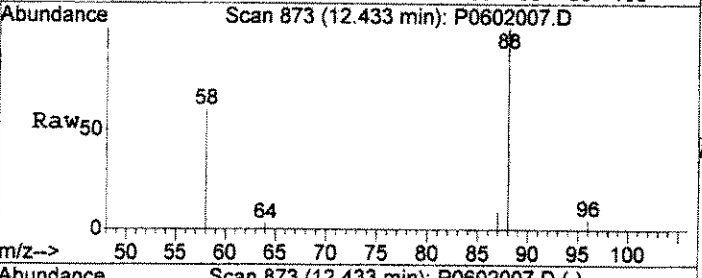
#3  
 1,4-DIOXANE-d8  
 Concen: 25.00 ug/L  
 RT: 12.35 min Scan# 867  
 Delta R.T. -0.00 min  
 Lab File: P0602007.D  
 Acq: 2 Jun 2005 12:13 pm

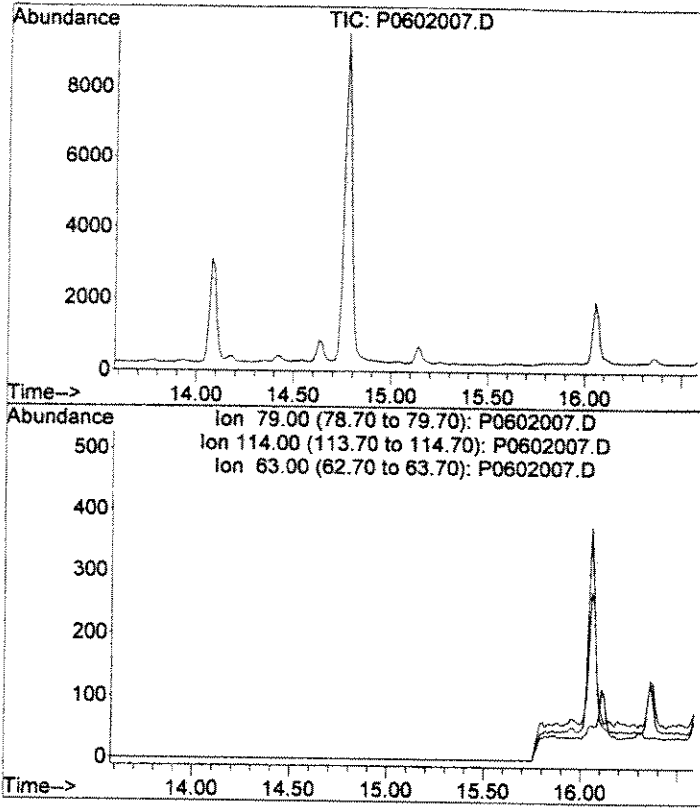
Tgt Ion: 64 Resp: 6752  
 Ion Ratio Lower Upper  
 64 100  
 96 136.6 72.7 172.7



#4  
 1,4-DIOXANE  
 Concen: 56.99 ug/L  
 RT: 12.43 min Scan# 873  
 Delta R.T. -0.00 min  
 Lab File: P0602007.D  
 Acq: 2 Jun 2005 12:13 pm

Tgt Ion: 88 Resp: 29124  
 Ion Ratio Lower Upper  
 88 100  
 58 59.1 15.8 115.8  
 87 8.6 0.0 59.5





#5  
 1,2,3-Trichloropropane-d5  
 Concen: 0.00 ug/L  
 Expected RT: 15.08 min

Lab File: P0602007.D  
 Acq: 2 Jun 2005 12:13 pm

Tgt Ion: 79  
 Sig Exp Ratio  
 79 100  
 114 0.0  
 63 98.0

*Handwritten signature*

Data File : D:\HPCHEM\1\DATA\060205\0602008.D Vial: 8  
 Acq On : 2 Jun 2005 12:46 pm Operator: cs  
 Sample : pof0007-04 ms Inst : GCMS1  
 Misc : 1X 10ML Multiplr: 1.00  
 MS Integration Params: DIOXANE.P  
 Quant Time: Jun 2 15:17 2005 Quant Results File: DX031905.RES

*P5 F0311-MS1*

Quant Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Mon Mar 21 07:49:30 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX031905

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	31062	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	5646	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0	0.00	ug/L	-15.08
<b>System Monitoring Compounds</b>						
2) Dibromofluoromethane (SU1)	10.06	113	22926	0.98	ug/L	0.00
Spiked Amount	1.000	Range 80 - 120	Recovery	=	98.00%	
<b>Target Compounds</b>						
4) 1,4-DIOXANE	12.43	88	38025	88.99	ug/L	Qvalue 91

*ATG 6/6/5*

*CMW 6/3/5*



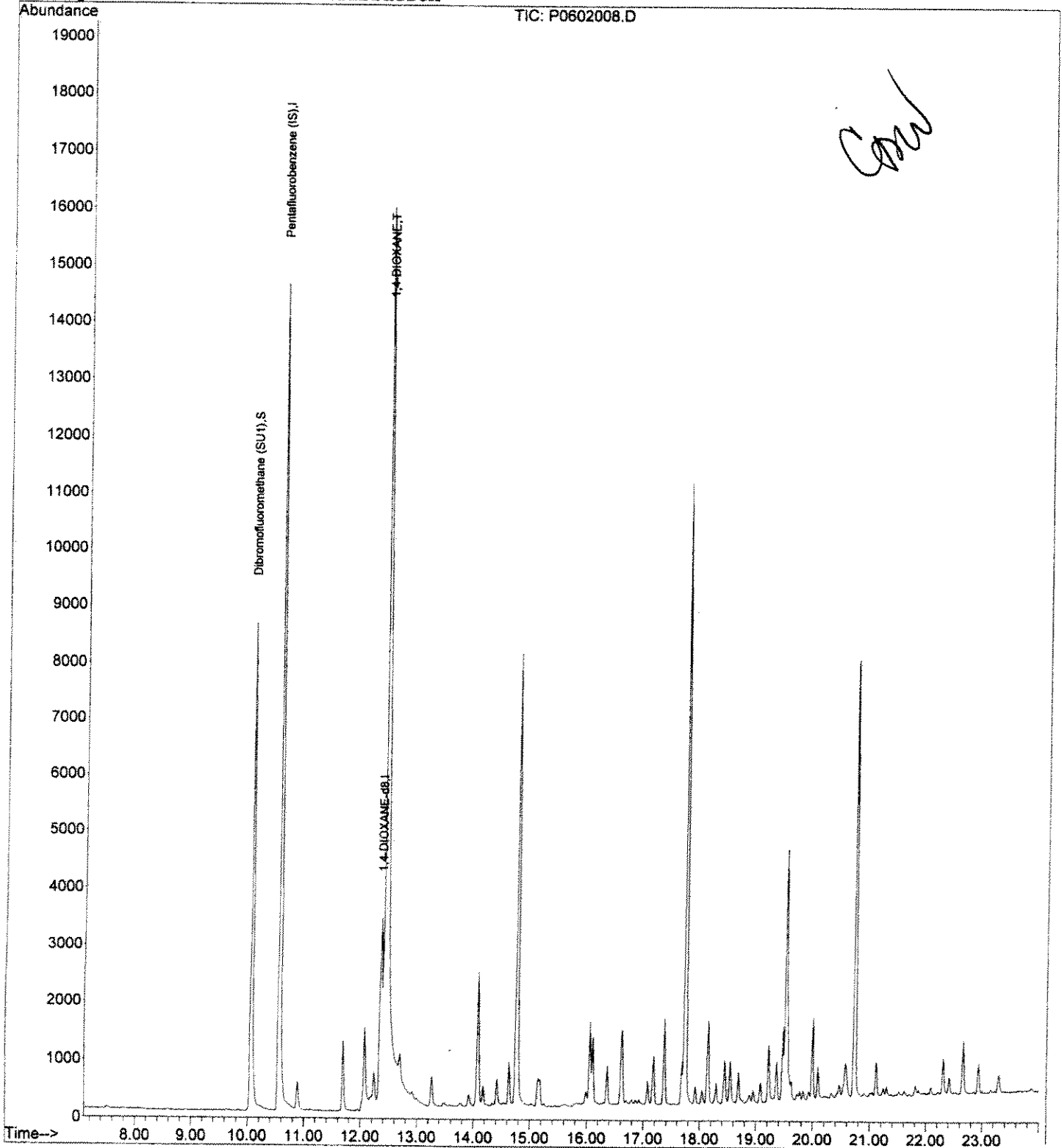
Quantitation Report

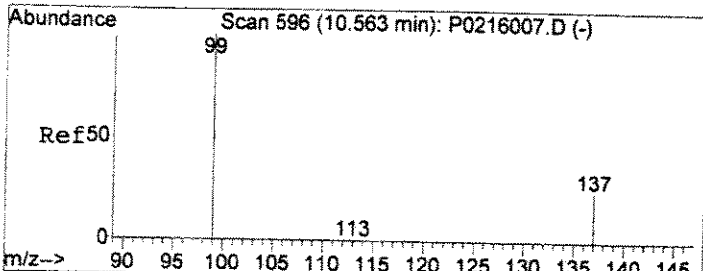
Data File : D:\HPCHEM\1\DATA\060205\0602008.D  
Acq On : 2 Jun 2005 12:46 pm  
Sample : pof0007-04 ms  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Jun 2 15:17 2005

Vial: 8  
Operator: cs  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX031905.RES

Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Mon Mar 21 07:49:30 2005  
Response via : Initial Calibration

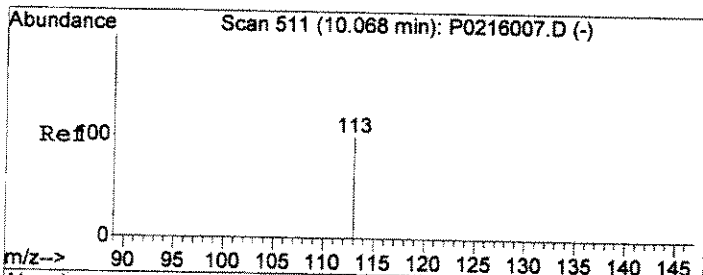
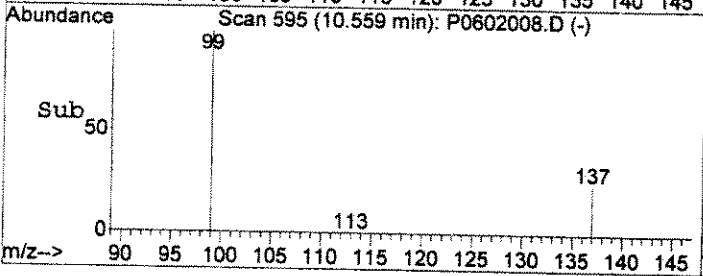
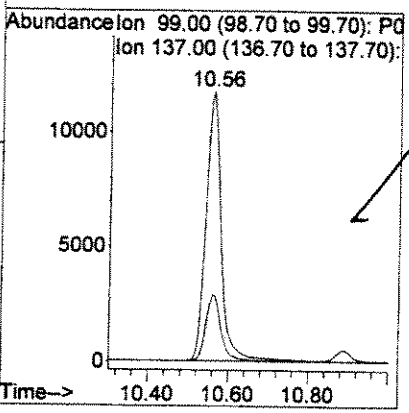
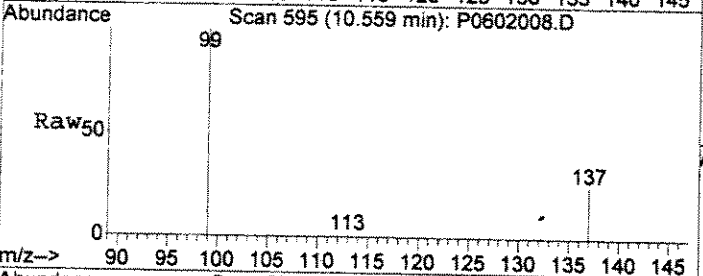




#1  
 Pentafluorobenzene (IS)  
 Concen: 1.00 ug/L  
 RT: 10.56 min Scan# 595  
 Delta R.T. -0.01 min  
 Lab File: P0602008.D  
 Acq: 2 Jun 2005 12:46 pm

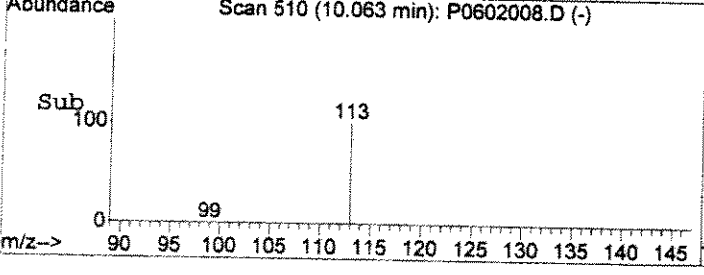
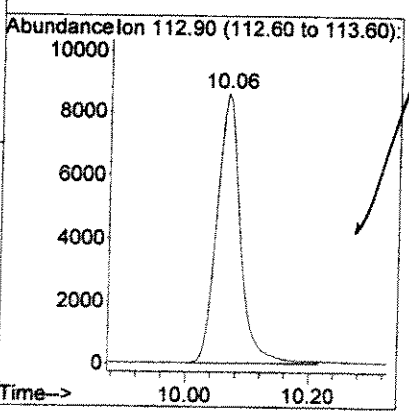
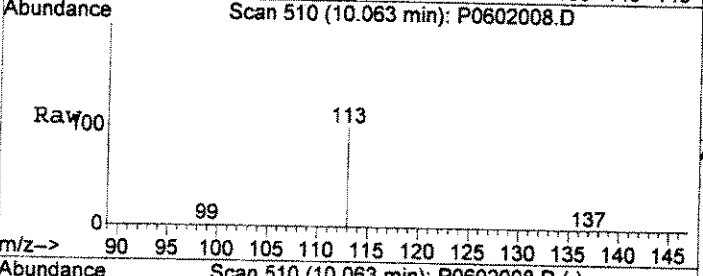
Tgt Ion: 99 Resp: 31062

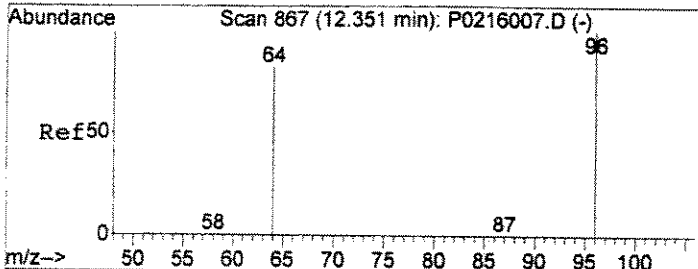
Ion	Ratio	Lower	Upper
99	100		
137	23.9	3.8	43.8



#2  
 Dibromofluoromethane (SU1)  
 Concen: 1.00 ug/L  
 RT: 10.06 min Scan# 510  
 Delta R.T. -0.01 min  
 Lab File: P0602008.D  
 Acq: 2 Jun 2005 12:46 pm

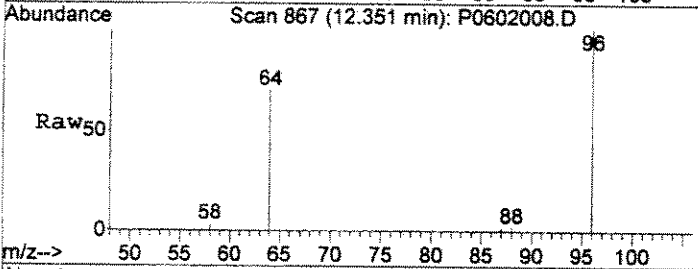
Tgt Ion: 113 Resp: 22926



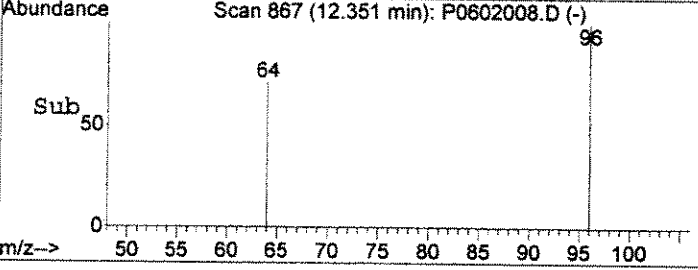
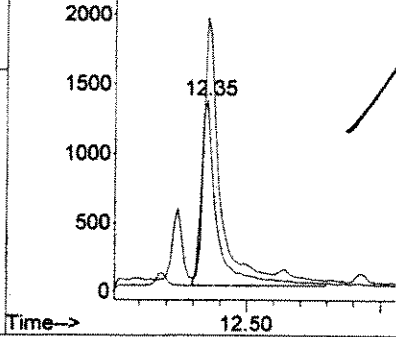


#3  
 1,4-DIOXANE-d8  
 Concen: 25.00 ug/L  
 RT: 12.35 min Scan# 867  
 Delta R.T. -0.00 min  
 Lab File: P0602008.D  
 Acq: 2 Jun 2005 12:46 pm

Tgt Ion: 64 Resp: 5646  
 Ion Ratio Lower Upper  
 64 100  
 96 142.1 72.7 172.7

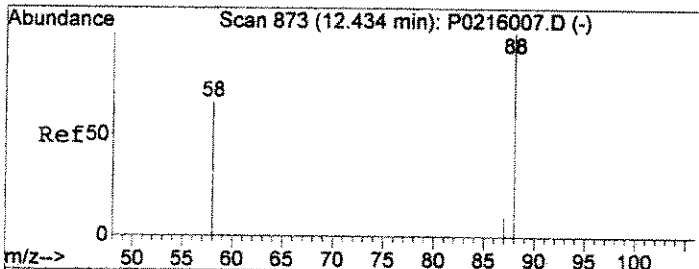


Abundance Ion 64.00 (63.70 to 64.70): P0  
 Ion 96.00 (95.70 to 96.70): P0



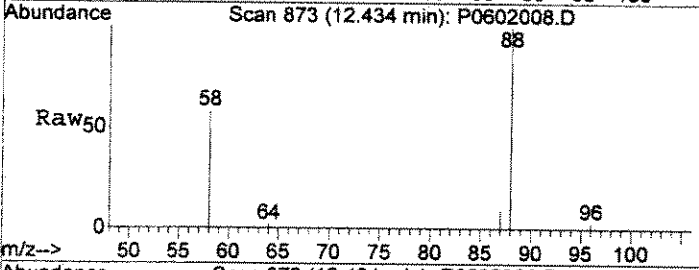
*Handwritten signature*

*Handwritten initials 'AB'*

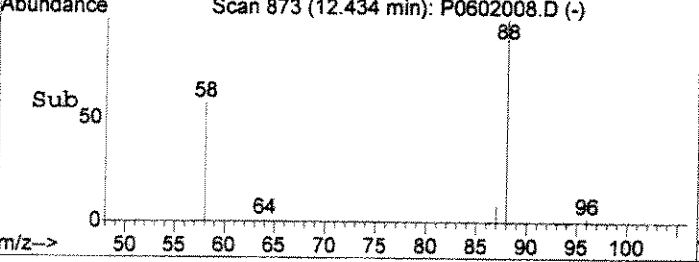
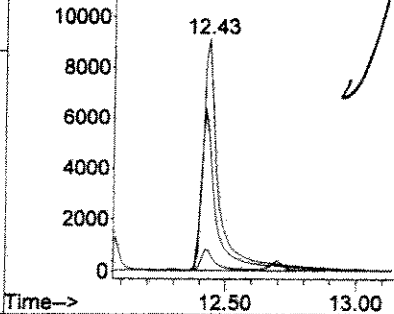


#4  
 1,4-DIOXANE  
 Concen: 88.99 ug/L  
 RT: 12.43 min Scan# 873  
 Delta R.T. 0.00 min  
 Lab File: P0602008.D  
 Acq: 2 Jun 2005 12:46 pm

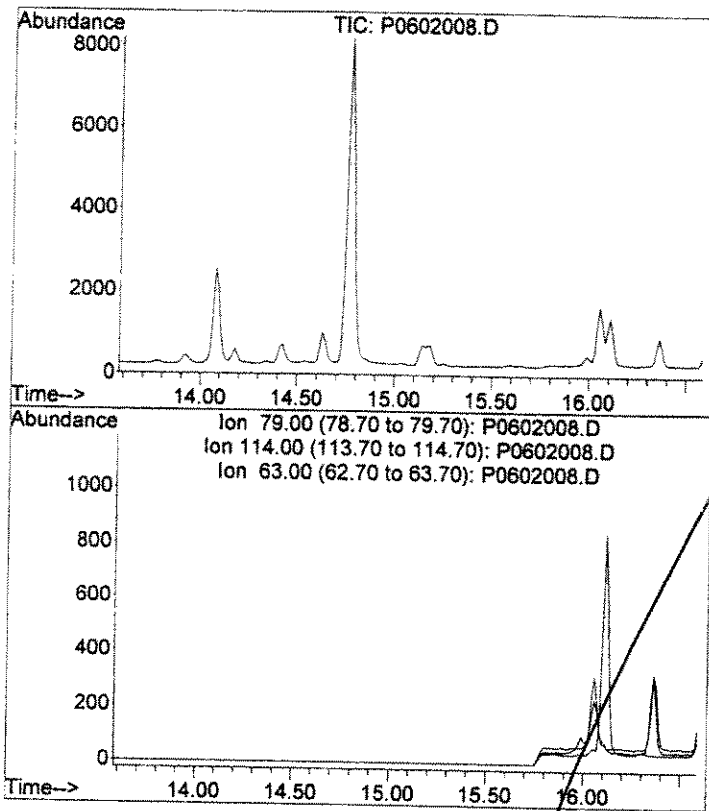
Tgt Ion: 88 Resp: 38025  
 Ion Ratio Lower Upper  
 88 100  
 58 58.1 15.8 115.8  
 87 8.3 0.0 59.5



Abundance Ion 88.00 (87.70 to 88.70): P0  
 Ion 58.00 (57.70 to 58.70): P0  
 Ion 87.00 (86.70 to 87.70): P0



*Handwritten signature*



#5  
 1,2,3-Trichloropropane-d5  
 Concen: 0.00 ug/L  
 Expected RT: 15.08 min

Lab File: P0602008.D  
 Acq: 2 Jun 2005 12:46 pm

Tgt Ion	79
Sig	Exp Ratio
79	100
114	0.0
63	98.0

*Handwritten signature*

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\060205\PO602009.D  
 Acq On : 2 Jun 2005 1:19 pm  
 Sample : pof0007-04 msd  
 Misc : 1X 10ML  
 MS Integration Params: DIOXANE.P  
 Quant Time: Jun 2 15:18 2005

Vial: 9  
 Operator: cs  
 Inst : GCMS1  
 Multiplr: 1.00

Quant Results File: DX031905.RES

Quant Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
 Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
 Last Update : Mon Mar 21 07:49:30 2005  
 Response via : Initial Calibration  
 DataAcq Meth : DX031905

*PSF-0311-MSD*

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	28338 ✓	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	4679 ✓	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0	0.00	ug/L	-15.08

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Dibromofluoromethane (SU1)	10.06	113	20762	0.97	ug/L	0.00
Spiked Amount	1.000	Range	80 - 120	Recovery =	97.00%	✓

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
4) 1,4-DIOXANE	12.43	88	35088	99.08	ug/L	92

*AG*  
*6/6/5*

*QMW*  
*6/2/5*

Quantitation Report

Data File : D:\HPCHEM\1\DATA\060205\P0602009.D

Acq On : 2 Jun 2005 1:19 pm

Sample : pof0007-04 msd

Misc : 1X 10ML

MS Integration Params: DIOXANE.P

Quant Time: Jun 2 15:18 2005

Vial: 9

Operator: cs

Inst : GCMS1

Multiplr: 1.00

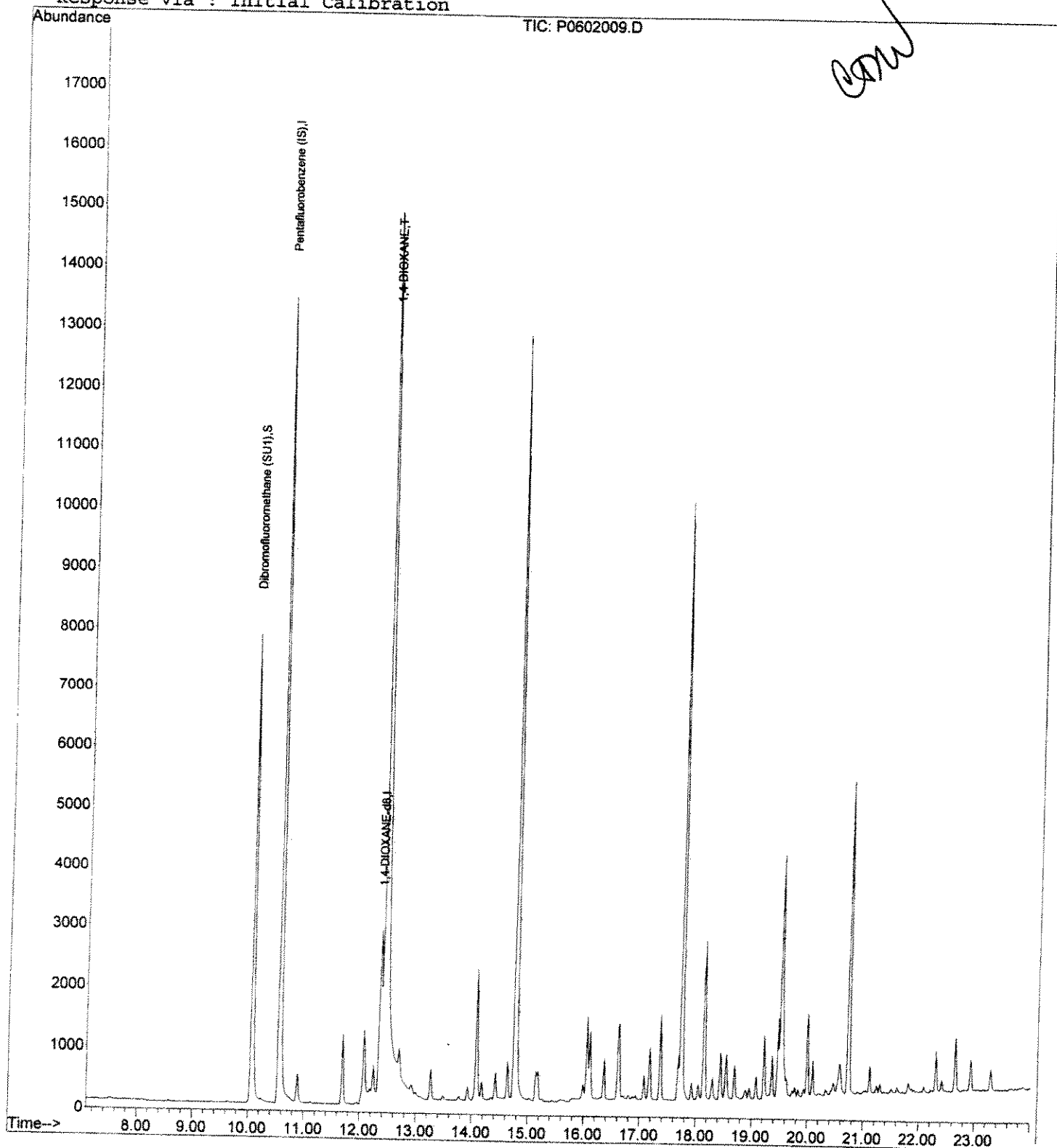
Quant Results File: DX031905.RES

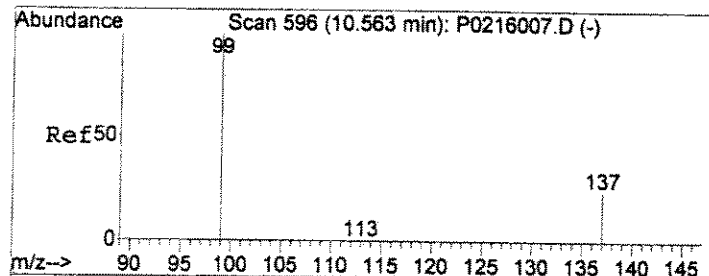
Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)

Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)

Last Update : Mon Mar 21 07:49:30 2005

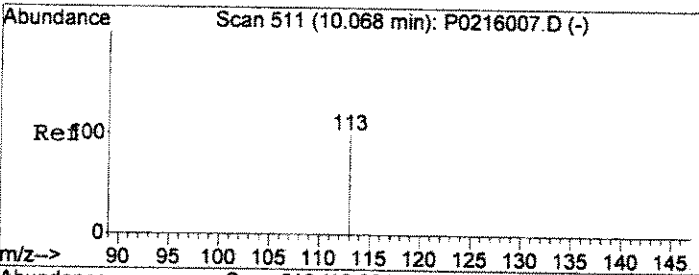
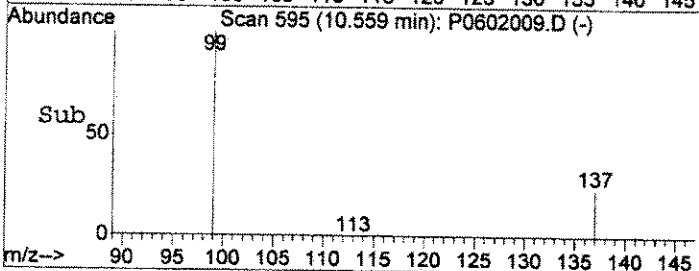
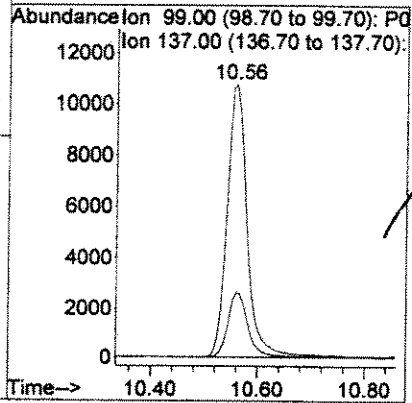
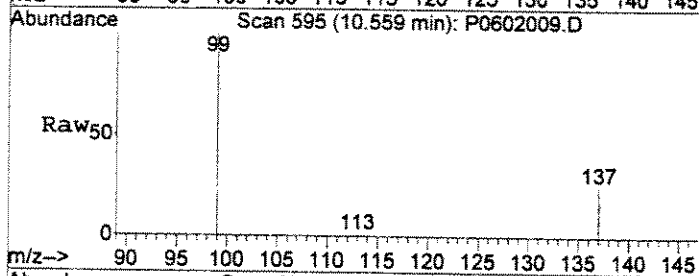
Response via : Initial Calibration





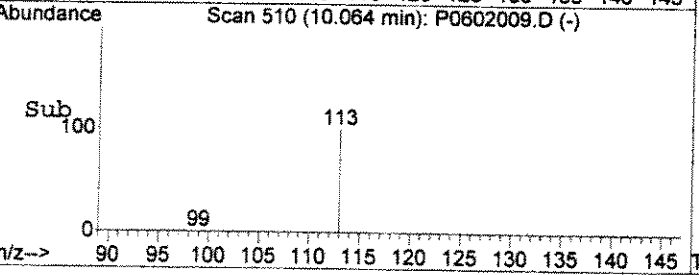
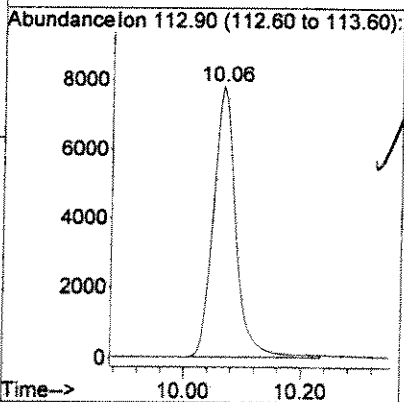
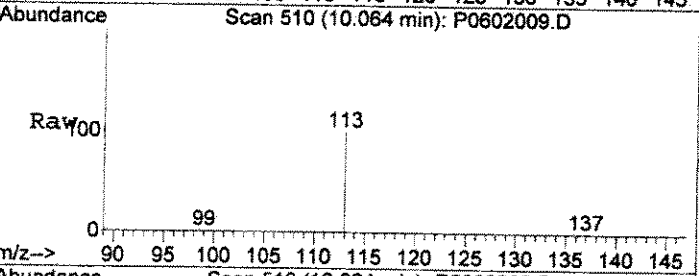
#1  
 Pentafluorobenzene (IS)  
 Concen: 1.00 ug/L  
 RT: 10.56 min Scan# 595  
 Delta R.T. -0.01 min  
 Lab File: P0602009.D  
 Acq: 2 Jun 2005 1:19 pm

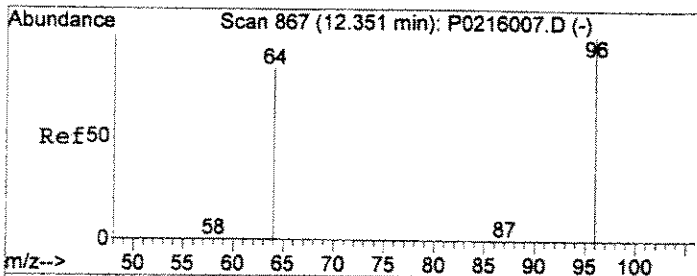
Tgt Ion	Resp	Lower	Upper
99	28338	100	
137	24.2	3.8	43.8



#2  
 Dibromofluoromethane (SU1)  
 Concen: 1.00 ug/L  
 RT: 10.06 min Scan# 510  
 Delta R.T. -0.01 min  
 Lab File: P0602009.D  
 Acq: 2 Jun 2005 1:19 pm

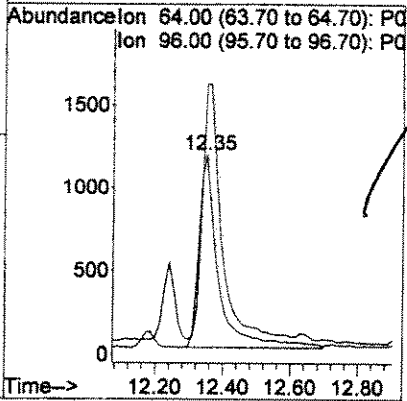
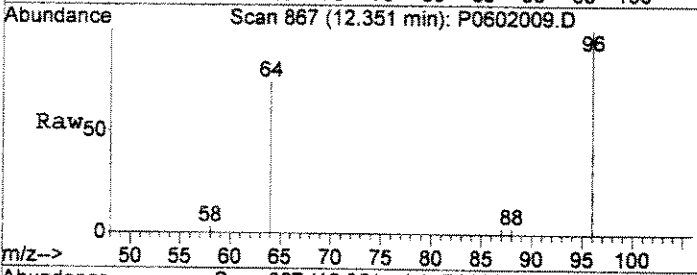
Tgt Ion: 113 Resp: 20762



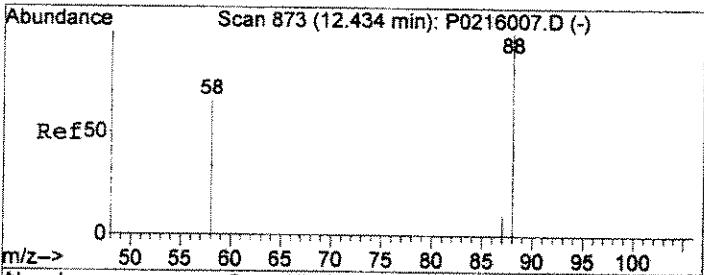
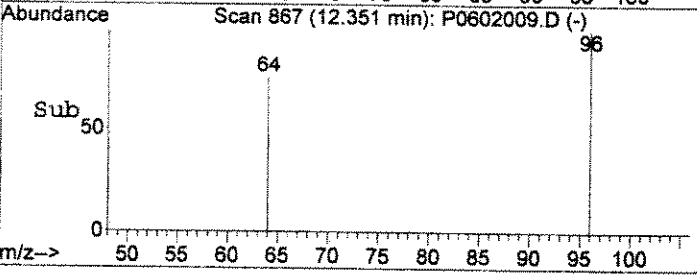


#3  
 1,4-DIOXANE-d8  
 Concen: 25.00 ug/L  
 RT: 12.35 min Scan# 867  
 Delta R.T. -0.00 min  
 Lab File: P0602009.D  
 Acq: 2 Jun 2005 1:19 pm

Tgt Ion: 64 Resp: 4679  
 Ion Ratio Lower Upper  
 64 100  
 96 132.8 72.7 172.7



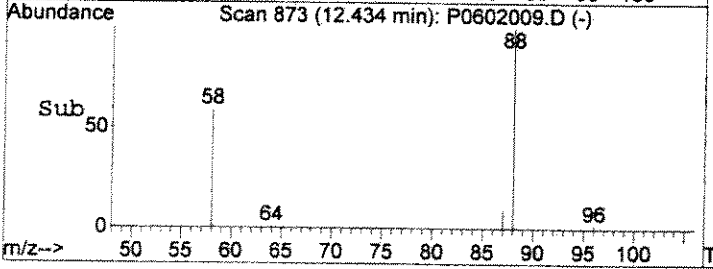
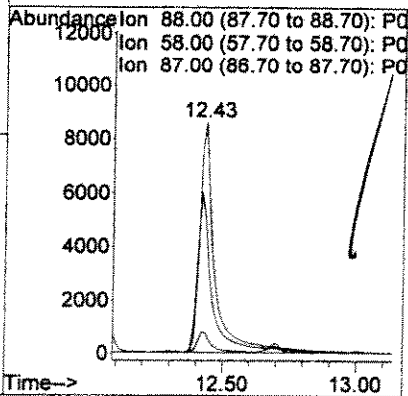
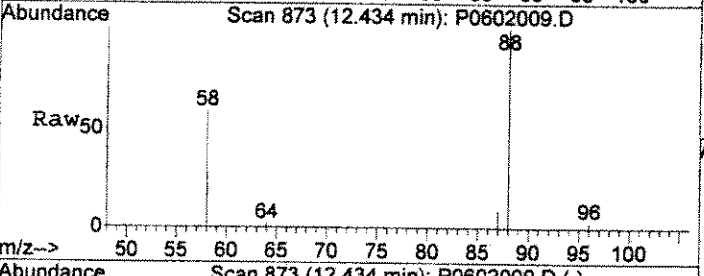
*Handwritten signature*



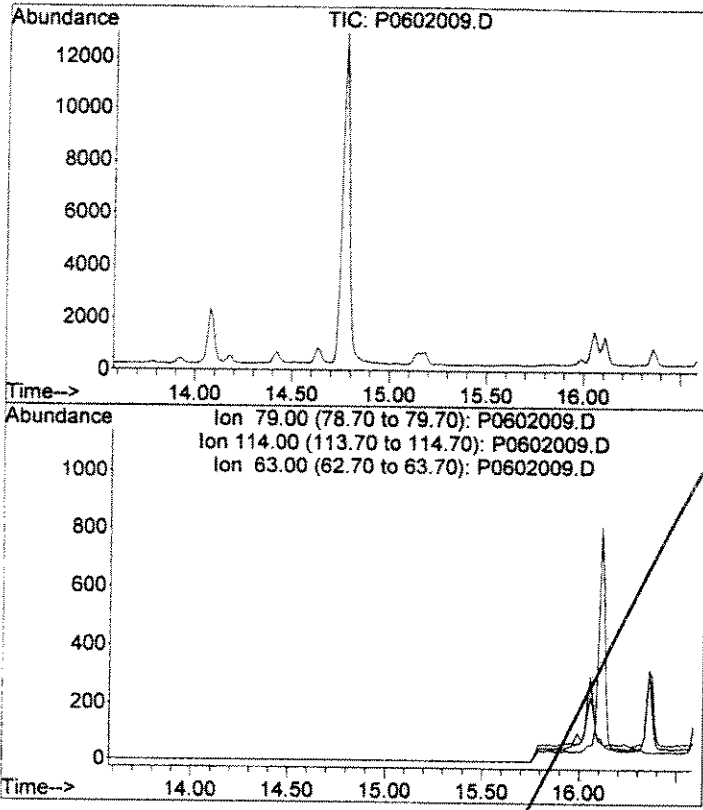
#4  
 1,4-DIOXANE  
 Concen: 99.08 ug/L  
 RT: 12.43 min Scan# 873  
 Delta R.T. 0.00 min  
 Lab File: P0602009.D  
 Acq: 2 Jun 2005 1:19 pm

Tgt Ion: 88 Resp: 35088  
 Ion Ratio Lower Upper  
 88 100  
 58 58.8 15.8 115.8  
 87 8.6 0.0 59.5

*Handwritten signature*







#5  
 1,2,3-Trichloropropane-d5  
 Concen: 0.00 ug/L  
 Expected RT: 15.08 min

Lab File: P0602009.D  
 Acq: 2 Jun 2005 1:19 pm

Tgt Ion	Exp Ratio
79	100
114	0.0
63	98.0

*Handwritten signature*

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\060205\0602010.D Vial: 10  
 Acq On : 2 Jun 2005 1:51 pm Operator: cs  
 Sample : poe0715-01 Inst : GCMS1  
 Misc : 1X 10ML Multiplr: 1.00

MS Integration Params: DIOXANE.P

Quant Time: Jun 2 15:18 2005

Quant Results File: DX031905.RES

Quant Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)

Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)

Last Update : Mon Mar 21 07:49:30 2005

Response via : Initial Calibration

DataAcq Meth : DX031905

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene (IS)	10.56	99	40829	1.00	ug/L	0.00
3) 1,4-DIOXANE-d8	12.35	64	6723	25.00	ug/L	0.00
5) 1,2,3-Trichloropropane-d5	0.00	79	0	0.00	ug/L	-15.08

System Monitoring Compounds

2) Dibromofluoromethane (SU1)	10.06	113	30112	0.98	ug/L	0.00
Spiked Amount	1.000	Range	80 - 120	Recovery	=	98.00%

Target Compounds

4) 1,4-DIOXANE	12.43	88	163	0.32	ug/L	Qvalue 59
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*Handwritten:* CAW  
6/3/05

*Handwritten:* AS  
6/6/05

(#) = qualifier out of range (m) = manual integration

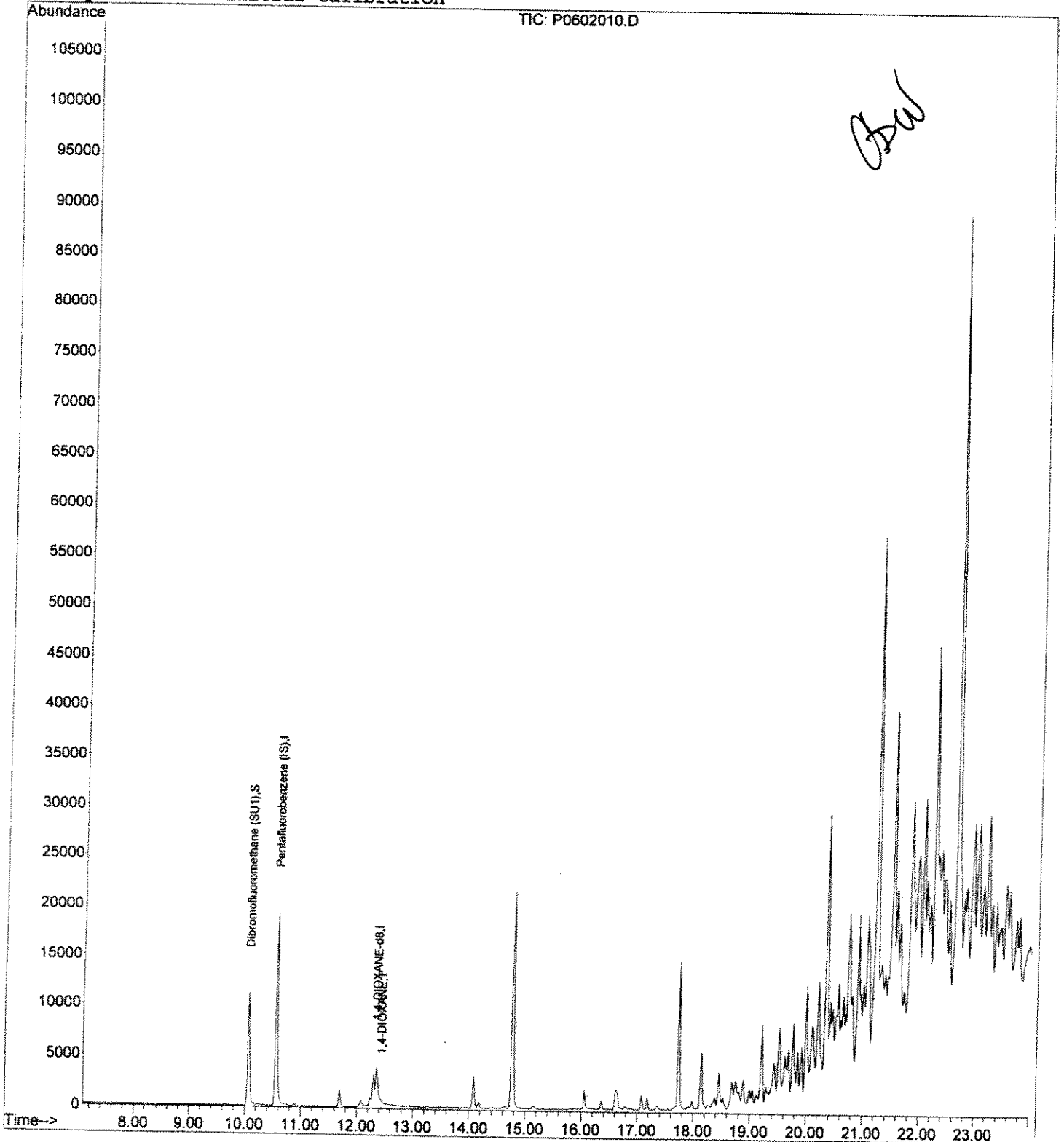
Quantitation Report

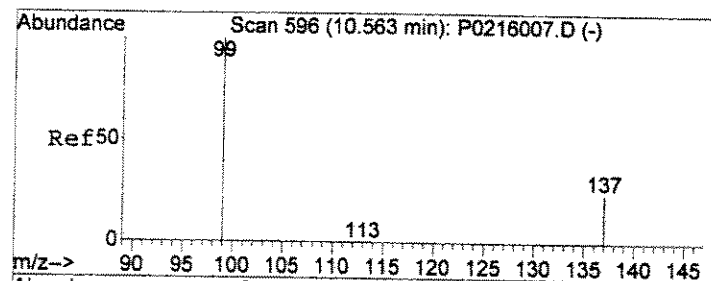
Data File : D:\HPCHEM\1\DATA\060205\P0602010.D  
Acq On : 2 Jun 2005 1:51 pm  
Sample : poe0715-01  
Misc : 1X 10ML  
MS Integration Params: DIOXANE.P  
Quant Time: Jun 2 15:18 2005

Vial: 10  
Operator: cs  
Inst : GCMS1  
Multiplr: 1.00

Quant Results File: DX031905.RES

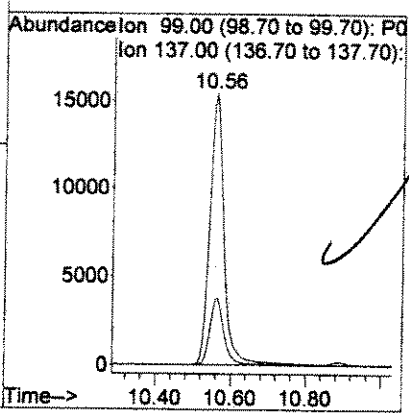
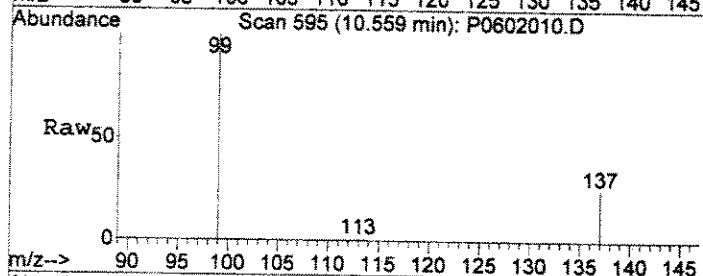
Method : D:\HPCHEM\1\METHODS\DX031905.M (RTE Integrator)  
Title : 8260 1,4-Dioxane Ini. Cal. (05/02/02)  
Last Update : Mon Mar 21 07:49:30 2005  
Response via : Initial Calibration



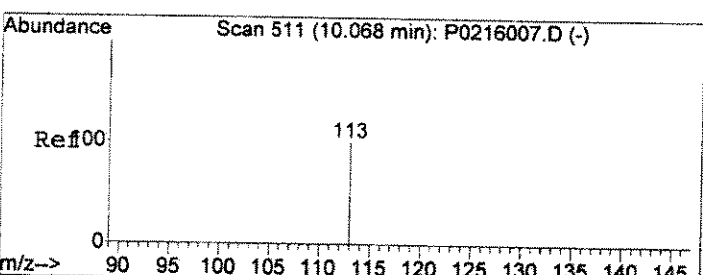
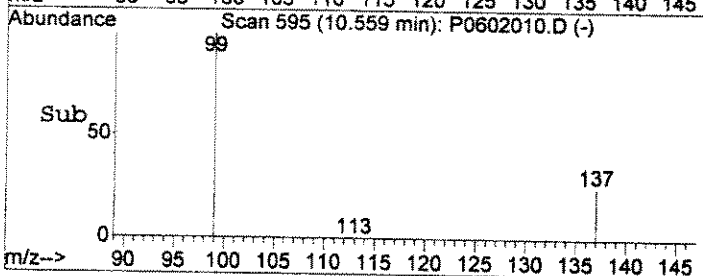


#1  
 Pentafluorobenzene (IS)  
 Concen: 1.00 ug/L  
 RT: 10.56 min Scan# 595  
 Delta R.T. -0.01 min  
 Lab File: P0602010.D  
 Acq: 2 Jun 2005 1:51 pm

Tgt Ion: 99 Resp: 40829  
 Ion Ratio Lower Upper  
 99 100  
 137 24.0 3.8 43.8



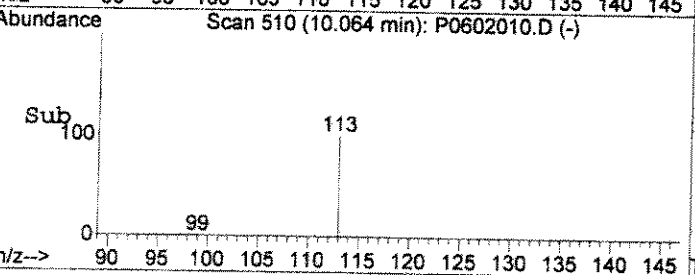
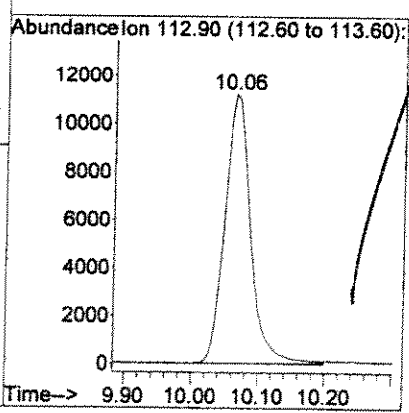
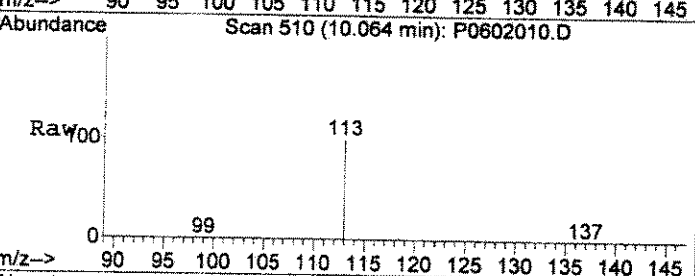
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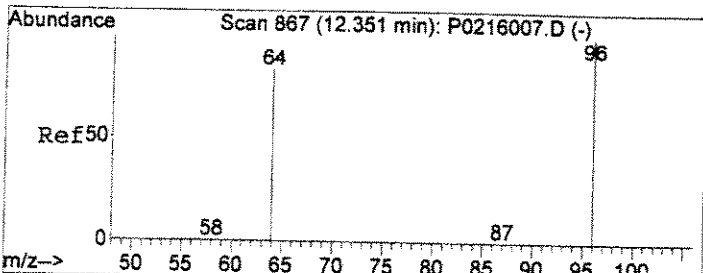


#2  
 Dibromofluoromethane (SU1)  
 Concen: 1.00 ug/L  
 RT: 10.06 min Scan# 510  
 Delta R.T. -0.01 min  
 Lab File: P0602010.D  
 Acq: 2 Jun 2005 1:51 pm

Tgt Ion: 113 Resp: 30112

*Handwritten signature*

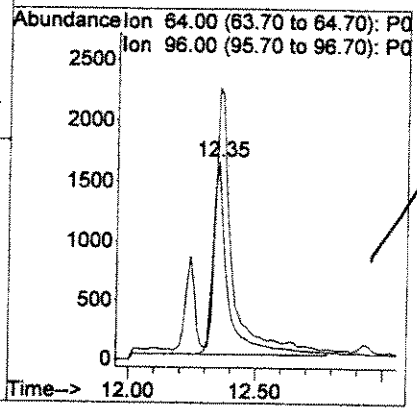
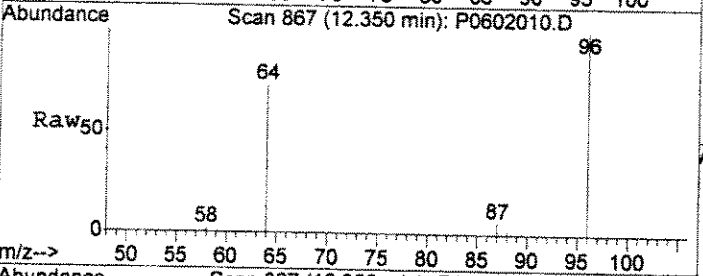




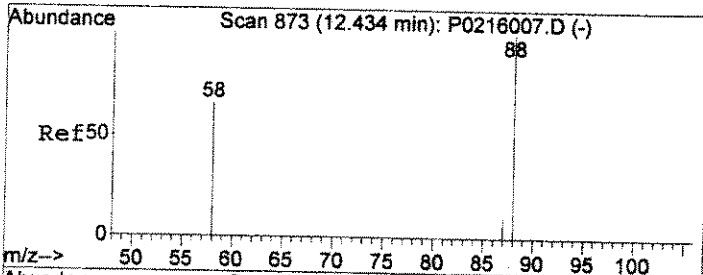
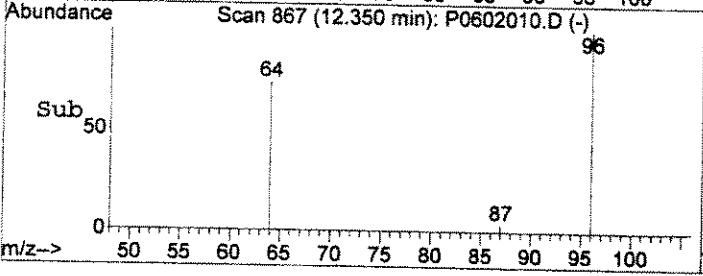
#3  
 1,4-DIOXANE-d8  
 Concen: 25.00 ug/L  
 RT: 12.35 min Scan# 867  
 Delta R.T. -0.00 min  
 Lab File: P0602010.D  
 Acq: 2 Jun 2005 1:51 pm

Tgt Ion: 64 Resp: 6723

Ion	Ratio	Lower	Upper
64	100		
96	134.3	72.7	172.7



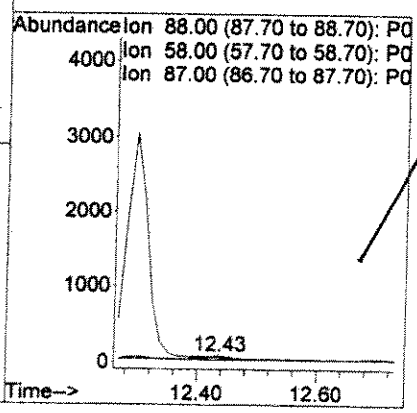
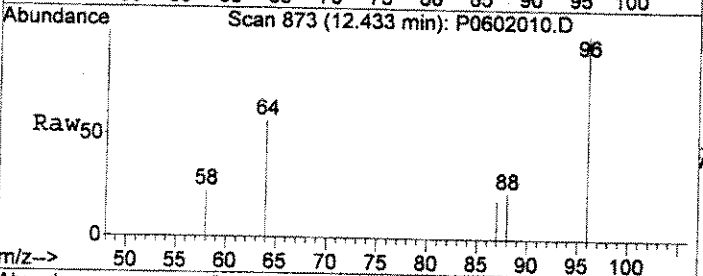
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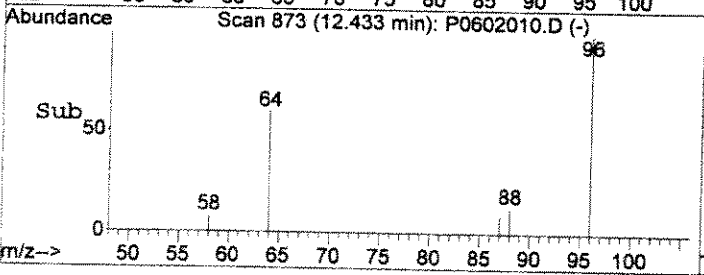
#4  
 1,4-DIOXANE  
 Concen: 0.32 ug/L  
 RT: 12.43 min Scan# 873  
 Delta R.T. 0.00 min  
 Lab File: P0602010.D  
 Acq: 2 Jun 2005 1:51 pm

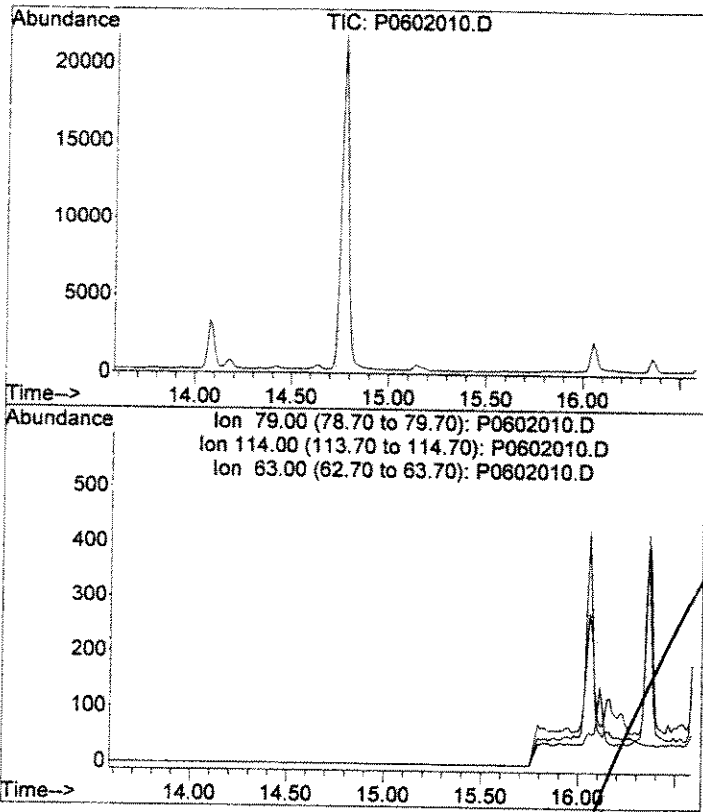
Tgt Ion: 88 Resp: 163

Ion	Ratio	Lower	Upper
88	100		
58	89.1	15.8	115.8
87	54.3	0.0	59.5



*Handwritten signature*





#5  
 1,2,3-Trichloropropane-d5  
 Concen: 0.00 ug/L  
 Expected RT: 15.08 min

Lab File: P0602010.D  
 Acq: 2 Jun 2005 1:51 pm

Tgt Ion:	79
Sig	Exp Ratio
79	100
114	0.0
63	98.0

*CMU*

PREPARATION BENCH SHEET

P5F0311

Del Mar Analytical - Phoenix

Printed: 6/3/05 11:46:53AM

Matrix: Water

Prepared using: GCMS - EPA 5030 GCMS

Surrogate used: 5050407

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	Surrogate	Initials	Extraction Comments
P5F0311-BLK1		QC	06/02/05 00:00	10	10						1		
P5F0311-BS1		QC	06/02/05 00:00	10	10		5050010	10			1		
P5F0311-BSD1		QC	06/02/05 00:00	10	10		5050010	10			1		
P5F0311-MS1		QC	06/02/05 00:00	10	10	POF0007-04	5050010	10			1		
P5F0311-MSD1		QC	06/02/05 00:00	10	10	POF0007-04	5050010	10			1		
POE0673-01	C	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		
POE0713-01	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		
POE0714-01	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		J & B flags, 2 ppb RL, Boeing, sub
POE0715-01	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		J & B flags, 2 ppb RL, Boeing, sub
POE0772-01	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		Boeing-permit, sub DMAP, J flags,
POE0772-02	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		J&B flags, sub to DMAP
POF0007-01	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		J&B flags, sub to DMAP
POF0007-02	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		J flag
POF0007-03	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		J flag
POF0007-04	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		J flag
POF0007-05	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		J flag
POF0007-06	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		J flag
POF0007-07	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		J flag
POF0007-08	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		J flag
POF0007-09	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10						1		J flag

Re-run IS Low


  
 J. Paul / 6/16/05

Witnessed By \_\_\_\_\_ Date \_\_\_\_\_  
 Preparation Reviewed By \_\_\_\_\_ Date \_\_\_\_\_  
 Extracts Received By \_\_\_\_\_ Date \_\_\_\_\_

PREPARATION BENCH SHEET

P5F0311

Del Mar Analytical - Phoenix

Printed: 6/3/05 11:46:53AM

Matrix: Water

Prepared using: GCMS - EPA 5030 GCMS

Surrogate used: 5050407

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	ul Spike	Spike 1	ul Spike	Spike 2	ul Spike	Surrogate	Initials	Extraction Comments
POF0007-10	A	8260B (1,4-Dioxane)	06/02/05 00:00	10	10							1		J flag

Reagents used in Batch

Reagent	Description	Solvent

Prepared By \_\_\_\_\_ Date \_\_\_\_\_ Preparation Reviewed By \_\_\_\_\_ Date \_\_\_\_\_  
 Extracts Received By \_\_\_\_\_ Date \_\_\_\_\_



**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030018**

Description:	1,4-Dioxane SSC 10 ppm	Expires:	04/01/05
Standard Type:	Analyte Spike	Prepared:	03/01/05
Solvent:	MeOH #44337	Prepared By:	Melissa Spencer
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	03/01/05 12:38 by MS

1,4-Dioxane SSC 10ppm

Analyte	CAS Number	Concentration (ppm)
1,4-Dioxane	123-91-1	10

**Parent Standards used in this standard**

Standard	Description	Prepared	Prepared By	Expires	Last Edit	Amount (mls)
5030017	1,4-Dioxane SS 2000 ppm STOCK	03/01/05	Melissa Spencer	04/01/05	03/01/05 12:38 by MS	0.005

Brenda Steffy  
 Reviewed By

03-08-2005  
 Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030017**

Description:	1,4-Dioxane SS 2000 ppm STOCK	Expires:	04/01/05
Standard Type:	Other Solution	Prepared:	03/01/05
Solvent:	MeOH	Prepared By:	Melissa Spencer
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	03/01/05 12:38 by MS

O2SI, 1,4-Dioxane 2000 ppm in Methanol PART#020223-01 LOT#109885  
CRACKED NEW AMPULE -- original log in #4120027

Analyte	CAS Number	Concentration (ppm)
1,4-Dioxane	123-91-1	2000

Brenda Steffy  
Reviewed By

03-08-2005  
Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030349**

Description:	1,4-Dioxane/Surr CAL Dil 10/1ppm	Expires:	04/18/05
Standard Type:	Other Solution	Prepared:	03/19/05
Solvent:	MeOH/EMD#44337	Prepared By:	Melissa Spencer
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	03/19/05 09:37 by MS

1,4-Dioxane/Surr CAL DIL 100/1ppm

Analyte	CAS Number	Concentration (ppm)
1,4-Dioxane	123-91-1	10
4-Bromofluorobenzene	460-00-4	1
Dibromofluoromethane	1868-53-7	1
Toluene-d8	2037-26-5	1

**Parent Standards used in this standard:**

Standard	Description	Prepared	Prepared By	Expires	Last Edit	Amount (mls)
5030348	1,4-Dioxane/Surr CAL Dil 100/10ppm	03/19/05	Melissa Spencer	04/18/05	03/19/05 09:36 by M	0.1

Reviewed By \_\_\_\_\_

Date \_\_\_\_\_

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030348**

Description:	1,4-Dioxane/Surr CAL Dil 100/10ppm	Expires:	04/18/05
Standard Type:	Other Solution	Prepared:	03/19/05
Solvent:	MeOH/EMD#44337	Prepared By:	Melissa Spencer
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	03/19/05 09:36 by MS

1,4-Dioxane/Surr CAL DIL 100/10ppm

Analyte	CAS Number	Concentration (ppm)
1,4-Dioxane	123-91-1	100
4-Bromofluorobenzene	460-00-4	10
Dibromofluoromethane	1868-53-7	10
Toluene-d8	2037-26-5	10

**Parent Standards used in this standard:**

Standard	Description	Prepared	Prepared By	Expires	Last Edit	Amount (mls)
5030320	8260 SURR,2000PPM	03/18/05	Corey Schrader	04/18/05	03/18/05 11:08 by c	0.005
5030347	1,4-Dioxane ps 2000 ppm	03/19/05	Melissa Spencer	04/19/05	03/19/05 09:34 by M	0.05

Reviewed By \_\_\_\_\_

Date \_\_\_\_\_

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030320**

Description:	8260 SURR,2000PPM	Expires:	04/18/05
Standard Type:	Surrogate Spike	Prepared:	03/18/05
Solvent:	MEOH	Prepared By:	Corey Schrader
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	03/18/05 11:08 by cs

ABSOLUTE, PART#21002, LOT#060304, 3 COMP @ 2000ug/mL  
CRACKED NEW AMPULE--original log in #5010497

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	2000
Dibromofluoromethane	1868-53-7	2000
Toluene-d8	2037-26-5	2000

Melissa Spencer  
Reviewed By

03-18-2005  
Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030347**

Description:	1,4-Dioxane ps 2000 ppm	Expires:	04/19/05
Standard Type:	Analyte Spike	Prepared:	03/19/05
Solvent:	METHANOL	Prepared By:	Melissa Spencer
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	03/19/05 09:34 by MS

CRESCENT PART #3195M.20 LOT #12DD087 ; 1,4-DIOXANE 2000 PPM IN MEOH  
original log-in ID#-5010041

Analyte	CAS Number	Concentration (ppm)
1,4-Dioxane	123-91-1	2000

Reviewed By \_\_\_\_\_ Date \_\_\_\_\_

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030353**

Description:	IS ONLY MIX DIOXANE250/10PPM	Expires:	04/01/05
Standard Type:	Surrogate Spike	Prepared:	03/19/05
Solvent:	MeOH/EMD#44337	Prepared By:	Melissa Spencer
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	03/19/05 10:34 by MS

IS ONLY MIX for 1,4-Dioxane:1,4-Dioxane-d8 at 250 ppm,Pentafluorobenzene at 10 ppm

Analyte	CAS Number	Concentration (ppm)
1,4-Dichlorobenzene d4	3855-82-1	10
1,4-Difluorobenzene	540-36-3	10
1,4-Dioxane-d8	17647-74-4	250
Chlorobenzene-d5	3114-55-4	10
Pentafluorobenzene	NA	10

**Parent Standards used in this standard:**

Standard	Description	Prepared	Prepared By	Expires	Last Edit	Amount (mls)
5030019	1,4-Dioxane-d8 10000 PPB	03/01/05	Melissa Spencer	04/01/05	03/01/05 12:03 by M	0.025
5030256	8260 INTERNAL STANDARD	03/15/05	Jody Galassi	04/15/05	03/15/05 10:23 by J	0.005

Reviewed By \_\_\_\_\_

Date \_\_\_\_\_

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030019**

Description:	1,4-Dioxane-d8 10000 PPB	Expires:	04/01/05
Standard Type:	Other Solution	Prepared:	03/01/05
Solvent:	MeOH	Prepared By:	Melissa Spencer
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	03/01/05 12:03 by MS

Absolute Part# 92785, Lot# 022301, 1,4-Dioxane-d8, 10mg/mL in methanol  
ORIGINAL LOG-IN ID#5010501

Analyte	CAS Number	Concentration (ppm)
1,4-Dioxane-d8	17647-74-4	10000

Brenda Steffy  
Reviewed By

03-08-2005  
Date



**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030256**

Description:	8260 INTERNAL STANDARD	Expires:	04/15/05
Standard Type:	Other Solution	Prepared:	03/15/05
Solvent:	N/A	Prepared By:	Jody Galassi
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	03/15/05 10:23 by JG

Absolute PART#20013, LOT#122104, 2000PPM  
 CRACKED NEW AMPULE--ORIGINAL LOG-IN ID#5010496

Analyte	CAS Number	Concentration (ppm)
1,4-Dichlorobenzene d4	3855-82-1	2000
1,4-Difluorobenzene	540-36-3	2000
Chlorobenzene-d5	3114-55-4	2000
Pentafluorobenzene	NA	2000

Melissa Spencer  
 Reviewed By

03-18-2005  
 Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030320**

Description:	8260 SURR,2000PPM	Expires:	04/18/05
Standard Type:	Surrogate Spike	Prepared:	03/18/05
Solvent:	MEOH	Prepared By:	Corey Schrader
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	03/18/05 11:08 by cs

ABSOLUTE, PART#21002, LOT#060304, 3 COMP @ 2000ug/mL  
CRACKED NEW AMPULE--original log in #5010497

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	2000
Dibromofluoromethane	1868-53-7	2000
Toluene-d8	2037-26-5	2000

Melissa Spencer  
Reviewed By

03-18-2005  
Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030321**

Description:	IS/SURR MIX DIOXANE250/10/10PPM	Expires:	04/01/05
Standard Type:	Surrogate Spike	Prepared:	03/18/05
Solvent:	MeOH/EMD#44337	Prepared By:	Corey Schrader
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	03/18/05 11:10 by cs

IS/SURR MIX for 1,4-Dioxane: 1,4-Dioxane-d8 at 250 ppm, Pentafluorobenzene at 10 ppm, Dibromofluoromethane at 10 ppm

Analyte	CAS Number	Concentration (ppm)
1,4-Dichlorobenzene d4	3855-82-1	10
1,4-Difluorobenzene	540-36-3	10
1,4-Dioxane-d8	17647-74-4	250
4-Bromofluorobenzene	460-00-4	10
Chlorobenzene-d5	3114-55-4	10
Dibromofluoromethane	1868-53-7	10
Pentafluorobenzene	NA	10
Toluene-d8	2037-26-5	10

**Parent Standards used in this standard:**

Standard	Description	Prepared	Prepared By	Expires	Last Edit	Amount (mls)
5030019	1,4-Dioxane-d8 10000 PPB	03/01/05	Melissa Spencer	04/01/05	03/01/05 12:03 by M	0.025
5030256	8260 INTERNAL STANDARD	03/15/05	Jody Galassi	04/15/05	03/15/05 10:23 by J	0.005
5030320	8260 SURR, 2000PPM	03/18/05	Corey Schrader	04/18/05	03/18/05 11:08 by c	0.005

Melissa Spencer  
 Reviewed By

03-18-2005  
 Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030090**

Description:	4-BFB FOR TUNE	Expires:	04/04/05
Standard Type:	Surrogate Spike	Prepared:	03/04/05
Solvent:	MeOH/EMD-#44337	Prepared By:	Jody Galassi
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	03/04/05 14:55 by JG

Analyte	CAS Number	Concentration (ppm)
4-BFB (FID)	460-00-4	40
4-BFB (PID)	460-00-4	40
4-Bromofluorobenzene	460-00-4	40

Parent Standards used in this standard:						
Standard	Description	Prepared	Prepared By	Expires	Last Edit	Amount (mls)
5030084	4-BFB STOCK 2000ppm	03/04/05	Carlos Warner	04/04/05	03/04/05 13:48 by c	0.02

Brenda Steffy  
 Reviewed By

03-08-2005  
 Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5030084**

Description:	4-BFB STOCK 2000ppm	Expires:	04/04/05
Standard Type:	Surrogate Spike	Prepared:	03/04/05
Solvent:	MeOH	Prepared By:	Carlos Warner
Final Volume (mls):	1	Department:	BTEX
Vials:	1	Last Edit:	03/04/05 13:48 by cw

CRACKED NEW VIAL OF ULTRA SCIENTIFIC PART# STS-110N, LOT# U-1409, 2000ug/ml in methanol. Original Log in # 4100456

This lot # has been used previously, no confirmation necessary.

Analyte	CAS Number	Concentration (ppm)
4-BFB (FID)	460-00-4	2000
4-BFB (PID)	460-00-4	2000
4-Bromofluorobenzene	460-00-4	2000

Reviewed By

Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5050010**

Description:	1,4-Dioxane SSC 10 ppm	Expires:	06/02/05
Standard Type:	Analyte Spike	Prepared:	05/02/05
Solvent:	MeOH #44337	Prepared By:	Corey Schrader
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	05/02/05 11:59 by cs

1,4-Dioxane SSC 10ppm

Analyte	CAS Number	Concentration (ppm)
1,4-Dioxane	123-91-1	10

**Parent Standards used in this standard:**

Standard	Description	Prepared	Prepared By	Expires	Last Edit	Amount (mls)
5050008	1,4-Dioxane SS 2000 ppm STOCK	05/02/05	Corey Schrader	06/02/05	05/02/05 11:41 by c	0.005

Elizabeth Wueschner

05-11-2005

Reviewed By

Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5050008**

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Description:	1,4-Dioxane SS 2000 ppm STOCK	Expires:	06/02/05
Standard Type:	Other Solution	Prepared:	05/02/05
Solvent:	MeOH	Prepared By:	Corey Schrader
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	05/02/05 11:41 by cs

O2SI, 1,4-Dioxane 2000 ppm in Methanol PART#020223-01 LOT#109885  
CRACKED NEW AMPULE -- original log in #5010214

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Analyte	CAS Number	Concentration (ppm)
1,4-Dioxane	123-91-1	2000

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Elizabeth Wueschner  
Reviewed By

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05-11-2005  
Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5050407**

Description:	IS/SURR MIX DIOXANE250/10/10PPM	Expires:	06/17/05
Standard Type:	Surrogate Spike	Prepared:	05/26/05
Solvent:	MeOH/EMD#44337	Prepared By:	Corey Schrader
Final Volume (ml):	1	Department:	GCMS
Vials:	1	Last Edit:	05/26/05 08:45 by cs

IS/SURR MIX for 1,4-Dioxane:1,4-Dioxane-d8 at 250 ppm,Pentafluorobenzene at 10 ppm,Dibromofluoromethane at 10 ppm

Analyte	CAS Number	Concentration (ppm)
1,4-Dichlorobenzene d4	3855-82-1	10
1,4-Difluorobenzene	540-36-3	10
1,4-Dioxane-d8	17647-74-4	250
4-Bromofluorobenzene	460-00-4	10
Chlorobenzene-d5	3114-55-4	10
Dibromofluoromethane	1868-53-7	10
Pentafluorobenzene	NA	10
Toluene-d8	2037-26-5	10

**Parent Standards used in this standard:**

Standard	Description	Prepared	Prepared By	Expires	Last Edit	Amount (mls)
5050266	8260 INTERNAL STANDARD	05/17/05	Corey Schrader	06/17/05	05/17/05 07:49 by c	0.005
5050382	8260 SURR.2000PPM	05/25/05	Melissa Spencer	06/25/05	05/25/05 07:49 by M	0.005
5050406	1,4-Dioxane-d8 10000 PPB	05/26/05	Corey Schrader	06/26/05	05/26/05 08:37 by c	0.025

Elizabeth Wueschner  
Reviewed By

05-31-2005  
Date



**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5050266**

Description:	8260 INTERNAL STANDARD	Expires:	06/17/05
Standard Type:	Other Solution	Prepared:	05/17/05
Solvent:	N/A	Prepared By:	Corey Schrader
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	05/17/05 07:49 by cs

Absolute PART#20013, LOT#122104, 2000PPM  
CRACKED NEW AMPULE--ORIGINAL LOG-IN ID#5040226 VERIFIED ON 5/17/05

Analyte	CAS Number	Concentration (ppm)
1,4-Dichlorobenzene d4	3855-82-1	2000
1,4-Difluorobenzene	540-36-3	2000
Chlorobenzene-d5	3114-55-4	2000
Pentafluorobenzene	NA	2000

Elizabeth Wueschner

05-22-2005

Reviewed By

Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5050382**

Description:	8260 SURR,2000PPM	Expires:	06/25/05
Standard Type:	Surrogate Spike	Prepared:	05/25/05
Solvent:	MEOH	Prepared By:	Melissa Spencer
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	05/25/05 07:49 by MS

ABSOLUTE, PART#21002, LOT#060304, 3 COMP @ 2000ug/mL  
CRACKED NEW AMPULE--original log in #5040222

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	2000
Dibromofluoromethane	1868-53-7	2000
Toluene-d8	2037-26-5	2000

Reviewed By \_\_\_\_\_

Date \_\_\_\_\_

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5050406**

Description:	1,4-Dioxane-d8 10000 PPB	Expires:	06/26/05
Standard Type:	Other Solution	Prepared:	05/26/05
Solvent:	MeOH	Prepared By:	Corey Schrader
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	05/26/05 08:37 by cs

Absolute Part# 92785, Lot# 022301, 1,4-Dioxane-d8, 10mg/mL in methanol  
ORIGINAL LOG-IN ID#5010501

Analyte	CAS Number	Concentration (ppm)
1,4-Dioxane-d8	17647-74-4	10000

Elizabeth Wueschner

05-31-2005

Reviewed By

Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5050261**

Description:	4-BFB FOR TUNE	Expires:	06/12/05
Standard Type:	Surrogate Spike	Prepared:	05/16/05
Solvent:	MeOH/EMD-#44337	Prepared By:	Corey Schrader
Final Volume (mls):	1	Department:	GCMS
Vials:	1	Last Edit:	05/16/05 15:26 by cw

20ul in 1ml

Analyte	CAS Number	Concentration (ppm)
4-BFB (FID)	460-00-4	40
4-BFB (PID)	460-00-4	40
4-Bromofluorobenzene	460-00-4	40

**Parent Standards used in this standard:**

Standard	Description	Prepared	Prepared By	Expires	Last Edit	Amount (mls)
5050196	4-BFB STOCK 2000ppm	05/12/05	Carlos Warner	06/12/05	05/12/05 12:51 by c	0.02

Elizabeth Wueschner

05-22-2005

Reviewed By

Date

**Analytical Standard Record**  
**Del Mar Analytical - Phoenix**  
**5050196**

Description:	4-BFB STOCK 2000ppm	Expires:	06/12/05
Standard Type:	Surrogate Spike	Prepared:	05/12/05
Solvent:	MeOH	Prepared By:	Carlos Warner
Final Volume (mls):	1	Department:	BTEX
Vials:	1	Last Edit:	05/12/05 12:51 by cw

CRACKED NEW VIAL OF ULTRA SCIENTIFIC PART# STS-110N, LOT# CA-1105, 2000ug/ml in methanol. Original Log in # 5030378  
This lot # has been used previously, no confirmation necessary.

Analyte	CAS Number	Concentration (ppm)
4-BFB (FID)	460-00-4	2000
4-BFB (PID)	460-00-4	2000
4-Bromofluorobenzene	460-00-4	2000

Elizabeth Wueschner  
Reviewed By

05-25-2005  
Date





**LABORATORY REPORT**

Prepared For: MWH-Pasadena/Boeing  
300 North Lake Avenue, Suite 1200  
Pasadena, CA 91101  
Attention: Bronwyn Kelly

Project: Alfa Outfall 012 - During Test

Sampled: 06/16/05  
Received: 06/16/05  
Issued: 07/20/05 14:33

NELAP #01108CA California ELAP#1197 CSDLAC #10117

*The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of Del Mar Analytical and its client. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical. The Chain of Custody, 1 page, is included and is an integral part of this report.  
This entire report was reviewed and approved for release.*

**SAMPLE CROSS REFERENCE**

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

LABORATORY ID	CLIENT ID	MATRIX
IOF1253-01	Outfall 012	Water
IOF1253-02	Trip Blank	Water

Reviewed By:

Del Mar Analytical, Irvine  
Michele Harper  
Project Manager



MWH-Pasadena/Boeing  
300 North Lake Avenue, Suite 1200  
Pasadena, CA 91101  
Attention: Bronwyn Kelly

Project ID: Alfa Outfall 012 - During Test

Report Number: IOF1253

Sampled: 06/16/05

Received: 06/16/05

**TOTAL RECOVERABLE PETROLEUM HYDROCARBONS (EPA 418.1)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF1253-01 (Outfall 012 - Water)									
Reporting Units: mg/l									
Total Recoverable Hydrocarbons	EPA 418.1	5F22081	0.31	1.0	3.2	1	06/22/05	06/22/05	

Del Mar Analytical, Irvine  
Michele Harper  
Project Manager





MWH-Pasadena/Boeing  
300 North Lake Avenue, Suite 1200  
Pasadena, CA 91101  
Attention: Bronwyn Kelly

Project ID: Alfa Outfall 012 - During Test

Report Number: IOF1253

Sampled: 06/16/05

Received: 06/16/05

**EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF1253-01 (Outfall 012 - Water) - cont.									
Reporting Units: mg/l									
EFH (C13 - C22)	EPA 8015B	5F20048	0.082	0.50	1.3	0.98	06/20/05	06/22/05	
Surrogate: n-Octacosane (40-125%)					80 %				

Del Mar Analytical, Irvine  
Michele Harper  
Project Manager



MWH-Pasadena/Boeing  
300 North Lake Avenue, Suite 1200  
Pasadena, CA 91101  
Attention: Bronwyn Kelly

Project ID: Alfa Outfall 012 - During Test

Report Number: IOF1253

Sampled: 06/16/05  
Received: 06/16/05

**VOLATILE FUEL HYDROCARBONS (EPA 5030/CADHS Mod. 8015)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: IOF1253-01 (Outfall 012 - Water) - cont.</b>									
Reporting Units: mg/l									
GRO (C4 - C12)	EPA 8015 Mod.	5F20039	0.050	0.10	0.30	1	06/20/05	06/20/05	
Surrogate: 4-BFB (FID) (65-140%)					84 %				
<b>Sample ID: IOF1253-02 (Trip Blank - Water)</b>									
Reporting Units: mg/l									
GRO (C4 - C12)	EPA 8015 Mod.	5F17038	0.050	0.10	ND	1	06/17/05	06/17/05	
Surrogate: 4-BFB (FID) (65-140%)					80 %				

Del Mar Analytical, Irvine  
Michele Harper  
Project Manager

MWH-Pasadena/Boeing  
 300 North Lake Avenue, Suite 1200  
 Pasadena, CA 91101  
 Attention: Bronwyn Kelly

Project ID: Alfa Outfall 012 - During Test

Report Number: IOF1253

Sampled: 06/16/05  
 Received: 06/16/05

**VOLATILE ORGANICS by GCMS SIM**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: IOF1253-01 (Outfall 012 - Water)</b>									
Reporting Units: ug/l									
<b>1,4-Dioxane</b>	EPA 8260B	5F21009	0.33	2.0	<b>0.70</b>	1	06/21/05	06/21/05	B, J
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					<i>108 %</i>				

**Del Mar Analytical, Irvine**  
 Michele Harper  
 Project Manager



MWH-Pasadena/Boeing  
300 North Lake Avenue, Suite 1200  
Pasadena, CA 91101  
Attention: Bronwyn Kelly

Project ID: Alfa Outfall 012 - During Test

Report Number: IOF1253

Sampled: 06/16/05  
Received: 06/16/05

**PURGEABLES BY GC/MS (EPA 624)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: IOF1253-01 (Outfall 012 - Water) - cont.</b>									
<b>Reporting Units: ug/l</b>									
1,2-Dibromoethane (EDB)	EPA 624	5F19005	0.32	2.0	ND	1	06/19/05	06/19/05	M2
Methyl-tert-butyl Ether (MTBE)	EPA 624	5F19005	0.32	5.0	ND	1	06/19/05	06/19/05	
1,2,3-Trichloropropane	EPA 624	5F19005	0.85	10	ND	1	06/19/05	06/19/05	
Di-isopropyl Ether (DIPE)	EPA 624	5F19005	0.25	5.0	ND	1	06/19/05	06/19/05	
tert-Butanol (TBA)	EPA 624	5F19005	3.1	25	ND	1	06/19/05	06/19/05	
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					108 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>					99 %				
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>					92 %				

**Sample ID: IOF1253-02 (Trip Blank - Water)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Reporting Units: ug/l</b>									
1,2-Dibromoethane (EDB)	EPA 624	5F19005	0.32	2.0	ND	1	06/19/05	06/19/05	
Methyl-tert-butyl Ether (MTBE)	EPA 624	5F19005	0.32	5.0	ND	1	06/19/05	06/19/05	
1,2,3-Trichloropropane	EPA 624	5F19005	0.85	10	ND	1	06/19/05	06/19/05	
Di-isopropyl Ether (DIPE)	EPA 624	5F19005	0.25	5.0	ND	1	06/19/05	06/19/05	
tert-Butanol (TBA)	EPA 624	5F19005	3.1	25	ND	1	06/19/05	06/19/05	
<i>Surrogate: Dibromofluoromethane (80-120%)</i>					104 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>					98 %				
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>					91 %				

Del Mar Analytical, Irvine  
Michele Harper  
Project Manager



MWH-Pasadena/Boeing  
300 North Lake Avenue, Suite 1200  
Pasadena, CA 91101  
Attention: Bronwyn Kelly

Project ID: Alfa Outfall 012 - During Test

Report Number: IOF1253

Sampled: 06/16/05  
Received: 06/16/05

**ACID & BASE/NEUTRALS BY GC/MS (EPA 625)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: IOF1253-01 (Outfall 012 - Water)</b>									
<b>Reporting Units: ug/l</b>									
Naphthalene	EPA 625	5F19018	4.5	10	13	0.98	06/19/05	06/22/05	
N-Nitrosodimethylamine	EPA 625	5F19018	3.7	20	ND	0.98	06/19/05	06/22/05	
Surrogate: 2-Fluorophenol (30-120%)					58 %				
Surrogate: Phenol-d6 (35-120%)					68 %				
Surrogate: 2,4,6-Tribromophenol (45-120%)					79 %				
Surrogate: Nitrobenzene-d5 (45-120%)					87 %				
Surrogate: 2-Fluorobiphenyl (45-120%)					76 %				
Surrogate: Terphenyl-d14 (45-120%)					113 %				

Del Mar Analytical, Irvine  
Michele Harper  
Project Manager



MWH-Pasadena/Boeing  
300 North Lake Avenue, Suite 1200  
Pasadena, CA 91101  
Attention: Bronwyn Kelly

Project ID: Alfa Outfall 012 - During Test

Report Number: IOF1253

Sampled: 06/16/05

Received: 06/16/05

**INORGANICS**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
<b>Sample ID: IOF1253-01 (Outfall 012 - Water) - cont.</b>									
Reporting Units: mg/l									
Ammonia-N (Distilled)	EPA 350.2	5F23075	0.30	0.50	<b>0.56</b>	1	06/23/05	06/23/05	
Biochemical Oxygen Demand	EPA 405.1	5F17083	0.59	2.0	<b>1.7</b>	1	06/17/05	06/22/05	J
Oil & Grease	EPA 413.1	5F20071	0.94	5.0	<b>1.5</b>	1	06/20/05	06/20/05	J
Total Dissolved Solids	SM2540C	5F21081	10	10	<b>280</b>	1	06/22/05	06/22/05	
Total Suspended Solids	EPA 160.2	5F22109	10	10	<b>13</b>	1	06/22/05	06/22/05	
<b>Sample ID: IOF1253-01 (Outfall 012 - Water)</b>									
Reporting Units: ml/l/hr									
Total Settleable Solids	EPA 160.5	5F18038	0.10	0.10	ND	1	06/18/05	06/18/05	
<b>Sample ID: IOF1253-01 (Outfall 012 - Water)</b>									
Reporting Units: NTU									
Turbidity	EPA 180.1	5F17094	0.040	1.0	<b>25</b>	1	06/17/05	06/17/05	
<b>Sample ID: IOF1253-01 (Outfall 012 - Water)</b>									
Reporting Units: ug/l									
Perchlorate	EPA 314.0	5F16067	0.80	4.0	ND	1	06/16/05	06/16/05	

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Project ID: Alfa Outfall 012 - During Test

Report Number: IOF1253

Sampled: 06/16/05

Received: 06/16/05

**SHORT HOLD TIME DETAIL REPORT**

Sample ID: Outfall 012 (IOF1253-01) - Water	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
EPA 160.5	2	06/16/2005 12:10	06/16/2005 15:05	06/18/2005 08:00	06/18/2005 09:00
EPA 180.1	2	06/16/2005 12:10	06/16/2005 15:05	06/17/2005 14:30	06/17/2005 16:00
EPA 405.1	2	06/16/2005 12:10	06/16/2005 15:05	06/17/2005 17:00	06/22/2005 11:00

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Sampled: 06/16/05

Received: 06/16/05

**METHOD BLANK/QC DATA**

**TOTAL RECOVERABLE PETROLEUM HYDROCARBONS (EPA 418.1)**

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5F22081 Extracted: 06/22/05</b>											
<b>Blank Analyzed: 06/22/2005 (5F22081-BLK1)</b>											
Total Recoverable Hydrocarbons	ND	1.0	0.31	mg/l							
<b>LCS Analyzed: 06/22/2005 (5F22081-BS1)</b>											
Total Recoverable Hydrocarbons	4.72	1.0	0.31	mg/l	5.00		94	65-120			M-NR1
<b>LCS Dup Analyzed: 06/22/2005 (5F22081-BSD1)</b>											
Total Recoverable Hydrocarbons	5.01	1.0	0.31	mg/l	5.00		100	65-120	6	20	

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**METHOD BLANK/QC DATA**

**EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)**

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5F20048 Extracted: 06/20/05</b>										
<b>Blank Analyzed: 06/22/2005 (5F20048-BLK1)</b>										
EFH (C13 - C22)	ND	0.50	0.082	mg/l						
EFH (C13 - C40)	ND	0.50	0.082	mg/l						
Surrogate: n-Octacosane	0.174			mg/l	0.200		87 40-125			
<b>LCS Analyzed: 06/22/2005 (5F20048-BS1)</b>										
EFH (C13 - C40)	0.680	0.50	0.082	mg/l	0.775		88 40-120			M-NR1
Surrogate: n-Octacosane	0.202			mg/l	0.200		101 40-125			
<b>LCS Dup Analyzed: 06/22/2005 (5F20048-BSD1)</b>										
EFH (C13 - C40)	0.592	0.50	0.082	mg/l	0.775		76 40-120	14	25	
Surrogate: n-Octacosane	0.186			mg/l	0.200		93 40-125			

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METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (EPA 5030/CADHS Mod. 8015)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5F17038 Extracted: 06/17/05</b>											
<b>Blank Analyzed: 06/17/2005 (5F17038-BLK1)</b>											
GRO (C4 - C12)	ND	0.10	0.050	mg/l							
Surrogate: 4-BFB (FID)	0.00888			mg/l	0.0100		89	65-140			
<b>LCS Analyzed: 06/17/2005 (5F17038-BS1)</b>											
GRO (C4 - C12)	0.613	0.10	0.050	mg/l	0.800		77	65-140			
Surrogate: 4-BFB (FID)	0.0321			mg/l	0.0300		107	65-140			
<b>Matrix Spike Analyzed: 06/17/2005 (5F17038-MS1) Source: IOF1270-01</b>											
GRO (C4 - C12)	0.224	0.10	0.050	mg/l	0.220	ND	102	60-145			
Surrogate: 4-BFB (FID)	0.0106			mg/l	0.0100		106	65-140			
<b>Matrix Spike Dup Analyzed: 06/17/2005 (5F17038-MSD1) Source: IOF1270-01</b>											
GRO (C4 - C12)	0.228	0.10	0.050	mg/l	0.220	ND	104	60-145	2	20	
Surrogate: 4-BFB (FID)	0.0106			mg/l	0.0100		106	65-140			
<b>Batch: 5F20039 Extracted: 06/20/05</b>											
<b>Blank Analyzed: 06/20/2005 (5F20039-BLK1)</b>											
GRO (C4 - C12)	ND	0.10	0.050	mg/l							
Surrogate: 4-BFB (FID)	0.00832			mg/l	0.0100		83	65-140			
<b>LCS Analyzed: 06/20/2005 (5F20039-BS1)</b>											
GRO (C4 - C12)	0.675	0.10	0.050	mg/l	0.800		84	65-140			
Surrogate: 4-BFB (FID)	0.0316			mg/l	0.0300		105	65-140			
<b>Matrix Spike Analyzed: 06/20/2005 (5F20039-MS1) Source: IOF1227-04</b>											
GRO (C4 - C12)	0.527	0.10	0.050	mg/l	0.220	0.37	71	60-145			
Surrogate: 4-BFB (FID)	0.00987			mg/l	0.0100		99	65-140			

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**METHOD BLANK/QC DATA**

**VOLATILE FUEL HYDROCARBONS (EPA 5030/CADHS Mod. 8015)**

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5F20039 Extracted: 06/20/05</b>											
<b>Matrix Spike Dup Analyzed: 06/20/2005 (5F20039-MSD1)</b>						<b>Source: IOF1227-04</b>					
GRO (C4 - C12)	0.523	0.10	0.050	mg/l	0.220	0.37	70	60-145	1	20	
Surrogate: 4-BFB (FID)	0.0106			mg/l	0.0100		106	65-140			

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**METHOD BLANK/QC DATA**
**VOLATILE ORGANICS by GCMS SIM**

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
<b>Batch: 5F21009 Extracted: 06/21/05</b>											
<b>Blank Analyzed: 06/21/2005 (5F21009-BLK1)</b>											
1,4-Dioxane	ND	2.0	1.0	ug/l							
Surrogate: Dibromofluoromethane	1.04			ug/l	1.00		104	80-120			
<b>LCS Analyzed: 06/21/2005 (5F21009-BS1)</b>											
1,4-Dioxane	8.86	2.0	1.0	ug/l	10.0		89	70-130			
Surrogate: Dibromofluoromethane	1.05			ug/l	1.00		105	80-120			
<b>Matrix Spike Analyzed: 06/21/2005 (5F21009-MS1)</b>											
						<b>Source: IOF1094-01</b>					
1,4-Dioxane	8.87	2.0	1.0	ug/l	10.0	0.66	82	70-130			
Surrogate: Dibromofluoromethane	1.04			ug/l	1.00		104	80-120			
<b>Matrix Spike Dup Analyzed: 06/21/2005 (5F21009-MSD1)</b>											
						<b>Source: IOF1094-01</b>					
1,4-Dioxane	8.58	2.0	1.0	ug/l	10.0	0.66	79	70-130	3	30	
Surrogate: Dibromofluoromethane	1.07			ug/l	1.00		107	80-120			

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