Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Surrogate Recovery Report

SOM01.2/VOA Tr Trace Water

Client Matrix: Water

Lab Sample ID	Client Sample ID	VCL %Rec	CLA %Rec	DCE %Rec	BUT %Rec	CLF %Rec	DCA %Rec	BEN %Rec	DPA %Rec
200-22183-8	MW-15S_050214	117	123	355X	109	109	128	106	93
200-22183-8 DL	MW-15S_050214 DL	118D	122D	177D X	109D	110D	134D X	102D	90D
200-22183-9 DL	MW-7S_050214 DL	119D	124D	97D	111D	112D	133D X	108D	94D
200-22183-9	MW-7S_050214	112	119	109X	106	107	129	99	87
200-22183-10 DL	MW-5S_050214 DL	113D	115D	93D	99D	105D	120D	104D	88D
200-22183-10	MW-5S_050214	121	126	125X	115	113	137X	108	95
200-22183-11	EB-6_050214	111	118	87	109	108	130X	101	89
200-22183-12	FB-3_050214	114	122	92	107	109	129	106	90
200-22183-13	TB_050214	112	121	90	109	109	130X	104	90
MB 200-71915/6		103	101	80	95	98	102	104	88
MB 200-72030/9		113	118	88	107	106	124	102	89
MB 200-72092/4		118	121	91	101	108	123	106	89
MB 200-72110/14		112	105	78	108	101	106	106	89
200-22155-11 MS	MW-5D_050114 MS	101	105	112X	95	99	108	99	86
200-22155-11 MSD	MW-5D_050114 MSD	100	100	110X	92	95	106	99	85

Surrogate	Acceptance Limits
VCL = Vinyl chloride-d3	65-131
CLA = Chloroethane-d5	71-131
DCE = 1,1-Dichloroethene-d2	55-104
BUT = 2-Butanone-d5	49-155
CLF = Chloroform-d	78-121
DCA = 1,2-Dichloroethane-d4	78-129
BEN = Benzene-d6	77-124
DPA = 1,2-Dichloropropane-d6	79-124

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Surrogate Recovery Report

SOM01.2/VOA_Tr_Trace Water

Client Matrix: Water

Lab Sample ID	Client Sample ID	TOL %Rec	TDP %Rec	HEX %Rec	TCA %Rec	DCZ %Rec
200-22132-2	MW-18S_042914	100	96	96	92	94
200-22132-3	FB-1_042914	100	95	95	91	95
200-22132-4	EB-2_042914	101	96	97	94	94
200-22132-5	TRIP BLANK	102	98	99	95	95
200-22132-6	VHBLK01	104	102	108	95	98
200-22155-2	MW-19D_050114	102	96	104	100	99
200-22155-3	MW-16S_050114	102	95	105	100	97
200-22155-4	MW-17S_050114	97	88	92	90	93
200-22155-5	MW-17D_050114	98	93	99	98	96
200-22155-6	MW-21D_050114	100	94	101	95	95
200-22155-7	MW-21S_050114	100	96	101	98	99
200-22155-9	MW-20S_050114	99	96	104	99	97
200-22155-10	MW-11D_050114	100	93	103	99	99
200-22155-11	MW-5D_050114	99	90	101	97	97
200-22155-12	DUP_050114	99	88	98	90	94
200-22155-13	MW-15D_050114	101	90	103	93	100
200-22155-14	FB-2_050114	101	92	98	95	97
200-22155-15	TRIP BLANK	102	94	99	95	96
200-22183-1	MW-12S_050114	99	95	98	94	94
200-22183-1 DL	MW-12S_050114 DL	103D	97D	105D	96D	96D
200-22183-2	EB-4_050114	100	95	99	94	96
200-22183-3	MW-24S_050114	101	101	106	97	95
200-22183-3 DL	MW-24S_050114 DL	102D	99D	105D	96D	95D
200-22183-5 DL	MW-11S_050214 DL	105D	103D	107D	100D	99D
200-22183-5	MW-11S_050214	102	100	103	96	94
200-22183-6 DL	MW-12D_050214 DL	109D	99D	109D	98D	100D
200-22183-6	MW-12D_050214	103	95	105	99	97
200-22183-7 DL	MW-20D_050214 DL	104D	98D	106D	99D	98D
200-22183-7	MW-20D_050214	97	92	97	91	91

Surrogate	Acceptance Limits
TOL = Toluene-d8	77-121
TDP = trans-1,3-Dichloropropene-d4	73-121
HEX = 2-Hexanone-d5	28-135
TCA = 1,1,2,2-Tetrachloroethane-d2	73-125
DCZ = 1,2-Dichlorobenzene-d4	80-131

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Surrogate Recovery Report

SOM01.2/VOA_Tr_Trace Water

Client Matrix: Water

Lab Sample ID	Client Sample ID	TOL %Rec	TDP %Rec	HEX %Rec	TCA %Rec	DCZ %Rec
200-22183-8	MW-15S_050214	104	100	104	97	95
200-22183-8 DL	MW-15S_050214 DL	101D	102D	103D	97D	92D
200-22183-9 DL	MW-7S_050214 DL	107D	101D	107D	100D	97D
200-22183-9	MW-7S_050214	98	94	97	89	90
200-22183-10 DL	MW-5S_050214 DL	104D	98D	96D	93D	97D
200-22183-10	MW-5S_050214	105	103	106	100	100
200-22183-11	EB-6_050214	99	96	102	95	92
200-22183-12	FB-3_050214	105	96	102	97	97
200-22183-13	TB_050214	103	99	103	98	98
MB 200-71915/6		105	98	100	95	96
MB 200-72030/9		101	101	105	100	97
MB 200-72092/4		104	96	99	91	95
MB 200-72110/14		104	101	111	96	102
200-22155-11 MS	MW-5D_050114 MS	99	88	98	94	95
200-22155-11 MSD	MW-5D_050114 MSD	99	85	96	90	96

Surrogate	Acceptance Limits
TOL = Toluene-d8	77-121
TDP = trans-1,3-Dichloropropene-d4	73-121
HEX = 2-Hexanone-d5	28-135
TCA = 1,1,2,2-Tetrachloroethane-d2	73-125
DCZ = 1,2-Dichlorobenzene-d4	80-131

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Surrogate Recovery Report

522 MOD 1,4 Dioxane (GC/MS SIM)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DXE %Rec
200-22132-1	EB-1_042914	85
200-22132-3	FB-1_042914	92
200-22132-4	EB-2_042914	95
200-22155-1	EB-3_050114	82
200-22155-2	MW-19D_050114	101
200-22155-8	MW-22D_050114	82
200-22155-11	MW-5D_050114	91
200-22155-12	DUP_050114	99
200-22155-13	MW-15D_050114	101
200-22155-14	FB-2_050114	93
200-22183-1	MW-12S_050114	99
200-22183-2	EB-4_050114	89
200-22183-3	MW-24S_050114	95
200-22183-4	EB-5_050214	84
200-22183-5	MW-11S_050214	65D
200-22183-7	MW-20D_050214	92
200-22183-8	MW-15S_050214	95
200-22183-9	MW-7S_050214	82
200-22183-10	MW-5S_050214	112
200-22183-11	EB-6_050214	92
200-22183-12	FB-3_050214	92
MB 200-71836/1-A		90
MB 200-72018/1-A		94
LCS 200-71836/2-A		91
LCS 200-72018/2-A		89
200-22155-11 MS	MW-5D_050114 MS	94
200-22155-11 MSD	MW-5D_050114 MSD	102

Surrogate	Acceptance Limits
DXE = 1,4-Dioxane-d8 (Surr)	70-130

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Method Blank - Batch: 200-71915

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR

Lab Sample ID:	MB 200-71915/6	Analysis Batch:	200-71915	Instrument ID:	D.i
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	dlla06.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1306	Units:	ug/L	Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1306				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.196	J	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.50	U	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Method Blank - Batch: 200-71915

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR

Lab Sample ID:	MB 200-71915/6	Analysis Batch:	200-71915	Instrument ID:	D.i
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	dlla06.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1306	Units:	ug/L	Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1306				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,3-Dichlorobenzene	0.50	U	0.064	0.50
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	% Rec	Acceptance Limits
Vinyl chloride-d3	103	65 - 131
Chloroethane-d5	101	71 - 131
1,1-Dichloroethene-d2	80	55 - 104
2-Butanone-d5	95	49 - 155
Chloroform-d	98	78 - 121
1,2-Dichloroethane-d4	102	78 - 129
Benzene-d6	104	77 - 124
1,2-Dichloropropane-d6	88	79 - 124
Toluene-d8	105	77 - 121
trans-1,3-Dichloropropene-d4	98	73 - 121
2-Hexanone-d5	100	28 - 135
1,1,2,2-Tetrachloroethane-d2	95	73 - 125
1,2-Dichlorobenzene-d4	96	80 - 131

Method Blank TICs- Batch: 200-71915

Cas Number	Analyte	RT	Est. Result (ug/L	Qual
	Unknown	4.64	0.676	J
	Unknown	7.43	3.09	J
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	1.69	J N
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	2.33	J N
	Unknown	13.31	0.538	J

Method Blank TICs- Batch: 200-71915

Cas Number	Analyte	RT	Est. Result (ug/L	Qual
	Total Alkanes	0.00		

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-71915

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR

MS Lab Sample ID:	200-22155-11	Analysis Batch:	200-71915	Instrument ID:	D.i
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	dlla20.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1850			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1850				25 mL
Leach Date:	N/A				

MSD Lab Sample ID:	200-22155-11	Analysis Batch:	200-71915	Instrument ID:	D.i
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	dlla21.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1915			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1915				25 mL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1-Dichloroethene	102	103	61 - 145	1	14		
Benzene	103	107	76 - 127	4	11		
Trichloroethene	110	112	71 - 120	2	14		
Toluene	112	117	76 - 125	4	13		
Chlorobenzene	101	103	75 - 130	2	13		

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
Vinyl chloride-d3	101		100		65 - 131
Chloroethane-d5	105		100		71 - 131
1,1-Dichloroethene-d2	112	X	110	X	55 - 104
2-Butanone-d5	95		92		49 - 155
Chloroform-d	99		95		78 - 121
1,2-Dichloroethane-d4	108		106		78 - 129
Benzene-d6	99		99		77 - 124
1,2-Dichloropropane-d6	86		85		79 - 124
Toluene-d8	99		99		77 - 121
trans-1,3-Dichloropropene-d4	88		85		73 - 121
2-Hexanone-d5	98		96		28 - 135
1,1,2,2-Tetrachloroethane-d2	94		90		73 - 125
1,2-Dichlorobenzene-d4	95		96		80 - 131

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-71915

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR

MS Lab Sample ID:	200-22155-11	Units:	ug/L	MSD Lab Sample ID:	200-22155-11
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	05/08/2014 1850			Analysis Date:	05/08/2014 1915
Prep Date:	05/08/2014 1850			Prep Date:	05/08/2014 1915
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,1-Dichloroethene	0.99		5.00	5.00	6.10	6.13
Benzene	0.50	U	5.00	5.00	5.17	5.37
Trichloroethene	6.9		5.00	5.00	12.4	12.5
Toluene	1.3		5.00	5.00	6.86	7.10
Chlorobenzene	0.50	U	5.00	5.00	5.06	5.15

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Method Blank - Batch: 200-72030

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR

Lab Sample ID:	MB 200-72030/9	Analysis Batch:	200-72030	Instrument ID:	D.i
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	dlld09.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1614	Units:	ug/L	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1614				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.184	J	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.299	J	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.50	U	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Method Blank - Batch: 200-72030

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR

Lab Sample ID:	MB 200-72030/9	Analysis Batch:	200-72030	Instrument ID:	D.i
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	dlld09.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1614	Units:	ug/L	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1614				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,3-Dichlorobenzene	0.50	U	0.064	0.50
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.224	J	0.066	0.50
1,2,3-Trichlorobenzene	0.362	J	0.091	0.50

Surrogate	% Rec	Acceptance Limits
Vinyl chloride-d3	113	65 - 131
Chloroethane-d5	118	71 - 131
1,1-Dichloroethene-d2	88	55 - 104
2-Butanone-d5	107	49 - 155
Chloroform-d	106	78 - 121
1,2-Dichloroethane-d4	124	78 - 129
Benzene-d6	102	77 - 124
1,2-Dichloropropane-d6	89	79 - 124
Toluene-d8	101	77 - 121
trans-1,3-Dichloropropene-d4	101	73 - 121
2-Hexanone-d5	105	28 - 135
1,1,2,2-Tetrachloroethane-d2	100	73 - 125
1,2-Dichlorobenzene-d4	97	80 - 131

Method Blank TICs- Batch: 200-72030

Cas Number	Analyte	RT	Est. Result (ug/L	Qual
	Unknown	7.43	3.09	J
	Unknown	11.17	0.591	J

Method Blank TICs- Batch: 200-72030

Cas Number	Analyte	RT	Est. Result (ug/L	Qual
	Total Alkanes	0.00		

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Method Blank - Batch: 200-72092

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR

Lab Sample ID:	MB 200-72092/4	Analysis Batch:	200-72092	Instrument ID:	D.i
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	dlle04.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1118	Units:	ug/L	Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1118				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.347	J	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.50	U	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Method Blank - Batch: 200-72092

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR

Lab Sample ID:	MB 200-72092/4	Analysis Batch:	200-72092	Instrument ID:	D.i
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	dlle04.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1118	Units:	ug/L	Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1118				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,3-Dichlorobenzene	0.50	U	0.064	0.50
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	% Rec	Acceptance Limits
Vinyl chloride-d3	118	65 - 131
Chloroethane-d5	121	71 - 131
1,1-Dichloroethene-d2	91	55 - 104
2-Butanone-d5	101	49 - 155
Chloroform-d	108	78 - 121
1,2-Dichloroethane-d4	123	78 - 129
Benzene-d6	106	77 - 124
1,2-Dichloropropane-d6	89	79 - 124
Toluene-d8	104	77 - 121
trans-1,3-Dichloropropene-d4	96	73 - 121
2-Hexanone-d5	99	28 - 135
1,1,2,2-Tetrachloroethane-d2	91	73 - 125
1,2-Dichlorobenzene-d4	95	80 - 131

Method Blank TICs- Batch: 200-72092

Cas Number	Analyte	RT	Est. Result (ug/L	Qual
	Unknown	7.43	2.92	J
	Unknown	11.17	0.693	J

Method Blank TICs- Batch: 200-72092

Cas Number	Analyte	RT	Est. Result (ug/L	Qual
	Total Alkanes	0.00		

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Method Blank - Batch: 200-72110

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR

Lab Sample ID:	MB 200-72110/14	Analysis Batch:	200-72110	Instrument ID:	D.i
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	dlm14.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	05/14/2014 1247	Units:	ug/L	Final Weight/Volume:	25 mL
Prep Date:	05/14/2014 1247				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.50	U	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Method Blank - Batch: 200-72110

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR

Lab Sample ID:	MB 200-72110/14	Analysis Batch:	200-72110	Instrument ID:	D.i
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	dlm14.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	05/14/2014 1247	Units:	ug/L	Final Weight/Volume:	25 mL
Prep Date:	05/14/2014 1247				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,3-Dichlorobenzene	0.50	U	0.064	0.50
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	% Rec	Acceptance Limits
Vinyl chloride-d3	112	65 - 131
Chloroethane-d5	105	71 - 131
1,1-Dichloroethene-d2	78	55 - 104
2-Butanone-d5	108	49 - 155
Chloroform-d	101	78 - 121
1,2-Dichloroethane-d4	106	78 - 129
Benzene-d6	106	77 - 124
1,2-Dichloropropane-d6	89	79 - 124
Toluene-d8	104	77 - 121
trans-1,3-Dichloropropene-d4	101	73 - 121
2-Hexanone-d5	111	28 - 135
1,1,2,2-Tetrachloroethane-d2	96	73 - 125
1,2-Dichlorobenzene-d4	102	80 - 131

Method Blank TICs- Batch: 200-72110

Cas Number	Analyte	RT	Est. Result (ug/L	Qual
	Unknown	4.64	0.565	J
	Unknown	7.43	3.19	J
	Unknown	8.35	0.702	J
	Unknown	11.17	1.15	J

Method Blank TICs- Batch: 200-72110

Cas Number	Analyte	RT	Est. Result (ug/L	Qual
	Total Alkanes	0.00		

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Method Blank - Batch: 200-71836

Method: 522 MOD
Preparation: 3535A

Lab Sample ID:	MB 200-71836/1-A	Analysis Batch:	200-71845	Instrument ID:	CHZ.i
Client Matrix:	Water	Prep Batch:	200-71836	Lab File ID:	Z7454_030.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	05/08/2014 2242	Units:	ug/L	Final Weight/Volume:	5000 uL
Prep Date:	05/08/2014 1124			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,4-Dioxane	0.20	U	0.059	0.20

Surrogate	% Rec	Acceptance Limits
1,4-Dioxane-d8 (Surr)	90	70 - 130

Lab Control Sample - Batch: 200-71836

Method: 522 MOD
Preparation: 3535A

Lab Sample ID:	LCS 200-71836/2-A	Analysis Batch:	200-71845	Instrument ID:	CHZ.i
Client Matrix:	Water	Prep Batch:	200-71836	Lab File ID:	Z7454_029.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	05/08/2014 2221	Units:	ug/L	Final Weight/Volume:	5000 uL
Prep Date:	05/08/2014 1124			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,4-Dioxane	8.00	7.32	91	70 - 130	

Surrogate	% Rec	Acceptance Limits
1,4-Dioxane-d8 (Surr)	91	70 - 130

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-71836

Method: 522 MOD
Preparation: 3535A

MS Lab Sample ID:	200-22155-11	Analysis Batch:	200-71845	Instrument ID:	CHZ.i
Client Matrix:	Water	Prep Batch:	200-71836	Lab File ID:	Z7454_048.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	266 mL
Analysis Date:	05/09/2014 0539			Final Weight/Volume:	5000 uL
Prep Date:	05/08/2014 1124			Injection Volume:	2 uL
Leach Date:	N/A				

MSD Lab Sample ID:	200-22155-11	Analysis Batch:	200-71845	Instrument ID:	CHZ.i
Client Matrix:	Water	Prep Batch:	200-71836	Lab File ID:	Z7454_047.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	267 mL
Analysis Date:	05/09/2014 0518			Final Weight/Volume:	5000 uL
Prep Date:	05/08/2014 1124			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,4-Dioxane	103	111	70 - 130	3	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,4-Dioxane-d8 (Surr)	94	102	70 - 130

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-71836

Method: 522 MOD
Preparation: 3535A

MS Lab Sample ID:	200-22155-11	Units:	ug/L	MSD Lab Sample ID:	200-22155-11
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	05/09/2014 0539			Analysis Date:	05/09/2014 0518
Prep Date:	05/08/2014 1124			Prep Date:	05/08/2014 1124
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,4-Dioxane	2.8	1.88	1.87	4.69	4.84

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Method Blank - Batch: 200-72018

Method: 522 MOD
Preparation: 3535A

Lab Sample ID:	MB 200-72018/1-A	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Client Matrix:	Water	Prep Batch:	200-72018	Lab File ID:	Z7522_004.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	05/13/2014 1734	Units:	ug/L	Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,4-Dioxane	0.20	U	0.059	0.20

Surrogate	% Rec	Acceptance Limits
1,4-Dioxane-d8 (Surr)	94	70 - 130

Lab Control Sample - Batch: 200-72018

Method: 522 MOD
Preparation: 3535A

Lab Sample ID:	LCS 200-72018/2-A	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Client Matrix:	Water	Prep Batch:	200-72018	Lab File ID:	Z7522_003.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	05/13/2014 1718	Units:	ug/L	Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,4-Dioxane	2.00	1.81	91	70 - 130	

Surrogate	% Rec	Acceptance Limits
1,4-Dioxane-d8 (Surr)	89	70 - 130

DATA REPORTING QUALIFIERS

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	E	Result exceeded calibration range.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
	H	Sample was prepped or analyzed beyond the specified holding time
	X	Surrogate is outside control limits
	N	This flag indicates the presumptive evidence of a compound.
GC/MS Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:200-71915					
MB 200-71915/6	Method Blank	T	Water	SOM01.2/VOA_Tr	
200-22132-2	MW-18S_042914	T	Water	SOM01.2/VOA_Tr	
200-22132-3FB	FB-1_042914	T	Water	SOM01.2/VOA_Tr	
200-22132-4EB	EB-2_042914	T	Water	SOM01.2/VOA_Tr	
200-22132-5TB	TRIP BLANK	T	Water	SOM01.2/VOA_Tr	
200-22155-2	MW-19D_050114	T	Water	SOM01.2/VOA_Tr	
200-22155-3	MW-16S_050114	T	Water	SOM01.2/VOA_Tr	
200-22155-4	MW-17S_050114	T	Water	SOM01.2/VOA_Tr	
200-22155-5	MW-17D_050114	T	Water	SOM01.2/VOA_Tr	
200-22155-6	MW-21D_050114	T	Water	SOM01.2/VOA_Tr	
200-22155-7	MW-21S_050114	T	Water	SOM01.2/VOA_Tr	
200-22155-9	MW-20S_050114	T	Water	SOM01.2/VOA_Tr	
200-22155-10	MW-11D_050114	T	Water	SOM01.2/VOA_Tr	
200-22155-11	MW-5D_050114	T	Water	SOM01.2/VOA_Tr	
200-22155-11MS	Matrix Spike	T	Water	SOM01.2/VOA_Tr	
200-22155-11MSD	Matrix Spike Duplicate	T	Water	SOM01.2/VOA_Tr	
200-22155-12	DUP_050114	T	Water	SOM01.2/VOA_Tr	
200-22155-13	MW-15D_050114	T	Water	SOM01.2/VOA_Tr	
200-22155-14	FB-2_050114	T	Water	SOM01.2/VOA_Tr	
200-22155-15TB	TRIP BLANK	T	Water	SOM01.2/VOA_Tr	
200-22183-1	MW-12S_050114	T	Water	SOM01.2/VOA_Tr	
200-22183-2	EB-4_050114	T	Water	SOM01.2/VOA_Tr	
Analysis Batch:200-72030					
MB 200-72030/9	Method Blank	T	Water	SOM01.2/VOA_Tr	
200-22183-1DL	MW-12S_050114	T	Water	SOM01.2/VOA_Tr	
200-22183-5DL	MW-11S_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-6DL	MW-12D_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-7DL	MW-20D_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-8	MW-15S_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-10DL	MW-5S_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-11	EB-6_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-12	FB-3_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-13	TB_050214	T	Water	SOM01.2/VOA_Tr	

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:200-72092					
MB 200-72092/4	Method Blank	T	Water	SOM01.2/VOA_Tr	
200-22183-3	MW-24S_050114	T	Water	SOM01.2/VOA_Tr	
200-22183-3DL	MW-24S_050114	T	Water	SOM01.2/VOA_Tr	
200-22183-5	MW-11S_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-6	MW-12D_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-7	MW-20D_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-8DL	MW-15S_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-9	MW-7S_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-9DL	MW-7S_050214	T	Water	SOM01.2/VOA_Tr	
200-22183-10	MW-5S_050214	T	Water	SOM01.2/VOA_Tr	
Analysis Batch:200-72110					
MB 200-72110/14	Method Blank	T	Water	SOM01.2/VOA_Tr	
200-22132-6STOBLK	VHBLK01	T	Water	SOM01.2/VOA_Tr	

Report Basis
T = Total

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 200-71836					
LCS 200-71836/2-A	Lab Control Sample	T	Water	3535A	
MB 200-71836/1-A	Method Blank	T	Water	3535A	
200-22155-1	EB-3_050114	T	Water	3535A	
200-22155-2	MW-19D_050114	T	Water	3535A	
200-22155-8	MW-22D_050114	T	Water	3535A	
200-22155-11	MW-5D_050114	T	Water	3535A	
200-22155-11MS	Matrix Spike	T	Water	3535A	
200-22155-11MSD	Matrix Spike Duplicate	T	Water	3535A	
200-22155-12	DUP_050114	T	Water	3535A	
200-22155-13	MW-15D_050114	T	Water	3535A	
200-22155-14	FB-2_050114	T	Water	3535A	
Analysis Batch:200-71845					
LCS 200-71836/2-A	Lab Control Sample	T	Water	522 MOD	200-71836
MB 200-71836/1-A	Method Blank	T	Water	522 MOD	200-71836
200-22155-1	EB-3_050114	T	Water	522 MOD	200-71836
200-22155-2	MW-19D_050114	T	Water	522 MOD	200-71836
200-22155-8	MW-22D_050114	T	Water	522 MOD	200-71836
200-22155-11	MW-5D_050114	T	Water	522 MOD	200-71836
200-22155-11MS	Matrix Spike	T	Water	522 MOD	200-71836
200-22155-11MSD	Matrix Spike Duplicate	T	Water	522 MOD	200-71836
200-22155-12	DUP_050114	T	Water	522 MOD	200-71836
200-22155-13	MW-15D_050114	T	Water	522 MOD	200-71836
200-22155-14	FB-2_050114	T	Water	522 MOD	200-71836
Prep Batch: 200-72018					
LCS 200-72018/2-A	Lab Control Sample	T	Water	3535A	
MB 200-72018/1-A	Method Blank	T	Water	3535A	
200-22132-1EB	EB-1_042914	T	Water	3535A	
200-22132-3FB	FB-1_042914	T	Water	3535A	
200-22132-4EB	EB-2_042914	T	Water	3535A	
200-22183-1	MW-12S_050114	T	Water	3535A	
200-22183-2	EB-4_050114	T	Water	3535A	
200-22183-3	MW-24S_050114	T	Water	3535A	
200-22183-4	EB-5_050214	T	Water	3535A	
200-22183-5	MW-11S_050214	T	Water	3535A	
200-22183-7	MW-20D_050214	T	Water	3535A	
200-22183-8	MW-15S_050214	T	Water	3535A	
200-22183-9	MW-7S_050214	T	Water	3535A	
200-22183-10	MW-5S_050214	T	Water	3535A	
200-22183-11	EB-6_050214	T	Water	3535A	
200-22183-12	FB-3_050214	T	Water	3535A	

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
Sdg Number: 200-22132

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Analysis Batch:200-72050					
LCS 200-72018/2-A	Lab Control Sample	T	Water	522 MOD	200-72018
MB 200-72018/1-A	Method Blank	T	Water	522 MOD	200-72018
200-22132-1EB	EB-1_042914	T	Water	522 MOD	200-72018
200-22132-3FB	FB-1_042914	T	Water	522 MOD	200-72018
200-22132-4EB	EB-2_042914	T	Water	522 MOD	200-72018
200-22183-1	MW-12S_050114	T	Water	522 MOD	200-72018
200-22183-2	EB-4_050114	T	Water	522 MOD	200-72018
200-22183-3	MW-24S_050114	T	Water	522 MOD	200-72018
200-22183-4	EB-5_050214	T	Water	522 MOD	200-72018
200-22183-7	MW-20D_050214	T	Water	522 MOD	200-72018
200-22183-8	MW-15S_050214	T	Water	522 MOD	200-72018
200-22183-11	EB-6_050214	T	Water	522 MOD	200-72018
200-22183-12	FB-3_050214	T	Water	522 MOD	200-72018
Analysis Batch:200-72100					
200-22183-5	MW-11S_050214	T	Water	522 MOD	200-72018
200-22183-9	MW-7S_050214	T	Water	522 MOD	200-72018
Analysis Batch:200-72137					
200-22183-10	MW-5S_050214	T	Water	522 MOD	200-72018

Report Basis
T = Total

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
SDG: 200-22132

Laboratory Chronicle

Lab ID: 200-22132-1 **Client ID:** EB-1_042914

Sample Date/Time: 04/29/2014 11:15 Received Date/Time: 05/01/2014 10:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3535A	200-22132-A-1-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	200-22132-A-1-A		200-72050	200-72018	05/13/2014 17:50	1	TAL BUR	DGJ

Lab ID: 200-22132-2 **Client ID:** MW-18S_042914

Sample Date/Time: 04/29/2014 12:07 Received Date/Time: 05/01/2014 10:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22132-B-2		200-71915		05/08/2014 13:31	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22132-B-2		200-71915		05/08/2014 13:31	1	TAL BUR	JSW

Lab ID: 200-22132-3 **Client ID:** FB-1_042914

Sample Date/Time: 04/29/2014 16:00 Received Date/Time: 05/01/2014 10:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22132-C-3		200-71915		05/08/2014 13:56	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22132-C-3		200-71915		05/08/2014 13:56	1	TAL BUR	JSW
P:3535A	200-22132-D-3-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	200-22132-D-3-A		200-72050	200-72018	05/13/2014 18:05	1	TAL BUR	DGJ

Lab ID: 200-22132-4 **Client ID:** EB-2_042914

Sample Date/Time: 04/29/2014 16:20 Received Date/Time: 05/01/2014 10:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22132-B-4		200-71915		05/08/2014 14:20	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22132-B-4		200-71915		05/08/2014 14:20	1	TAL BUR	JSW
P:3535A	200-22132-D-4-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	200-22132-D-4-A		200-72050	200-72018	05/13/2014 18:21	1	TAL BUR	DGJ

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
SDG: 200-22132

Laboratory Chronicle

Lab ID: 200-22132-5 **Client ID:** TRIP BLANK

Sample Date/Time: 04/29/2014 00:00 Received Date/Time: 05/01/2014 10:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22132-B-5		200-71915		05/08/2014 14:45	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22132-B-5		200-71915		05/08/2014 14:45	1	TAL BUR	JSW

Lab ID: 200-22132-6 **Client ID:** VHBLK01

Sample Date/Time: 05/01/2014 12:20 Received Date/Time: 05/01/2014 10:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22132-B-6		200-72110		05/14/2014 13:12	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22132-B-6		200-72110		05/14/2014 13:12	1	TAL BUR	JSW

Lab ID: 200-22155-1 **Client ID:** EB-3_050114

Sample Date/Time: 05/01/2014 08:00 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3535A	200-22155-A-1-A		200-71845	200-71836	05/08/2014 11:24	1	TAL BUR	EAN
A:522 MOD	200-22155-A-1-A		200-71845	200-71836	05/09/2014 03:55	1	TAL BUR	DGJ

Lab ID: 200-22155-2 **Client ID:** MW-19D_050114

Sample Date/Time: 05/01/2014 09:35 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-B-2		200-71915		05/08/2014 15:09	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-B-2		200-71915		05/08/2014 15:09	1	TAL BUR	JSW
P:3535A	200-22155-D-2-A		200-71845	200-71836	05/08/2014 11:24	1	TAL BUR	EAN
A:522 MOD	200-22155-D-2-A		200-71845	200-71836	05/09/2014 04:16	1	TAL BUR	DGJ

Lab ID: 200-22155-3 **Client ID:** MW-16S_050114

Sample Date/Time: 05/01/2014 08:47 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-C-3		200-71915		05/08/2014 15:34	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-C-3		200-71915		05/08/2014 15:34	1	TAL BUR	JSW

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
SDG: 200-22132

Laboratory Chronicle

Lab ID: 200-22155-4 **Client ID:** MW-17S_050114

Sample Date/Time: 05/01/2014 09:54 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-B-4		200-71915		05/08/2014 15:58	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-B-4		200-71915		05/08/2014 15:58	1	TAL BUR	JSW

Lab ID: 200-22155-5 **Client ID:** MW-17D_050114

Sample Date/Time: 05/01/2014 10:33 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-B-5		200-71915		05/08/2014 16:23	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-B-5		200-71915		05/08/2014 16:23	1	TAL BUR	JSW

Lab ID: 200-22155-6 **Client ID:** MW-21D_050114

Sample Date/Time: 05/01/2014 10:40 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-C-6		200-71915		05/08/2014 16:47	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-C-6		200-71915		05/08/2014 16:47	1	TAL BUR	JSW

Lab ID: 200-22155-7 **Client ID:** MW-21S_050114

Sample Date/Time: 05/01/2014 11:25 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-C-7		200-71915		05/08/2014 17:12	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-C-7		200-71915		05/08/2014 17:12	1	TAL BUR	JSW

Lab ID: 200-22155-8 **Client ID:** MW-22D_050114

Sample Date/Time: 05/01/2014 13:45 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3535A	200-22155-A-8-A		200-71845	200-71836	05/08/2014 11:24	1	TAL BUR	EAN
A:522 MOD	200-22155-A-8-A		200-71845	200-71836	05/09/2014 04:36	1	TAL BUR	DGJ

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
SDG: 200-22132

Laboratory Chronicle

Lab ID: 200-22155-9 **Client ID:** MW-20S_050114

Sample Date/Time: 05/01/2014 11:30 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-C-9		200-71915		05/08/2014 17:37	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-C-9		200-71915		05/08/2014 17:37	1	TAL BUR	JSW

Lab ID: 200-22155-10 **Client ID:** MW-11D_050114

Sample Date/Time: 05/01/2014 15:00 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-C-10		200-71915		05/08/2014 18:01	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-C-10		200-71915		05/08/2014 18:01	1	TAL BUR	JSW

Lab ID: 200-22155-11 **Client ID:** MW-5D_050114

Sample Date/Time: 05/01/2014 13:52 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-C-11		200-71915		05/08/2014 18:26	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-C-11		200-71915		05/08/2014 18:26	1	TAL BUR	JSW
P:3535A	200-22155-D-11-A		200-71845	200-71836	05/08/2014 11:24	1	TAL BUR	EAN
A:522 MOD	200-22155-D-11-A		200-71845	200-71836	05/09/2014 04:57	1	TAL BUR	DGJ

Lab ID: 200-22155-11 **Client ID:** MW-5D_050114

Sample Date/Time: 05/01/2014 13:52 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-A-11 MS		200-71915		05/08/2014 18:50	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-A-11 MS		200-71915		05/08/2014 18:50	1	TAL BUR	JSW
P:3535A	200-22155-D-11-E MS		200-71845	200-71836	05/08/2014 11:24	1	TAL BUR	EAN
A:522 MOD	200-22155-D-11-E MS		200-71845	200-71836	05/09/2014 05:39	1	TAL BUR	DGJ

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
SDG: 200-22132

Laboratory Chronicle

Lab ID: 200-22155-11 **Client ID:** MW-5D_050114

Sample Date/Time: 05/01/2014 13:52 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-B-11 MSD		200-71915		05/08/2014 19:15	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-B-11 MSD		200-71915		05/08/2014 19:15	1	TAL BUR	JSW
P:3535A	200-22155-D-11-D MSD		200-71845	200-71836	05/08/2014 11:24	1	TAL BUR	EAN
A:522 MOD	200-22155-D-11-D MSD		200-71845	200-71836	05/09/2014 05:18	1	TAL BUR	DGJ

Lab ID: 200-22155-12 **Client ID:** DUP_050114

Sample Date/Time: 05/01/2014 13:58 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-C-12		200-71915		05/08/2014 19:40	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-C-12		200-71915		05/08/2014 19:40	1	TAL BUR	JSW
P:3535A	200-22155-D-12-A		200-71845	200-71836	05/08/2014 11:24	1	TAL BUR	EAN
A:522 MOD	200-22155-D-12-A		200-71845	200-71836	05/09/2014 06:00	1	TAL BUR	DGJ

Lab ID: 200-22155-13 **Client ID:** MW-15D_050114

Sample Date/Time: 05/01/2014 15:13 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-C-13		200-71915		05/08/2014 20:04	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-C-13		200-71915		05/08/2014 20:04	1	TAL BUR	JSW
P:3535A	200-22155-D-13-A		200-71845	200-71836	05/08/2014 11:24	1	TAL BUR	EAN
A:522 MOD	200-22155-D-13-A		200-71845	200-71836	05/09/2014 06:21	1	TAL BUR	DGJ

Lab ID: 200-22155-14 **Client ID:** FB-2_050114

Sample Date/Time: 05/01/2014 15:40 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-B-14		200-71915		05/08/2014 20:29	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-B-14		200-71915		05/08/2014 20:29	1	TAL BUR	JSW
P:3535A	200-22155-D-14-A		200-71845	200-71836	05/08/2014 11:24	1	TAL BUR	EAN
A:522 MOD	200-22155-D-14-A		200-71845	200-71836	05/09/2014 07:23	1	TAL BUR	DGJ

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
SDG: 200-22132

Laboratory Chronicle

Lab ID: 200-22155-15 **Client ID:** TRIP BLANK

Sample Date/Time: 05/01/2014 00:00 Received Date/Time: 05/02/2014 10:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22155-A-15		200-71915		05/08/2014 20:54	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22155-A-15		200-71915		05/08/2014 20:54	1	TAL BUR	JSW

Lab ID: 200-22183-1 **Client ID:** MW-12S_050114

Sample Date/Time: 05/01/2014 16:07 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22183-B-1		200-71915		05/08/2014 21:18	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-B-1		200-71915		05/08/2014 21:18	1	TAL BUR	JSW
P:SOM01.2/VOA_PR	200-22183-A-1	DL	200-72030		05/12/2014 19:48	1.7	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-A-1	DL	200-72030		05/12/2014 19:48	1.7	TAL BUR	JSW
P:3535A	200-22183-D-1-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	200-22183-D-1-A		200-72050	200-72018	05/13/2014 18:37	1	TAL BUR	DGJ

Lab ID: 200-22183-2 **Client ID:** EB-4_050114

Sample Date/Time: 05/01/2014 16:35 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22183-B-2		200-71915		05/08/2014 21:43	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-B-2		200-71915		05/08/2014 21:43	1	TAL BUR	JSW
P:3535A	200-22183-E-2-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	200-22183-E-2-A		200-72050	200-72018	05/13/2014 18:52	1	TAL BUR	DGJ

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
SDG: 200-22132

Laboratory Chronicle

Lab ID: 200-22183-3 **Client ID:** MW-24S_050114

Sample Date/Time: 05/01/2014 16:23 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22183-C-3		200-72092		05/13/2014 12:07	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-C-3		200-72092		05/13/2014 12:07	1	TAL BUR	JSW
P:SOM01.2/VOA_PR	200-22183-B-3	DL	200-72092		05/13/2014 16:13	2.8	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-B-3	DL	200-72092		05/13/2014 16:13	2.8	TAL BUR	JSW
P:3535A	200-22183-E-3-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	200-22183-E-3-A		200-72050	200-72018	05/13/2014 19:08	1	TAL BUR	DGJ

Lab ID: 200-22183-4 **Client ID:** EB-5_050214

Sample Date/Time: 05/02/2014 07:30 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3535A	200-22183-B-4-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	200-22183-B-4-A		200-72050	200-72018	05/13/2014 19:24	1	TAL BUR	DGJ

Lab ID: 200-22183-5 **Client ID:** MW-11S_050214

Sample Date/Time: 05/02/2014 08:36 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22183-C-5	DL	200-72030		05/12/2014 18:09	42	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-C-5	DL	200-72030		05/12/2014 18:09	42	TAL BUR	JSW
P:SOM01.2/VOA_PR	200-22183-C-5		200-72092		05/13/2014 14:35	8.4	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-C-5		200-72092		05/13/2014 14:35	8.4	TAL BUR	JSW
P:3535A	200-22183-E-5-A		200-72100	200-72018	05/13/2014 09:49	10	TAL BUR	EAN
A:522 MOD	200-22183-E-5-A		200-72100	200-72018	05/14/2014 12:42	10	TAL BUR	DGJ

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
SDG: 200-22132

Laboratory Chronicle

Lab ID: 200-22183-6 **Client ID:** MW-12D_050214

Sample Date/Time: 05/02/2014 09:47 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22183-C-6	DL	200-72030		05/12/2014 19:23	3.2	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-C-6	DL	200-72030		05/12/2014 19:23	3.2	TAL BUR	JSW
P:SOM01.2/VOA_PR	200-22183-B-6		200-72092		05/13/2014 15:24	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-B-6		200-72092		05/13/2014 15:24	1	TAL BUR	JSW

Lab ID: 200-22183-7 **Client ID:** MW-20D_050214

Sample Date/Time: 05/02/2014 10:52 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22183-C-7	DL	200-72030		05/12/2014 17:44	26	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-C-7	DL	200-72030		05/12/2014 17:44	26	TAL BUR	JSW
P:SOM01.2/VOA_PR	200-22183-C-7		200-72092		05/13/2014 17:27	5.3	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-C-7		200-72092		05/13/2014 17:27	5.3	TAL BUR	JSW
P:3535A	200-22183-E-7-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	200-22183-E-7-A		200-72050	200-72018	05/13/2014 19:55	1	TAL BUR	DGJ

Lab ID: 200-22183-8 **Client ID:** MW-15S_050214

Sample Date/Time: 05/02/2014 08:03 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22183-B-8		200-72030		05/12/2014 18:34	7.6	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-B-8		200-72030		05/12/2014 18:34	7.6	TAL BUR	JSW
P:SOM01.2/VOA_PR	200-22183-B-8	DL	200-72092		05/13/2014 12:56	26	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-B-8	DL	200-72092		05/13/2014 12:56	26	TAL BUR	JSW
P:3535A	200-22183-D-8-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	200-22183-D-8-A		200-72050	200-72018	05/13/2014 20:11	1	TAL BUR	DGJ

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
SDG: 200-22132

Laboratory Chronicle

Lab ID: 200-22183-9 **Client ID:** MW-7S_050214

Sample Date/Time: 05/02/2014 08:58 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22183-C-9	DL	200-72092		05/13/2014 13:21	70	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-C-9	DL	200-72092		05/13/2014 13:21	70	TAL BUR	JSW
P:SOM01.2/VOA_PR	200-22183-C-9		200-72092		05/13/2014 16:38	14	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-C-9		200-72092		05/13/2014 16:38	14	TAL BUR	JSW
P:3535A	200-22183-D-9-A		200-72100	200-72018	05/13/2014 09:49	2.5	TAL BUR	EAN
A:522 MOD	200-22183-D-9-A		200-72100	200-72018	05/14/2014 12:58	2.5	TAL BUR	DGJ

Lab ID: 200-22183-10 **Client ID:** MW-5S_050214

Sample Date/Time: 05/02/2014 09:53 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22183-C-10	DL	200-72030		05/12/2014 16:55	656	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-C-10	DL	200-72030		05/12/2014 16:55	656	TAL BUR	JSW
P:SOM01.2/VOA_PR	200-22183-C-10		200-72092		05/13/2014 13:46	131	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-C-10		200-72092		05/13/2014 13:46	131	TAL BUR	JSW
P:3535A	200-22183-E-10-A		200-72137	200-72018	05/13/2014 09:49	33.33	TAL BUR	EAN
A:522 MOD	200-22183-E-10-A		200-72137	200-72018	05/15/2014 13:01	33.33	TAL BUR	DGJ

Lab ID: 200-22183-11 **Client ID:** EB-6_050214

Sample Date/Time: 05/02/2014 11:20 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22183-A-11		200-72030		05/12/2014 20:12	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-A-11		200-72030		05/12/2014 20:12	1	TAL BUR	JSW
P:3535A	200-22183-E-11-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	200-22183-E-11-A		200-72050	200-72018	05/13/2014 21:29	1	TAL BUR	DGJ

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
SDG: 200-22132

Laboratory Chronicle

Lab ID: **200-22183-12** **Client ID:** **FB-3_050214**

Sample Date/Time: 05/02/2014 10:58 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22183-C-12		200-72030		05/12/2014 20:37	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-C-12		200-72030		05/12/2014 20:37	1	TAL BUR	JSW
P:3535A	200-22183-D-12-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	200-22183-D-12-A		200-72050	200-72018	05/13/2014 21:44	1	TAL BUR	DGJ

Lab ID: **200-22183-13** **Client ID:** **TB_050214**

Sample Date/Time: 05/02/2014 11:03 Received Date/Time: 05/03/2014 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	200-22183-B-13		200-72030		05/12/2014 21:01	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	200-22183-B-13		200-72030		05/12/2014 21:01	1	TAL BUR	JSW

Lab ID: **MB** **Client ID:** **N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:SOM01.2/VOA_PR	MB 200-71915/6		200-71915		05/08/2014 13:06	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	MB 200-71915/6		200-71915		05/08/2014 13:06	1	TAL BUR	JSW
P:SOM01.2/VOA_PR	MB 200-72030/9		200-72030		05/12/2014 16:14	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	MB 200-72030/9		200-72030		05/12/2014 16:14	1	TAL BUR	JSW
P:SOM01.2/VOA_PR	MB 200-72092/4		200-72092		05/13/2014 11:18	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	MB 200-72092/4		200-72092		05/13/2014 11:18	1	TAL BUR	JSW
P:SOM01.2/VOA_PR	MB 200-72110/14		200-72110		05/14/2014 12:47	1	TAL BUR	JSW
A:SOM01.2/VOA_Tr	MB 200-72110/14		200-72110		05/14/2014 12:47	1	TAL BUR	JSW
P:3535A	MB 200-71836/1-A		200-71845	200-71836	05/08/2014 11:24	1	TAL BUR	EAN
A:522 MOD	MB 200-71836/1-A		200-71845	200-71836	05/08/2014 22:42	1	TAL BUR	DGJ
P:3535A	MB 200-72018/1-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	MB 200-72018/1-A		200-72050	200-72018	05/13/2014 17:34	1	TAL BUR	DGJ

Client: Langan Engineering & Environmental Srvcs

Job Number: 200-22132-1
SDG: 200-22132

Laboratory Chronicle

Lab ID: LCS **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3535A	LCS 200-71836/2-A		200-71845	200-71836	05/08/2014 11:24	1	TAL BUR	EAN
A:522 MOD	LCS 200-71836/2-A		200-71845	200-71836	05/08/2014 22:21	1	TAL BUR	DGJ
P:3535A	LCS 200-72018/2-A		200-72050	200-72018	05/13/2014 09:49	1	TAL BUR	EAN
A:522 MOD	LCS 200-72018/2-A		200-72050	200-72018	05/13/2014 17:18	1	TAL BUR	DGJ

Lab References:
TAL BUR = TestAmerica Burlington

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
EX522SPi_00007	09/18/14	03/18/14	METHANOL, Lot 634631	100 mL	SV14Dioxanes_00008	50 uL	1,4-Dioxane	2 ug/mL
.SV14Dioxanes_00008	01/31/18		Restek, Lot A092761		(Purchased Reagent)		1,4-Dioxane	4000 ug/mL
EX522SUi_00011	06/01/14	08/26/13	METHANOL, Lot 542366	200 mL	SVr30614s_00012	200 uL	1,4-Dioxane-d8	2 ug/mL
							1,4-Dioxane-d8 (Surr)	2 ug/mL
.SVr30614s_00012	08/26/14		Restek, Lot A097053		(Purchased Reagent)		1,4-Dioxane-d8	2000 ug/mL
							1,4-Dioxane-d8 (Surr)	2000 ug/mL
SV522CALi_00016	02/11/15	02/11/14	MeCL2, Lot 619231	8 mL	SV522IntCALi_00009	800 uL	1,4-Dioxane	1 ug/mL
.SV522IntCALi_00009	02/11/15	02/11/14	MeCL2, Lot 619231	4 mL	SV14Dioxanes_00008	10 uL	1,4-Dioxane	10 ug/mL
..SV14Dioxanes_00008	01/31/18		Restek, Lot A092761		(Purchased Reagent)		1,4-Dioxane	4000 ug/mL
SV522ICVi_00006	05/09/14	05/13/13	MeCL2, Lot 483157	4 mL	SVuNV-150s_00005	8 uL	1,4-Dioxane	0.2 ug/mL
.SVuNV-150s_00005	05/09/14		Ultra Scientific, Lot CH-0670		(Purchased Reagent)		1,4-Dioxane	100 ug/mL
SV522ICVi_00008	05/15/15	05/13/13	MeCL2, Lot 654431	4 mL	SV522IntICVi_00001	100 uL	1,4-Dioxane	0.2 ug/mL
.SV522IntICVi_00001	05/15/15	05/13/13	MeCL2, Lot 654431	4 mL	VMSOMCALcs_00071	8 uL	1,4-Dioxane	8 ug/mL
..VMSOMCALcs_00071	04/30/17		Restek, Lot A0102394		(Purchased Reagent)		1,4-Dioxane	4000 ug/mL
SV522ISi_00020	09/05/14	02/11/14	MeCL2, Lot 619231	8 mL	SVa72261s_00005	100 uL	Tetrahydrofuran-d8	12.5 ug/mL
.SVa72261s_00005	09/05/14		Absolute, Lot 022213		(Purchased Reagent)		Tetrahydrofuran-d8	1000 ug/mL
SV522SUi_00012	09/05/14	02/11/14	MeCL2, Lot 619231	8 mL	SVr30614s_00013	20 uL	1,4-Dioxane-d8 (Surr)	5 ug/mL
.SVr30614s_00013	09/05/14		Restek, Lot A097053		(Purchased Reagent)		1,4-Dioxane-d8 (Surr)	2000 ug/mL
VMSOMTRCALw_00076	05/14/14	04/15/14	METHANOL, Lot 125253	4000 uL	VM8260CALbs_00151	40 uL	Bromomethane	20 ug/mL
							Chloroethane	20 ug/mL
							Chloromethane	20 ug/mL
							Dichlorodifluoromethane	20 ug/mL
							Trichlorofluoromethane	20 ug/mL
							Vinyl chloride	20 ug/mL
					VMSOMCALas_00019	40 uL	1,1,1-Trichloroethane	20 ug/mL
							1,1,2,2-Tetrachloroethane	20 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	20 ug/mL
							1,1,2-Trichloroethane	20 ug/mL
							1,1-Dichloroethane	20 ug/mL
							1,1-Dichloroethene	20 ug/mL
							1,2,3-Trichlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dibromo-3-chloropropane	20 ug/mL
							1,2-Dibromoethane	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Dichloroethane	20 ug/mL
							1,2-Dichloropropane	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							Benzene	20 ug/mL
							Bromochloromethane	20 ug/mL
							Bromodichloromethane	20 ug/mL
							Bromoform	20 ug/mL
							Carbon disulfide	20 ug/mL

REAGENT TRA[illegible]ILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	20 ug/mL
							Chlorobenzene	20 ug/mL
							Chloroform	20 ug/mL
							cis-1,2-Dichloroethene	20 ug/mL
							cis-1,3-Dichloropropene	20 ug/mL
							Cyclohexane	20 ug/mL
							Dibromochloromethane	20 ug/mL
							Ethylbenzene	20 ug/mL
							Isopropylbenzene	20 ug/mL
							m,p-Xylene	20 ug/mL
							Methyl acetate	20 ug/mL
							Methyl tert-butyl ether	20 ug/mL
							Methylcyclohexane	20 ug/mL
							Methylene chloride	20 ug/mL
							o-Xylene	20 ug/mL
							Styrene	20 ug/mL
							Tetrachloroethene	20 ug/mL
							Toluene	20 ug/mL
							trans-1,2-Dichloroethene	20 ug/mL
							trans-1,3-Dichloropropene	20 ug/mL
							Trichloroethene	20 ug/mL
					VMSOMCALbs_00028	160 uL	2-Butanone	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone	200 ug/mL
							Acetone	200 ug/mL
					VMSOMSUas_00066	40 uL	Chloroethane-d5	20 ug/mL
							Vinyl chloride-d3	20 ug/mL
					VMSOMSUbs_00107	320 uL	2-Butanone-d5	200 ug/mL
							2-Hexanone-d5	200 ug/mL
					VMSOMSUcs_00043	40 uL	1,1,2,2-Tetrachloroethane-d2	20 ug/mL
							1,1-Dichloroethene-d2	20 ug/mL
							1,2-Dichlorobenzene-d4	20 ug/mL
							1,2-Dichloroethane-d4	20 ug/mL
							1,2-Dichloropropane-d6	20 ug/mL
							Benzene-d6	20 ug/mL
							Chloroform-d	20 ug/mL
							Toluene-d8	20 ug/mL
							trans-1,3-Dichloropropene-d4	20 ug/mL
					VMTHFs_00016	400 uL	Tetrahydrofuran	200 ug/mL
.VM8260CALbs_00151	05/14/20	RESTEK, Lot A0101077			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VMSOMCALas_00019	01/07/15	Restek, Lot A086827			(Purchased Reagent)		1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloro-1,2,2-trifluor oethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2-Dibromo-3-chloropropane	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							Benzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m,p-Xylene	2000 ug/mL
							Methyl acetate	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene chloride	2000 ug/mL
							o-Xylene	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
.VMSOMCALbs_00028	03/03/15		Restek, Lot A097663		(Purchased Reagent)		2-Butanone	5000 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone	5000 ug/mL
							Acetone	5000 ug/mL
.VMSOMSUas_00066	03/17/15		Absolute, Lot 030513		(Purchased Reagent)		Chloroethane-d5	2000 ug/mL
							Vinyl chloride-d3	2000 ug/mL
.VMSOMSUbs_00107	03/31/15		Absolute, Lot 113012		(Purchased Reagent)		2-Butanone-d5	2500 ug/mL
							2-Hexanone-d5	2500 ug/mL

REAGENT TRA BILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VMSOMSUcs_00043	03/17/15		Absolute, Lot 040912		(Purchased Reagent)		1,1,2,2-Tetrachloroethane-d2	2000 ug/mL
							1,1-Dichloroethene-d2	2000 ug/mL
							1,2-Dichlorobenzene-d4	2000 ug/mL
							1,2-Dichloroethane-d4	2000 ug/mL
							1,2-Dichloropropane-d6	2000 ug/mL
							Benzene-d6	2000 ug/mL
							Chloroform-d	2000 ug/mL
							Toluene-d8	2000 ug/mL
							trans-1,3-Dichloropropene-d4	2000 ug/mL
.VMTHFs_00016	03/31/15		RESTEK, Lot A096047		(Purchased Reagent)		Tetrahydrofuran	2000 ug/mL
VMSOMTRCALw_00077	06/13/14	05/13/14	METHANOL, Lot 125253	4000 uL	VM8260CALbs_00150	40 uL	Bromomethane	20 ug/mL
							Chloroethane	20 ug/mL
							Chloromethane	20 ug/mL
							Dichlorodifluoromethane	20 ug/mL
							Trichlorofluoromethane	20 ug/mL
							Vinyl chloride	20 ug/mL
					VMSOMCALas_00020	40 uL	1,1,1-Trichloroethane	20 ug/mL
							1,1,2,2-Tetrachloroethane	20 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	20 ug/mL
							1,1,2-Trichloroethane	20 ug/mL
							1,1-Dichloroethane	20 ug/mL
							1,1-Dichloroethene	20 ug/mL
							1,2,3-Trichlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dibromo-3-chloropropane	20 ug/mL
							1,2-Dibromoethane	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Dichloroethane	20 ug/mL
							1,2-Dichloropropane	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							Benzene	20 ug/mL
							Bromochloromethane	20 ug/mL
							Bromodichloromethane	20 ug/mL
							Bromoform	20 ug/mL
							Carbon disulfide	20 ug/mL
							Carbon tetrachloride	20 ug/mL
							Chlorobenzene	20 ug/mL
							Chloroform	20 ug/mL
							cis-1,2-Dichloroethene	20 ug/mL
							cis-1,3-Dichloropropene	20 ug/mL
							Cyclohexane	20 ug/mL
							Dibromochloromethane	20 ug/mL
							Ethylbenzene	20 ug/mL
							Isopropylbenzene	20 ug/mL
							m,p-Xylene	20 ug/mL
							Methyl acetate	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	20 ug/mL
							Methylcyclohexane	20 ug/mL
							Methylene chloride	20 ug/mL
							o-Xylene	20 ug/mL
							Styrene	20 ug/mL
							Tetrachloroethene	20 ug/mL
							Toluene	20 ug/mL
							trans-1,2-Dichloroethene	20 ug/mL
							trans-1,3-Dichloropropene	20 ug/mL
							Trichloroethene	20 ug/mL
					VMSOMCALbs_00029	160 uL	2-Butanone	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone	200 ug/mL
							Acetone	200 ug/mL
					VMSOMSUas_00066	40 uL	Chloroethane-d5	20 ug/mL
							Vinyl chloride-d3	20 ug/mL
					VMSOMSUbs_00110	320 uL	2-Butanone-d5	200 ug/mL
							2-Hexanone-d5	200 ug/mL
					VMSOMSUcs_00043	40 uL	1,1,2,2-Tetrachloroethane-d2	20 ug/mL
							1,1-Dichloroethene-d2	20 ug/mL
							1,2-Dichlorobenzene-d4	20 ug/mL
							1,2-Dichloroethane-d4	20 ug/mL
							1,2-Dichloropropane-d6	20 ug/mL
							Benzene-d6	20 ug/mL
							Chloroform-d	20 ug/mL
							Toluene-d8	20 ug/mL
							trans-1,3-Dichloropropene-d4	20 ug/mL
					VMTHFs_00019	400 uL	Tetrahydrofuran	200 ug/mL
.VM8260CALbs_00150	06/13/14	RESTEK, Lot A0101077			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VMSOMCALas_00020	04/17/15	Restek, Lot A086827			(Purchased Reagent)		1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2-Dibromo-3-chloropropane	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							Benzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m,p-Xylene	2000 ug/mL
							Methyl acetate	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene chloride	2000 ug/mL
							o-Xylene	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
.VMSOMCALbs_00029	04/17/15		Restek, Lot A097663		(Purchased Reagent)		2-Butanone	5000 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone	5000 ug/mL
							Acetone	5000 ug/mL
.VMSOMSUas_00066	03/17/15		Absolute, Lot 030513		(Purchased Reagent)		Chloroethane-d5	2000 ug/mL
							Vinyl chloride-d3	2000 ug/mL
.VMSOMSUbs_00110	04/17/15		Absolute, Lot 113012		(Purchased Reagent)		2-Butanone-d5	2500 ug/mL
							2-Hexanone-d5	2500 ug/mL
.VMSOMSUcs_00043	03/17/15		Absolute, Lot 040912		(Purchased Reagent)		1,1,2,2-Tetrachloroethane-d2	2000 ug/mL
							1,1-Dichloroethene-d2	2000 ug/mL
							1,2-Dichlorobenzene-d4	2000 ug/mL
							1,2-Dichloroethane-d4	2000 ug/mL
							1,2-Dichloropropane-d6	2000 ug/mL
							Benzene-d6	2000 ug/mL
							Chloroform-d	2000 ug/mL
							Toluene-d8	2000 ug/mL
							trans-1,3-Dichloropropene-d4	2000 ug/mL
.VMTHFs_00019	06/13/15		RESTEK, Lot A096047		(Purchased Reagent)		Tetrahydrofuran	2000 ug/mL
VMSOMTRISw_00086	06/08/14	05/08/14	METHANOL, Lot 125253	4400 uL	VMSOMISs_00021	35.2 uL	1,4-Dichlorobenzene-d4	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Difluorobenzene	20 ug/mL
							Chlorobenzene-d5	20 ug/mL
.VMSOMISs_00021	04/15/15		RESTEK, Lot A090187		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							1,4-Difluorobenzene	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
VMSOMTRSPw_00050	06/06/14	05/06/14	METHANOL, Lot 125253	4000 uL	VMSOMSPs_00019	32 uL	1,1-Dichloroethene	20 ug/mL
							Benzene	20 ug/mL
							Chlorobenzene	20 ug/mL
							Toluene	20 ug/mL
							Trichloroethene	20 ug/mL
.VMSOMSPs_00019	04/30/15		RESTEK, Lot A093366		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							Benzene	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Toluene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMSOMTRSUw_00079	05/15/14	04/15/14	METHANOL, Lot 125253	4400 uL	VMSOMSUas_00066	44 uL	Chloroethane-d5	20 ug/mL
							Vinyl chloride-d3	20 ug/mL
					VMSOMSUbs_00107	352 uL	2-Butanone-d5	200 ug/mL
							2-Hexanone-d5	200 ug/mL
					VMSOMSUcs_00043	44 uL	1,1,2,2-Tetrachloroethane-d2	20 ug/mL
							1,1-Dichloroethene-d2	20 ug/mL
							1,2-Dichlorobenzene-d4	20 ug/mL
							1,2-Dichloroethane-d4	20 ug/mL
							1,2-Dichloropropane-d6	20 ug/mL
							Benzene-d6	20 ug/mL
							Chloroform-d	20 ug/mL
							Toluene-d8	20 ug/mL
							trans-1,3-Dichloropropene-d4	20 ug/mL
.VMSOMSUas_00066	03/17/15		Absolute, Lot 030513		(Purchased Reagent)		Chloroethane-d5	2000 ug/mL
							Vinyl chloride-d3	2000 ug/mL
.VMSOMSUbs_00107	03/31/15		Absolute, Lot 113012		(Purchased Reagent)		2-Butanone-d5	2500 ug/mL
							2-Hexanone-d5	2500 ug/mL
.VMSOMSUcs_00043	03/17/15		Absolute, Lot 040912		(Purchased Reagent)		1,1,2,2-Tetrachloroethane-d2	2000 ug/mL
							1,1-Dichloroethene-d2	2000 ug/mL
							1,2-Dichlorobenzene-d4	2000 ug/mL
							1,2-Dichloroethane-d4	2000 ug/mL
							1,2-Dichloropropane-d6	2000 ug/mL
							Benzene-d6	2000 ug/mL
							Chloroform-d	2000 ug/mL
							Toluene-d8	2000 ug/mL
							trans-1,3-Dichloropropene-d4	2000 ug/mL
VMSOMTRSUw_00080	06/13/14	05/13/14	METHANOL, Lot 125253	4400 uL	VMSOMSUas_00066	44 uL	Chloroethane-d5	20 ug/mL
							Vinyl chloride-d3	20 ug/mL
					VMSOMSUbs_00110	352 uL	2-Butanone-d5	200 ug/mL
							2-Hexanone-d5	200 ug/mL
					VMSOMSUcs_00043	44 uL	1,1,2,2-Tetrachloroethane-d2	20 ug/mL
							1,1-Dichloroethene-d2	20 ug/mL

REAGENT TRAC ILITY SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene-d4	20 ug/mL
							1,2-Dichloroethane-d4	20 ug/mL
							1,2-Dichloropropane-d6	20 ug/mL
							Benzene-d6	20 ug/mL
							Chloroform-d	20 ug/mL
							Toluene-d8	20 ug/mL
							trans-1,3-Dichloropropene-d4	20 ug/mL
.VMSOMSUas_00066	03/17/15		Absolute, Lot 030513		(Purchased Reagent)		Chloroethane-d5	2000 ug/mL
							Vinyl chloride-d3	2000 ug/mL
.VMSOMSUbs_00110	04/17/15		Absolute, Lot 113012		(Purchased Reagent)		2-Butanone-d5	2500 ug/mL
							2-Hexanone-d5	2500 ug/mL
.VMSOMSUcs_00043	03/17/15		Absolute, Lot 040912		(Purchased Reagent)		1,1,2,2-Tetrachloroethane-d2	2000 ug/mL
							1,1-Dichloroethene-d2	2000 ug/mL
							1,2-Dichlorobenzene-d4	2000 ug/mL
							1,2-Dichloroethane-d4	2000 ug/mL
							1,2-Dichloropropane-d6	2000 ug/mL
							Benzene-d6	2000 ug/mL
							Chloroform-d	2000 ug/mL
							Toluene-d8	2000 ug/mL
							trans-1,3-Dichloropropene-d4	2000 ug/mL

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.03

Gravimetric Certificate

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 561001 **Lot No.:** A092761

Description : Custom 1,4-Dioxane Standard

Custom 1,4-Dioxane Standard 4000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane	4,000.0 µg/mL	+/- 37.1978	µg/mL	Gravimetric
	CAS # 123-91-1		+/- 93.1459	µg/mL	Unstressed
	Purity 99%		+/- 93.4888	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Mary Ellen Wood - Mix Technician **Date Mixed:** 07-Jan-2013 **Balance:** 1125113331

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Received 1/10/13

447403
ID: SV14Dioxanes_00008
Exp: 01/31/18 Prpd: RJH
1,4-Dioxane 4000ppm

447405
ID: SV14Dioxanes_00010
Exp: 01/31/18 Prpd: RJH
1,4-Dioxane 4000ppm

447407
ID: SV14Dioxanes_00012
Exp: 01/31/18 Prpd: RJH
1,4-Dioxane 4000ppm

447404
ID: SV14Dioxanes_00009
Exp: 01/31/18 Prpd: RJH
1,4-Dioxane 4000ppm

447406
ID: SV14Dioxanes_00011
Exp: 01/31/18 Prpd: RJH
1,4-Dioxane 4000ppm

CERTIFIED WEIGHT REPORT

Part Number:	72261	**Solvent(s):**	Lot # DE997	Methanol
Lot Number:	022213			
Description:	Tetrahydrofuran-d8			
Expiration Date:	022218			
Recommended Storage:	Refrigerate (4 °C)			
Nominal Concentration (µg/mL):	1000			

Formulated By: Paul Barron 022213 DATE

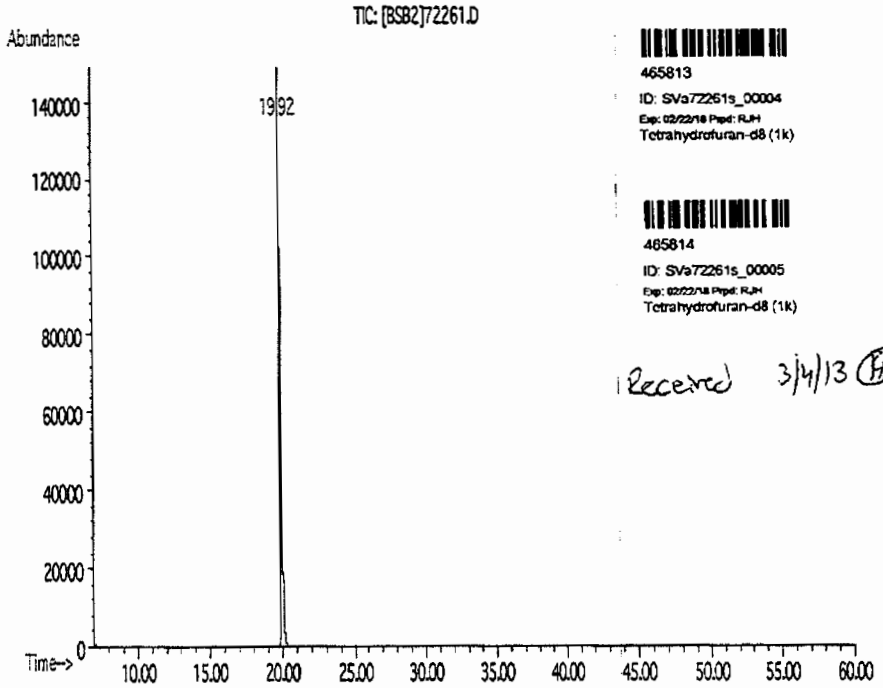
Reviewed By: Pedro L. Rentas 022213 DATE

5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 100.0 0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Tetrahydrofuran-d8	2261	07503EA	1000	99.5	0.2	0.10051	0.10080	1002.9	0.0041	01693-74-9	N/A	N/A

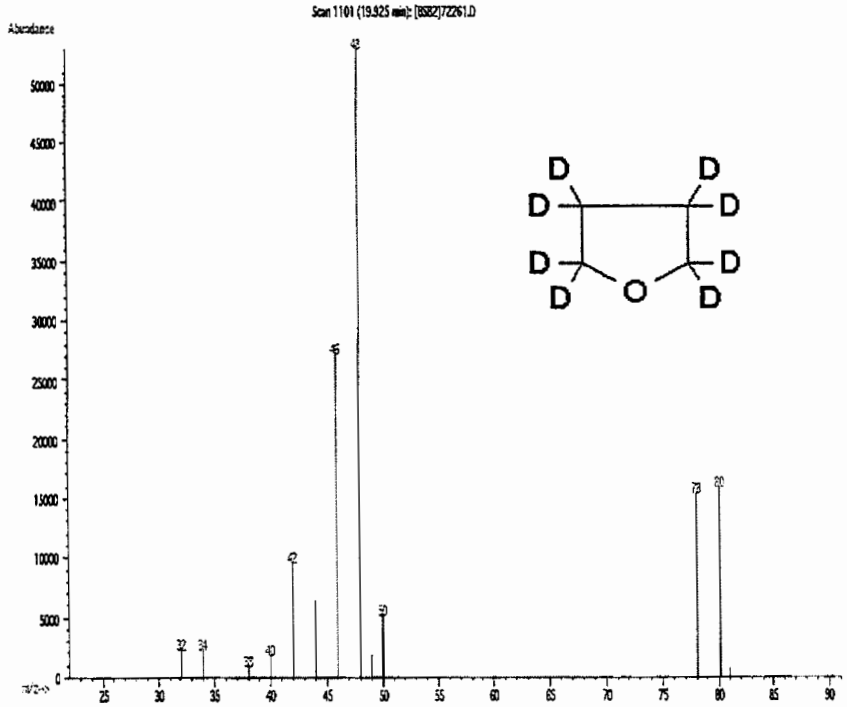
Method: GC6MSD-1. **Detector:** MSD (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1=35°C (10 min.), Temp. 2=200°C (8.75 min.), Rate=4°C/min., Injector Temp.=200°C, Detector Temp.=200°C. **Analyst:** Candice Warren.



465813
ID: SVa72261s_00004
Exp: 02/22/18 Prpd: RJH
Tetrahydrofuran-d8 (1k)

465814
ID: SVa72261s_00005
Exp: 02/22/18 Prpd: RJH
Tetrahydrofuran-d8 (1k)

Received 3/4/13



RESTEK CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30614 **Lot No.:** A097053

Description : 1,4-dioxane-d8 Standard

1,4-Dioxane-d8 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane-d8	2,000.8 µg/mL	+/- 11.7418	µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot 11C-596)		+/- 42.7701	µg/mL	Unstressed
	Purity 99%		+/- 42.9568	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

546816
ID. SVr30614s_00011
Exp: 07/31/16 Prpd. JPD
1,4-Dioxane-d8 2000ppm

546817
ID. SVr30614s_00012
Exp: 07/31/16 Prpd. JPD
1,4-Dioxane-d8 2000ppm

RESTEK CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.01

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30614 **Lot No.:** A097053

Description : 1,4-dioxane-d8 Standard

1,4-Dioxane-d8 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane-d8	2,000.8 µg/mL	+/- 11.7418 µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot 11C-596)		+/- 42.7701 µg/mL	Unstressed
	Purity 99%		+/- 42.9568 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate #3022.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0101077

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12)	1,995.3 µg/mL	+/- 13.0914	µg/mL	Gravimetric
	CAS # 75-71-8 (Lot Q167-08)		+/- 23.3034	µg/mL	Unstressed
	Purity 99%		+/- 26.5921	µg/mL	Stressed
2	Chloromethane (methyl chloride)	1,995.3 µg/mL	+/- 13.3265	µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBB3606V)		+/- 23.4361	µg/mL	Unstressed
	Purity 99%		+/- 26.7083	µg/mL	Stressed
3	Vinyl chloride	2,003.6 µg/mL	+/- 13.6519	µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 17542)		+/- 23.6884	µg/mL	Unstressed
	Purity 99%		+/- 26.9556	µg/mL	Stressed
4	Bromomethane (methyl bromide)	2,001.8 µg/mL	+/- 16.0079	µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 25.1063	µg/mL	Unstressed
	Purity 99%		+/- 28.2042	µg/mL	Stressed
5	Chloroethane (ethyl chloride)	2,009.7 µg/mL	+/- 13.6158	µg/mL	Gravimetric
	CAS # 75-00-3 (Lot SHBB8515V)		+/- 23.7161	µg/mL	Unstressed
	Purity 99%		+/- 26.9987	µg/mL	Stressed
6	Trichlorofluoromethane (CFC-11)	2,007.6 µg/mL	+/- 16.1915	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot SHBB0593V)		+/- 25.2671	µg/mL	Unstressed
	Purity 99%		+/- 28.3645	µg/mL	Stressed

642917
ID: VM8260CALbs_00148
Exp. 10/31/20 Prpd. MTP
8260 GAS R30042 2000 PPM

642918
ID: VM8260CALbs_00149
Exp: 10/31/20 Prpd: MTP
8260 GAS R30042 2000 PPM

642919
ID: VM8260CALbs_00150
Exp: 10/31/20 Prpd: MTP
8260 GAS R30042 2000 PPM

642920
ID: VM8260CALbs_00151
Exp: 10/31/20 Prpd: MTP
8260 GAS R30042 2000 PPM

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate #3023.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0101077

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8 (Lot Q167-08) Purity 99%	1,995.3 µg/mL	+/- 13.0914 µg/mL +/- 23.3034 µg/mL +/- 26.5921 µg/mL		Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3 (Lot SHBB3606V) Purity 99%	1,995.3 µg/mL	+/- 13.3265 µg/mL +/- 23.4361 µg/mL +/- 26.7083 µg/mL		Gravimetric Unstressed Stressed
3	Vinyl chloride CAS # 75-01-4 (Lot 17542) Purity 99%	2,003.6 µg/mL	+/- 13.6519 µg/mL +/- 23.6884 µg/mL +/- 26.9556 µg/mL		Gravimetric Unstressed Stressed
4	Bromomethane (methyl bromide) CAS # 74-83-9 (Lot 101604) Purity 99%	2,001.8 µg/mL	+/- 16.0079 µg/mL +/- 25.1063 µg/mL +/- 28.2042 µg/mL		Gravimetric Unstressed Stressed
5	Chloroethane (ethyl chloride) CAS # 75-00-3 (Lot SHBB8515V) Purity 99%	2,009.7 µg/mL	+/- 13.6158 µg/mL +/- 23.7161 µg/mL +/- 26.9987 µg/mL		Gravimetric Unstressed Stressed
6	Trichlorofluoromethane (CFC-11) CAS # 75-69-4 (Lot SHBB0593V) Purity 99%	2,007.6 µg/mL	+/- 16.1915 µg/mL +/- 25.2671 µg/mL +/- 28.3645 µg/mL		Gravimetric Unstressed Stressed

642917
ID: VM8260CALbs_00148
Exp: 10/31/20 Prpd: MTP
8260 GAS R30042 2000 PPM

642918
ID: VM8260CALbs_00149
Exp: 10/31/20 Prpd: MTP
8260 GAS R30042 2000 PPM

642919
ID: VM8260CALbs_00150
Exp: 10/31/20 Prpd: MTP
8260 GAS R30042 2000 PPM

642920
ID: VM8260CALbs_00151
Exp: 10/31/20 Prpd: MTP
8260 GAS R30042 2000 PPM

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.Restek.com

Certificate of Analysis

ACCREDITED Reference Material Producer Certificate #3222.01

ilac-MRA

ACCREDITED Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30492 **Lot No.:** A086827

Description : OLC 03.2 VOA Mega Mix

OLC 03.2 VOA Mega Mix 2000ug/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2015 **Storage:** 0°C or colder

576950
ID. VMSOMCALas_00019
Exp: 02/26/15 Prpd: MTP
RS 30492 SOM Mega Mix 200

576951
ID. VMSOMCALas_00020
Exp: 02/26/15 Prpd: MTP
RS 30492 SOM Mega Mix 200

576952
ID. VMSOMCALas_00021
Exp: 02/26/15 Prpd: MTP
RS 30492 SOM Mega Mix 200

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,000.1	ug/mL	+/-	11.7379	ug/mL	Gravimetric
	CAS # 76-13-1			+/-	159.7571	ug/mL	Unstressed
	Purity 97%			+/-	159.8353	ug/mL	Stressed
2	1,1-dichloroethene	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 75-35-4			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
3	Methyl acetate	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 79-20-9			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
4	Methylene chloride (dichloromethane)	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 75-09-2			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
5	Carbon disulfide	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 75-15-0			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
6	Methyl-tert-butyl ether (MTBE)	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 1634-04-4			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
7	trans-1,2-Dichloroethene	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 156-60-5			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
8	1,1-Dichloroethane	1,999.9	ug/mL	+/-	15.4816	ug/mL	Gravimetric
	CAS # 75-34-3			+/-	160.0595	ug/mL	Unstressed
	Purity 98%			+/-	160.1375	ug/mL	Stressed
9	cis-1,2-Dichloroethene	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 156-59-2			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed

29	Ethylbenzene	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 100-41-4			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
30	m-Xylene	1,000.0	ug/mL	+/-	5.8686	ug/mL	Gravimetric
	CAS # 108-38-3			+/-	79.8730	ug/mL	Unstressed
	Purity 99%			+/-	79.9121	ug/mL	Stressed
31	p-Xylene	1,000.0	ug/mL	+/-	5.8686	ug/mL	Gravimetric
	CAS # 106-42-3			+/-	79.8730	ug/mL	Unstressed
	Purity 99%			+/-	79.9121	ug/mL	Stressed
32	o-Xylene	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 95-47-6			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
33	Styrene	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 100-42-5			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
34	Isopropylbenzene (cumene)	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 98-82-8			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
35	bromoform	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 75-25-2			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
36	1,1,2,2-Tetrachloroethane	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 79-34-5			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
37	1,3-Dichlorobenzene	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 541-73-1			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
38	1,4-Dichlorobenzene	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 106-46-7			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
39	1,2-Dichlorobenzene	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 95-50-1			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
40	1,2-Dibromo-3-chloropropane	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 96-12-8			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
41	1,2,4-Trichlorobenzene	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 120-82-1			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
42	1,2,3-Trichlorobenzene	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 87-61-6			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.Restek.com

Certificate of Analysis

ACCREDITED Reference Material Producer Certificate #3222.01

ilac-MRA

ACCREDITED Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30492 **Lot No.:** A086827

Description : OLC 03.2 VOA Mega Mix

OLC 03.2 VOA Mega Mix 2000ug/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2015 **Storage:** 0°C or colder

576950
ID. VMSOMCALas_00019
Exp: 02/28/15 Prpd: MTP
RS 30492 SOM Mega Mix 200

576951
ID. VMSOMCALas_00020
Exp: 02/28/15 Prpd: MTP
RS 30492 SOM Mega Mix 200

576952
ID. VMSOMCALas_00021
Exp: 02/28/15 Prpd: MTP
RS 30492 SOM Mega Mix 200

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,000.1	ug/mL	+/-	11.7379	ug/mL	Gravimetric
	CAS # 76-13-1			+/-	159.7571	ug/mL	Unstressed
	Purity 97%			+/-	159.8353	ug/mL	Stressed
2	1,1-dichloroethene	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 75-35-4			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
3	Methyl acetate	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 79-20-9			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
4	Methylene chloride (dichloromethane)	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 75-09-2			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
5	Carbon disulfide	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 75-15-0			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
6	Methyl-tert-butyl ether (MTBE)	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 1634-04-4			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
7	trans-1,2-Dichloroethene	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 156-60-5			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
8	1,1-Dichloroethane	1,999.9	ug/mL	+/-	15.4816	ug/mL	Gravimetric
	CAS # 75-34-3			+/-	160.0595	ug/mL	Unstressed
	Purity 98%			+/-	160.1375	ug/mL	Stressed
9	cis-1,2-Dichloroethene	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 156-59-2			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed

29	Ethylbenzene	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 100-41-4			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
30	m-Xylene	1,000.0	ug/mL	+/-	5.8686	ug/mL	Gravimetric
	CAS # 108-38-3			+/-	79.8730	ug/mL	Unstressed
	Purity 99%			+/-	79.9121	ug/mL	Stressed
31	p-Xylene	1,000.0	ug/mL	+/-	5.8686	ug/mL	Gravimetric
	CAS # 106-42-3			+/-	79.8730	ug/mL	Unstressed
	Purity 99%			+/-	79.9121	ug/mL	Stressed
32	o-Xylene	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 95-47-6			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
33	Styrene	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 100-42-5			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
34	Isopropylbenzene (cumene)	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 98-82-8			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
35	bromoform	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 75-25-2			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
36	1,1,2,2-Tetrachloroethane	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 79-34-5			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
37	1,3-Dichlorobenzene	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 541-73-1			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
38	1,4-Dichlorobenzene	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 106-46-7			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
39	1,2-Dichlorobenzene	2,000.0	ug/mL	+/-	15.4821	ug/mL	Gravimetric
	CAS # 95-50-1			+/-	160.0647	ug/mL	Unstressed
	Purity 99%			+/-	160.1427	ug/mL	Stressed
40	1,2-Dibromo-3-chloropropane	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 96-12-8			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
41	1,2,4-Trichlorobenzene	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 120-82-1			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed
42	1,2,3-Trichlorobenzene	2,000.0	ug/mL	+/-	11.7371	ug/mL	Gravimetric
	CAS # 87-61-6			+/-	159.7459	ug/mL	Unstressed
	Purity 99%			+/-	159.8242	ug/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

RESTEK CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A097663

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone CAS # 67-64-1 (Lot SHBC6350V) Purity 99%	5,036.1 µg/mL	+/- 29.2803 µg/mL +/- 401.1978 µg/mL +/- 401.3953 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) CAS # 78-93-3 (Lot BCBG5320V) Purity 99%	5,014.5 µg/mL	+/- 29.1547 µg/mL +/- 399.4770 µg/mL +/- 399.6737 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 (Lot SHBD0462V) Purity 99%	5,021.8 µg/mL	+/- 29.1972 µg/mL +/- 400.0586 µg/mL +/- 400.2555 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone CAS # 591-78-6 (Lot MKBF3977V) Purity 99%	5,014.8 µg/mL	+/- 29.1565 µg/mL +/- 399.5009 µg/mL +/- 399.6976 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

628720
ID: VMSOMCALbs_00027
Exp: 11/30/16 Prpd. MTP
RS 30006 VOA Mix #1 5000

628721
ID: VMSOMCALbs_00028
Exp: 11/30/16 Prpd. MTP
RS 30006 VOA Mix #1 5000

628722
ID: VMSOMCALbs_00029
Exp: 11/30/16 Prpd. MTP
RS 30006 VOA Mix #1 5000

RESTEK CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A097663

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone CAS # 67-64-1 (Lot SHBC6350V) Purity 99%	5,036.1 µg/mL	+/- 29.2803 µg/mL +/- 401.1978 µg/mL +/- 401.3953 µg/mL		Gravimetric Unstressed Stressed
2	2-Butanone (MEK) CAS # 78-93-3 (Lot BCBG5320V) Purity 99%	5,014.5 µg/mL	+/- 29.1547 µg/mL +/- 399.4770 µg/mL +/- 399.6737 µg/mL		Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 (Lot SHBD0462V) Purity 99%	5,021.8 µg/mL	+/- 29.1972 µg/mL +/- 400.0586 µg/mL +/- 400.2555 µg/mL		Gravimetric Unstressed Stressed
4	2-Hexanone CAS # 591-78-6 (Lot MKBF3977V) Purity 99%	5,014.8 µg/mL	+/- 29.1565 µg/mL +/- 399.5009 µg/mL +/- 399.6976 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

628720
ID: VMSOMCALbs_00027
Exp: 11/30/16 Prpd: MTP
RS 30006 VOA Mix #1 5000

628721
ID: VMSOMCALbs_00028
Exp: 11/30/16 Prpd: MTP
RS 30006 VOA Mix #1 5000

628722
ID: VMSOMCALbs_00029
Exp: 11/30/16 Prpd: MTP
RS 30006 VOA Mix #1 5000

RESTEK CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Gravimetric Certificate

ACCREDITED ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568975 **Lot No.:** A0102394

Description : Custom 1,4-Dioxane Standard

Custom 1,4-Dioxane Standard 4,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane CAS # 123-91-1 (Lot SHBD4119V) Purity 99%	4,012.0 µg/mL	+/- 37.3094 µg/mL +/- 215.4862 µg/mL +/- 215.7195 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

642921
ID: VMSOMCALcs_00067
Exp: 04/30/17 Prpd: MTP
RS 568975 Dioxane 4000 PP

642922
ID: VMSOMCALcs_00068
Exp: 04/30/17 Prpd: MTP
RS 568975 Dioxane 4000 PP

642923
ID: VMSOMCALcs_00069
Exp: 04/30/17 Prpd: MTP
RS 568975 Dioxane 4000 PP

642924
ID: VMSOMCALcs_00070
Exp: 04/30/17 Prpd: MTP
RS 568975 Dioxane 4000 PP

642925
ID: VMSOMCALcs_00071
Exp: 04/30/17 Prpd: MTP
RS 568975 Dioxane 4000 PP

Alex Pavkovich - Mix Technician **Date Mixed:** 01-Apr-2014 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.Restek.com

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer Certificate 03222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate 03222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30091 **Lot No.:** A090187

Description : L/C VOA Internal Standard Mix

L/C Internal Std 2500ug/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Difluorobenzene CAS # 540-36-3 Purity 99%	2,500.0 µg/mL	+/- 14.6714 +/- 30.2004 +/- 34.0606	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chlorobenzene-d5 CAS # 3114-55-4 Purity 99%	2,500.0 µg/mL	+/- 14.6714 +/- 30.2004 +/- 34.0606	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 Purity 99%	2,500.0 µg/mL	+/- 14.6714 +/- 30.2004 +/- 34.0606	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

439428
ID: VMSOMISs_00018
Exp: 07/31/17 Prpd: TFS
RS 30091 ISTD 2500PPM

439429
ID: VMSOMISs_00019
Exp: 07/31/17 Prpd: TFS
RS 30091 ISTD 2500PPM

439430
ID: VMSOMISs_00020
Exp: 07/31/17 Prpd: TFS
RS 30091 ISTD 2500PPM

439431
ID: VMSOMISs_00021
Exp: 07/31/17 Prpd: TFS
RS 30091 ISTD 2500PPM

439432
ID: VMSOMISs_00022
Exp: 07/31/17 Prpd: TFS
RS 30091 ISTD 2500PPM

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory
Certificate #3222.03

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30005 **Lot No.:** A093366

Description : VOA Matrix Spike Mix

Matrix Spike Std 2500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2018 **Storage:** 0°C or colder

503268
ID: VMSOMSPs_00018
Exp: 02/28/18 Prpd. JSW
RS 30005 SOM MS 2500 PPM

503269
ID: VMSOMSPs_00019
Exp: 02/28/18 Prpd. JSW
RS 30005 SOM MS 2500 I

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,1-dichloroethene CAS # 75-35-4 Purity 99%	2,500.0 µg/mL	+/- 14.6714 µg/mL +/- 30.2004 µg/mL +/- 34.0606 µg/mL		Gravimetric Unstressed Stressed
2	Benzene CAS # 71-43-2 Purity 99%	2,500.0 µg/mL	+/- 14.6714 µg/mL +/- 30.2004 µg/mL +/- 34.0606 µg/mL		Gravimetric Unstressed Stressed
3	Trichloroethene CAS # 79-01-6 Purity 99%	2,500.0 µg/mL	+/- 14.6714 µg/mL +/- 30.2004 µg/mL +/- 34.0606 µg/mL		Gravimetric Unstressed Stressed
4	Toluene CAS # 108-88-3 Purity 99%	2,500.0 µg/mL	+/- 14.6714 µg/mL +/- 30.2004 µg/mL +/- 34.0606 µg/mL		Gravimetric Unstressed Stressed
5	Chlorobenzene CAS # 108-90-7 Purity 99%	2,500.0 µg/mL	+/- 14.6714 µg/mL +/- 30.2004 µg/mL +/- 34.0606 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x .53mm x 3.0um
Rtx-502.2 (cat.#10910)

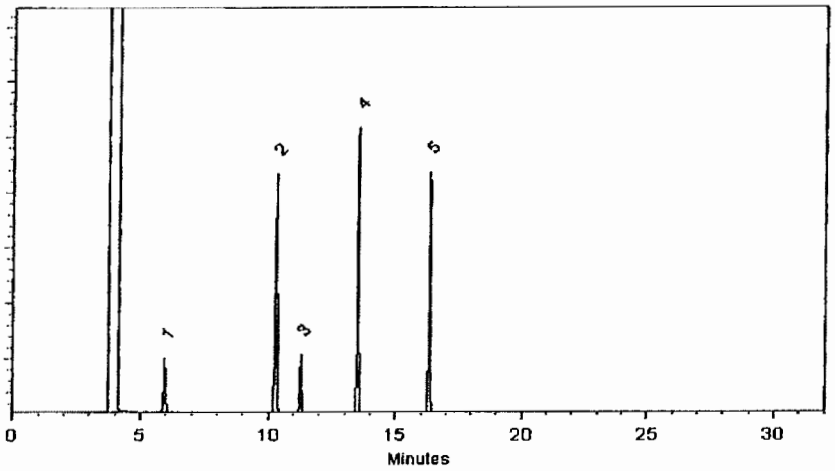
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



Jennifer L Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 05-Feb-2013 Balance: 1128342314

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 9001 QS Registered
ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

		Lot #	Solvent(s):
Part Number:	94156	DE997	Methanol
Lot Number:	030513		
Description:	CLP SOM 01.1 VOC DMC Gases		
	2 components		
Expiration Date:	030516		
Recommended Storage:	Freezer (0 °C)		
Nominal Concentration (µg/mL):	2000		

Formulated By:	Vincent K. Criscio, Jr.	030513	DATE
Reviewed By:	Pedro L. Rentas	030513	DATE

5E-05 Balance Uncertainty

Volume(s) shown below were combined and diluted to (mL): 50.0 0.003 Flask Uncertainty

Compound	Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Uncertainty Pipette	Initial Conc.(ug/mL)	Final Conc.(ug/mL)	Expanded Uncertainty (+/-)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Chloroethane-d5	94176	020311	0.20	10.00	0.006	10017.6	2003.7	0.00423	19199-91-8	N/A	N/A
2. Vinyl chloride-d3	94177	071411	0.20	10.00	0.006	10069.3	2014.0	0.00409	06745-35-3	N/A	orl-rat 500mg/kg

Run 5, "P94156 L030513 [2000µg/mL in MeOH]"

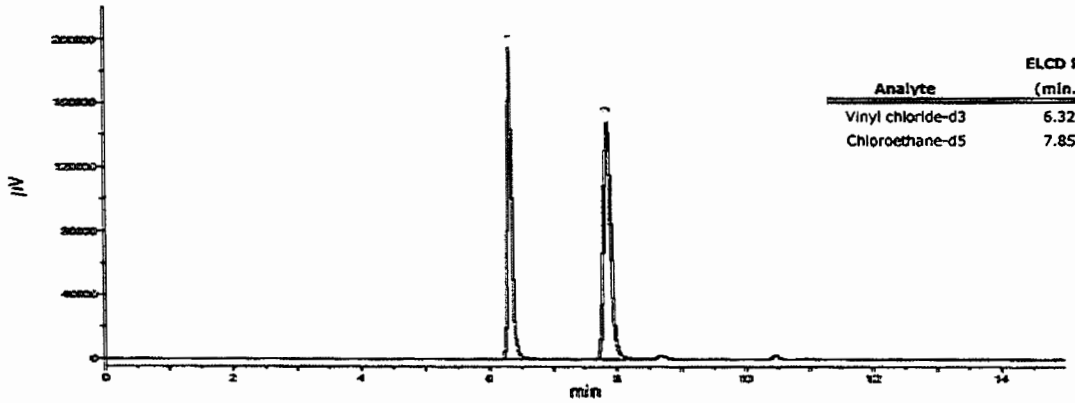
Run Length: 15.00 min, 8999 points at 10 points/second.
Created: Wed, Mar 13, 2013 at 10:41:14 AM.
Sampled: Sequence "031313-GC1", Method "GC1-MS".
Analyzed using Method "GC1-MS".

Comments
GC1-MS Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow = 150mL/min., Helium (carrier) = 10mL/min., Helium (make-up) = 40mL/min., Hydogen (make-up) = 100mL/min.,
Oven Profile: Temp. 1 = 35°C (Time 1 = 9 min.), Temp 2 = 200°C (Time 2 = 1 min.),
Rate = 33°C/min., Total run time = 15 min. Injector temp. = 200°C, FID Temp. = 200°C
ELCD Signal = Edaq Channel 2 PID Signal = Edaq Channel 2
Standard injection = 0.5µL, Range=4 Purge Valve = 0 min

618276
ID: VMSOMSUas_00065
Exp: 03/05/16 Prpd: MTP
AB 94156 DMC Gases 2000 P

618277
ID: VMSOMSUas_00066
Exp: 03/05/16 Prpd: MTP
AB 94156 DMC Gases 2000 P

618278
ID: VMSOMSUas_00067
Exp: 03/05/16 Prpd: MTP
AB 94156 DMC Gases 2000 P



Analyte	ELCD RT (min.)
Vinyl chloride-d3	6.32
Chloroethane-d5	7.85

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 9001 QS Registered
ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

			Lot #		
Part Number:	94157	**Solvent(s):**	DF369	Methanol	(90%)
Lot Number:	113012		112912	Water	(10%)
Description:	CLP SOM 01.1 DMC Ketones				
	2 components				
Expiration Date:	113015				
Recommended Storage:	Refrigerate (4 °C)				
Nominal Concentration (µg/mL):	2500				

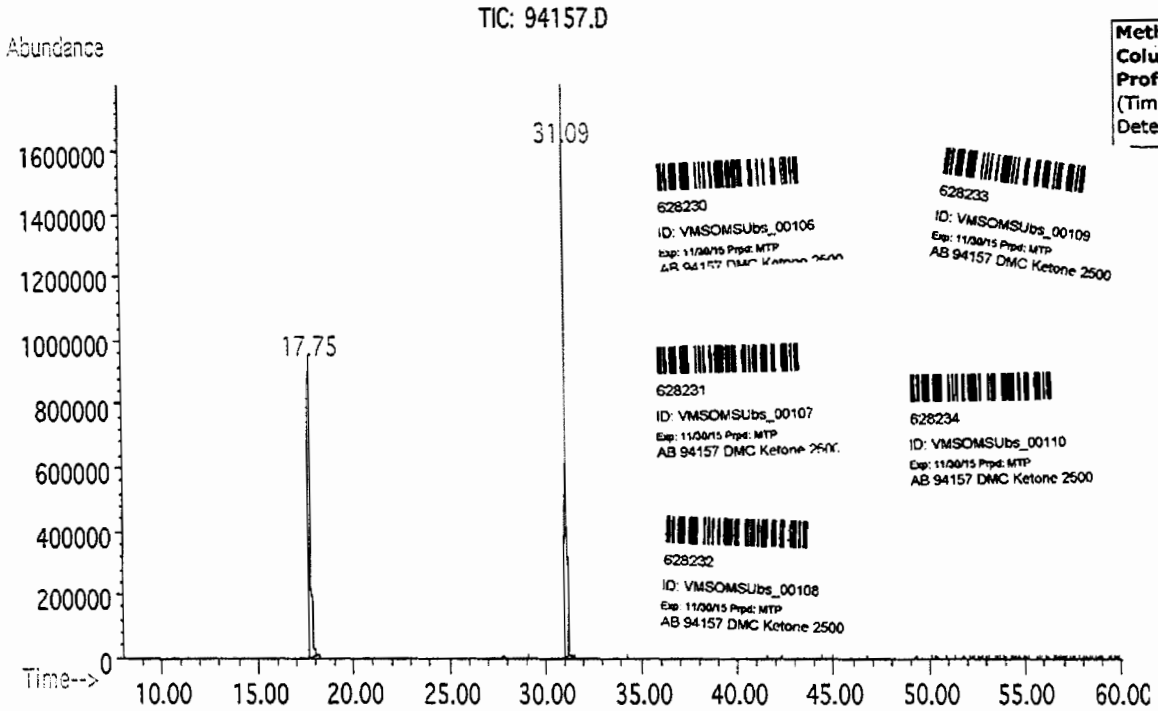
Gabriel Helland		113012
Formulated By:	Gabriel Helland	DATE
Pedro Rentas		113012
Reviewed By:	Pedro L. Rentas	DATE

5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 100.0 0.001 Flask Uncertainty

MSDS Information
(Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty : Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. 2-Butanone-1,1,1,3,3-d5	2557	M276P7	2500	99	0.2	0.25255	0.25290	2503.5	0.0041	24313-50-6	N/A	orl-rat 2737mg/kg
2. 2-Hexanone-1,1,1,3,3-d5	2558	S166P26	2500	98.5	0.2	0.25383	0.25424	2504.0	0.0041	04840-82-8	N/A	orl-rat 2590mg/kg



Method: GC6MSD-1. **Detector:** Mass Selective Detector. **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1=10min.), Temp. 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector Temp.= 200°C, Detector Temp. = 220°C. **Analyst:** Candice Warren.

Name	MSD RT (min.)
2-Butanone-1,1,1,3,3-d5	17.75
2-Hexanone-1,1,1,3,3-d5	31.12

05/16/20
Page 227 of 1522

CERTIFIED WEIGHT REPORT

			Lot #		
Part Number:	94157	Solvent(s):	DF369	Methanol	(90%)
Lot Number:	113012		112912	Water	(10%)
Description:	CLP SOM 01.1 DMC Ketones				
	2 components				
Expiration Date:	113015				
Recommended Storage:	Refrigerate (4 °C)				
Nominal Concentration (µg/mL):	2500				

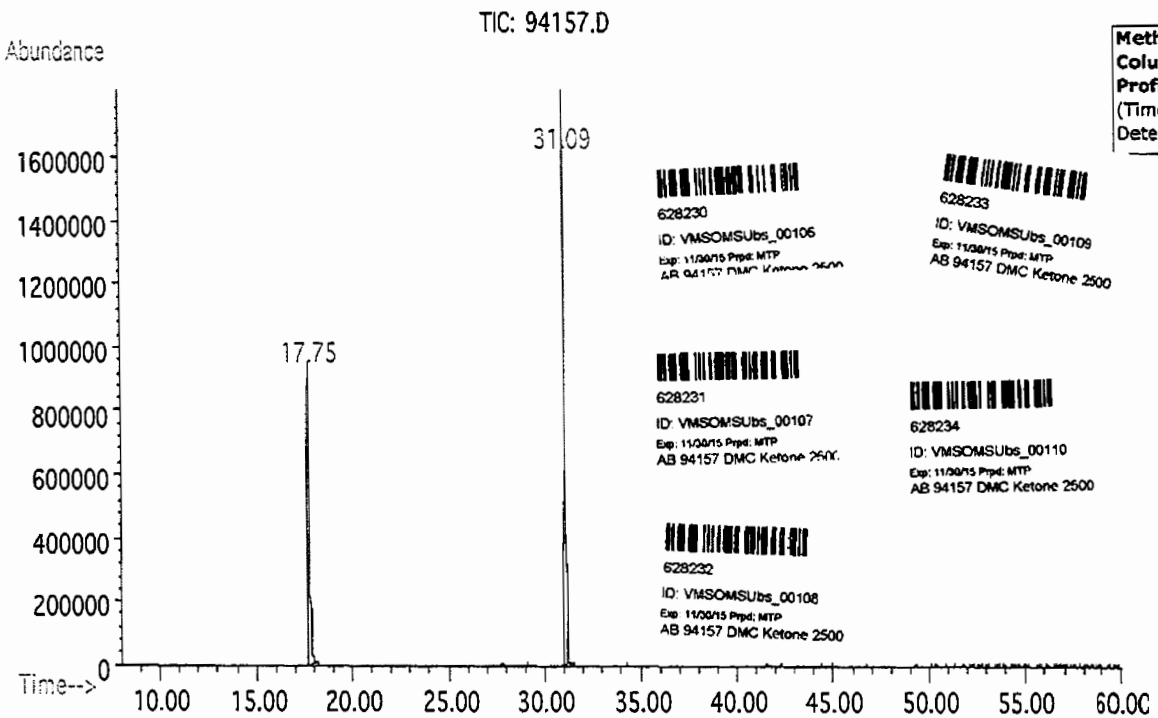
Formulated By: Gabriel Helland — 113012 — DATE

Reviewed By: Pedro L. Rentas — 113012 — DATE

05/16/2014

Weight(s) shown below were combined and diluted to (mL): 100.0 — 5E-05 Balance Uncertainty — 0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty : Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
										MSDS Information (Solvent Safety Info. On Attached pg.)		
1. 2-Butanone-1,1,1,3,3-d5	2557	M276P7	2500	99	0.2	0.25255	0.25290	2503.5	0.0041	24313-50-6	N/A	orl-rat 2737mg/kg
2. 2-Hexanone-1,1,1,3,3-d5	2558	S166P26	2500	98.5	0.2	0.25383	0.25424	2504.0	0.0041	04840-82-8	N/A	orl-rat 2590mg/kg



Method: GC6MSD-1. **Detector:** Mass Selective Detector. **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1=10min.), Temp. 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector Temp.= 200°C, Detector Temp. = 220°C. **Analyst:** Candice Warren.

Name	MSD RT (min.)
2-Butanone-1,1,1,3,3-d5	17.75
2-Hexanone-1,1,1,3,3-d5	31.12

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 9001 QS Registered
ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

05/16/18

CERTIFIED WEIGHT REPORT

Part Number: 94155
Lot Number: 040912
Description: CLP SOM 01.1 DMC Volatiles
9 components
Expiration Date: 040915
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000

Solvent(s): Lot # 51182 Methanol

Gabriel Helland		040912
Formulated By:	Gabriel Helland	DATE
Pedro Rentas		040912
Reviewed By:	Pedro L. Rentas	DATE

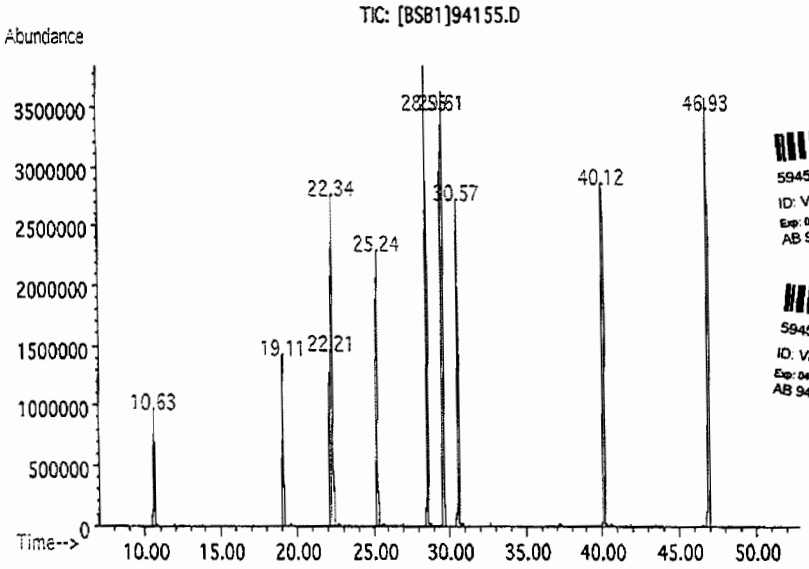
5E-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 100.0 0.001 Flask Uncertainty

MSDS Information (Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. Benzene-d6	26	4605DKDK	2000	99	0.2	0.20204	0.20235	2003.1	0.0041	01076-43-3	1 ppm (8H)	N/A
2. Chloroform-d	2556	V210P1	2000	99.8	0.2	0.20042	0.20065	2002.3	0.0040	00865-49-6	N/A	orl-hmn 140mg/kg
3. 1,2-Dichlorobenzene-d4	128	PR-18653/12207DB2	2000	99	0.2	0.20204	0.20240	2003.6	0.0041	02199-69-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
4. 1,2-Dichloroethane-d4	137	8G-348	2000	99	0.2	0.20204	0.20254	2004.9	0.0041	17060-07-0	N/A	orl-mus 625mg/kg
5. 1,1-Dichloroethene-d2	2047	W151P5	2000	99	0.2	0.20204	0.20225	2002.1	0.0041	22280-73-5	N/A	N/A
6. 1,2-Dichloropropane-d6	2051	L283P25	2000	99.7	0.2	0.20062	0.20085	2002.3	0.0040	93952-08-0	N/A	orl-rat 1947mg/kg
7. cis,trans-1,3-Dichloropropene-d4	2052	Z181P5	2000	40.6	0.2	0.49266	0.49301	2001.4	0.0099	202656-23-3	N/A	orl-rat 470mg/kg
8. 1,1,2,2-Tetrachloroethane-d2	2053	F465P1	2000	99.6	0.2	0.20082	0.20125	2004.2	0.0040	33685-54-0	N/A	orl-rat 800mg/kg
9. Toluene-d8	282	6D-549	2000	99.5	0.2	0.20103	0.20153	2005.0	0.0041	02037-26-5	200 ppm	orl-rat 5000mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector. **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1=10min.). Temp. 2 = 200°C (Time 2=8.75 min.). Rate = 4°C/min., Injector Temp.= 200°C. Detector Temp. = 220°C. **Analyst:** Candice Warren.



594537
ID: VMSOMSUcs_00042
Exp: 04/09/15 Prpd: MTP
AB 94155 DMC Liquid 2000

594538
ID: VMSOMSUcs_00043
Exp: 04/09/15 Prpd: MTP
AB 94155 DMC Liquid 2000

594539
ID: VMSOMSUcs_00044
Exp: 04/09/15 Prpd: MTP
AB 94155 DMC Liquid 2000

Name	MSD RT (min.)
1,1-Dichloroethene-d2	10.61
Chloroform-d	19.13
1,2-Dichloroethane-d4	22.20
Benzene-d6	22.36
1,2-Dichloropropane-d6	25.23
cis-1,3-Dichloropropene-d4	28.53
Toluene-d8	29.62
trans-1,3-Dichloropropene-d4	30.59
1,1,2,2-Tetrachloroethane-d2	40.08
1,2-Dichlorobenzene-d4	46.93

RESTEK CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30414 **Lot No.:** A096047

JM 1/14/14

Description : Tetrahydrofuran Standard

Tetrahydrofuran 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Tetrahydrofuran CAS # 109-99-9 (Lot SHBC4511V) Purity 99%	2,002.0 µg/mL	+/- 11.7489 µg/mL +/- 44.3261 µg/mL +/- 44.5066 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

619340
ID: VMTHFs_00016
Exp: 06/30/18 Prpd: JSW
RS30414 Tetrahydrofuran 2

619341
ID: VMTHFs_00017
Exp: 06/30/18 Prpd: JSW
RS30414 Tetrahydrofuran 2

619342
ID: VMTHFs_00018
Exp: 06/30/18 Prpd: JSW
RS30414 Tetrahydrofuran 2

619343
ID: VMTHFs_00019
Exp: 06/30/18 Prpd: JSW
RS30414 Tetrahydrofuran 2

619344
ID: VMTHFs_00020
Exp: 06/30/18 Prpd: JSW
RS30414 Tetrahydrofuran 2

Column:
105m x .53mm x 3.0um
Rtx-502.2 (cat.#10910)

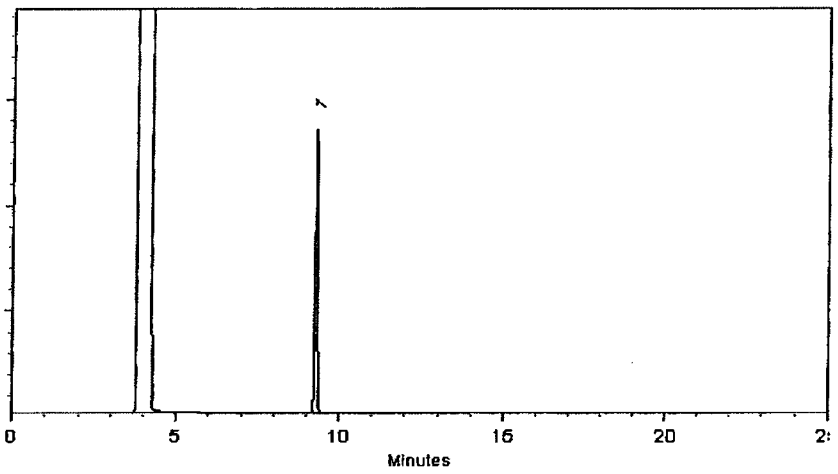
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen to guarantee product quality. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kendra Swope - Mix Technician

Date Mixed: 17-Jun-2013 **Balance:** 1125113331

Jennifer L. Pollino - QC Analyst

Date Passed: 18-Jun-2013

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

RESTEK CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.01

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30414 **Lot No.:** A096047

JM 1/14/14

Description : Tetrahydrofuran Standard

Tetrahydrofuran 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Tetrahydrofuran	2,002.0 µg/mL	+/- 11.7489	µg/mL	Gravimetric
	CAS # 109-99-9 (Lot SHBC4511V)		+/- 44.3261	µg/mL	Unstressed
	Purity 99%		+/- 44.5066	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

619340
ID: VMTHFs_00016
Exp: 06/30/18 Prpd: JSW
RS30414 Tetrahydrofuran 2

619341
ID: VMTHFs_00017
Exp: 06/30/18 Prpd: JSW
RS30414 Tetrahydrofuran 2

619342
ID: VMTHFs_00018
Exp: 06/30/18 Prpd: JSW
RS30414 Tetrahydrofuran 2

619343
ID: VMTHFs_00019
Exp: 06/30/18 Prpd: JSW
RS30414 Tetrahydrofuran 2

619344
ID: VMTHFs_00020
Exp: 06/30/18 Prpd: JSW
RS30414 Tetrahydrofuran 2

Column:
105m x .53mm x 3.0um
Rtx-502.2 (cat.#10910)

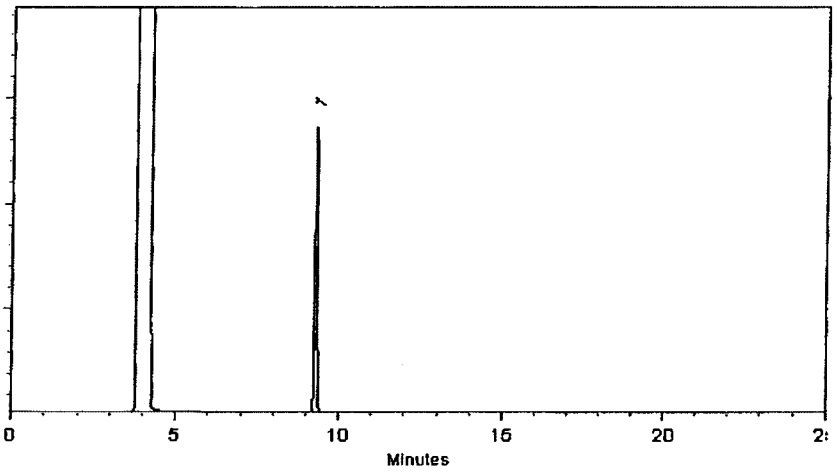
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen to guarantee product quality. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kendra Swope - Mix Technician

Date Mixed: 17-Jun-2013 **Balance:** 1125113331

Jennifer L. Pollino - QC Analyst

Date Passed: 18-Jun-2013

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Certification Summary

Client: Langan Engineering & Environmental Srvcs
Project/Site: AMETEK - Sellersville

TestAmerica Job ID: 200-22132-1
SDG: 200-22132

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Burlington	Connecticut	State Program	1	PH-0751
TestAmerica Burlington	DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA
TestAmerica Burlington	Florida	NELAP	4	E87467
TestAmerica Burlington	L-A-B	DoD ELAP		L2336
TestAmerica Burlington	Louisiana	NELAP	6	176292
TestAmerica Burlington	Maine	State Program	1	VT00008
TestAmerica Burlington	Minnesota	NELAP	5	050-999-436
TestAmerica Burlington	New Hampshire	NELAP	1	2006
TestAmerica Burlington	New Jersey	NELAP	2	VT972
TestAmerica Burlington	New York	NELAP	2	10391
TestAmerica Burlington	Pennsylvania	NELAP	3	68-00489
TestAmerica Burlington	Rhode Island	State Program	1	LAO00298
TestAmerica Burlington	US Fish & Wildlife	Federal		LE-058448-0
TestAmerica Burlington	USDA	Federal		P330-11-00093
TestAmerica Burlington	Vermont	State Program	1	VT-4000
TestAmerica Burlington	Virginia	NELAP	3	460209

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method SOM01.2 Vol Tr

Volatile Organic Compounds (GC/MS) by Method SOM01.2_Vol_Tr

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Matrix: Water Level: Trace

GC Column (1): DB-624 ID: 0.2 (mm)

Client Sample ID	Lab Sample ID	VCL #	CLA #	DCE #	BUT #	CLF #	DCA #	BEN #	DPA #
MW-18S_042914	200-22132-2	103	101	79	88	94	100	101	84
FB-1_042914	200-22132-3	104	101	80	90	97	102	100	85
EB-2_042914	200-22132-4	105	103	80	91	97	102	101	85
TRIP BLANK	200-22132-5	107	105	82	95	100	106	103	87
VHBLK01	200-22132-6	111	104	78	104	98	103	104	87
MW-19D_050114	200-22155-2	108	106	82	100	100	110	102	88
MW-16S_050114	200-22155-3	105	105	80	98	98	110	102	88
MW-17S_050114	200-22155-4	95	98	77	89	94	98	98	82
MW-17D_050114	200-22155-5	99	103	81	96	98	107	100	87
MW-21D_050114	200-22155-6	100	105	81	96	97	109	101	86
MW-21S_050114	200-22155-7	100	105	82	99	100	108	101	89
MW-20S_050114	200-22155-9	96	103	100	98	97	108	99	87
MW-11D_050114	200-22155-10	102	106	87	101	101	110	101	87
MW-5D_050114	200-22155-11	101	102	83	99	98	108	99	85
DUP_050114	200-22155-12	102	102	84	94	98	107	99	84
MW-15D_050114	200-22155-13	107	108	105 X	98	100	113	101	88
FB-2_050114	200-22155-14	104	108	82	97	99	107	100	86
TRIP BLANK	200-22155-15	105	110	81	98	100	111	103	89
MW-12S_050114	200-22183-1	104	105	200 X	96	99	110	101	86
MW-12S_050114 DL	200-22183-1 DL	114 D	122 D	145 X D	112 D	110 D	129 D	105 D	92 D
EB-4_050114	200-22183-2	107	106	82	99	100	111	100	87
MW-24S_050114	200-22183-3	116	122	105 X	111	110	134 X	104	90
MW-24S_050114 DL	200-22183-3 DL	118 D	123 D	93 D	115 D	113 D	135 D X	102 D	89 D
MW-11S_050214	200-22183-5	116	124	229 X	112	112	132 X	104	89
MW-11S_050214 DL	200-22183-5 DL	117 D	124 D	117 D X	114 D	113 D	131 D X	108 D	93 D
MW-12D_050214	200-22183-6	115	126	97	115	114	139 X	105	90
MW-12D_050214 DL	200-22183-6 DL	121 D	130 D	95 D	112 D	115 D	132 X D	110 D	95 D
MW-20D_050214	200-22183-7	113	118	121 X	104	107	127	97	86
MW-20D_050214 DL	200-22183-7 DL	117 D	124 D	95 D	109 D	109 D	127 D	106 D	91 D
MW-15S_050214	200-22183-8	117	123	355 X	109	109	128	106	93
MW-15S_050214 DL	200-22183-8 DL	118 D	122 D	177 D X	109 D	110 D	134 D X	102 D	90 D
MW-7S_050214	200-22183-9	112	119	109 X	106	107	129	99	87
MW-7S_050214 DL	200-22183-9 DL	119 D	124 D	97 D	111 D	112 D	133 D X	108 D	94 D
MW-5S_050214	200-22183-10	121	126	125 X	115	113	137 X	108	95
MW-5S_050214 DL	200-22183-10 DL	113 D	115 D	93 D	99 D	105 D	120 D	104 D	88 D

	QC LIMITS
VCL = Vinyl chloride-d3	65-131
CLA = Chloroethane-d5	71-131
DCE = 1,1-Dichloroethene-d2	55-104
BUT = 2-Butanone-d5	49-155
CLF = Chloroform-d	78-121
DCA = 1,2-Dichloroethane-d4	78-129
BEN = Benzene-d6	77-124
DPA = 1,2-Dichloropropane-d6	79-124

Column to be used to flag recovery values

FORM II SOM01.2/VOA_Tr

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Matrix: Water Level: Trace

GC Column (1): DB-624 ID: 0.2 (mm)

Client Sample ID	Lab Sample ID	VCL #	CLA #	DCE #	BUT #	CLF #	DCA #	BEN #	DPA #
EB-6_050214	200-22183-11	111	118	87	109	108	130 X	101	89
FB-3_050214	200-22183-12	114	122	92	107	109	129	106	90
TB_050214	200-22183-13	112	121	90	109	109	130 X	104	90
	MB 200-71915/6	103	101	80	95	98	102	104	88
	MB 200-72030/9	113	118	88	107	106	124	102	89
	MB 200-72092/4	118	121	91	101	108	123	106	89
	MB 200-72110/14	112	105	78	108	101	106	106	89
MW-5D_050114 MS	200-22155-11 MS	101	105	112 X	95	99	108	99	86
MW-5D_050114 MSD	200-22155-11 MSD	100	100	110 X	92	95	106	99	85

	QC LIMITS
VCL = Vinyl chloride-d3	65-131
CLA = Chloroethane-d5	71-131
DCE = 1,1-Dichloroethene-d2	55-104
BUT = 2-Butanone-d5	49-155
CLF = Chloroform-d	78-121
DCA = 1,2-Dichloroethane-d4	78-129
BEN = Benzene-d6	77-124
DPA = 1,2-Dichloropropane-d6	79-124

Column to be used to flag recovery values

FORM II SOM01.2/VOA_Tr

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Matrix: Water Level: Trace

GC Column (1): DB-624 ID: 0.2 (mm)

Client Sample ID	Lab Sample ID	TOL #	TDP #	HEX #	TCA #	DCZ #
MW-18S_042914	200-22132-2	100	96	96	92	94
FB-1_042914	200-22132-3	100	95	95	91	95
EB-2_042914	200-22132-4	101	96	97	94	94
TRIP BLANK	200-22132-5	102	98	99	95	95
VHBLK01	200-22132-6	104	102	108	95	98
MW-19D_050114	200-22155-2	102	96	104	100	99
MW-16S_050114	200-22155-3	102	95	105	100	97
MW-17S_050114	200-22155-4	97	88	92	90	93
MW-17D_050114	200-22155-5	98	93	99	98	96
MW-21D_050114	200-22155-6	100	94	101	95	95
MW-21S_050114	200-22155-7	100	96	101	98	99
MW-20S_050114	200-22155-9	99	96	104	99	97
MW-11D_050114	200-22155-10	100	93	103	99	99
MW-5D_050114	200-22155-11	99	90	101	97	97
DUP_050114	200-22155-12	99	88	98	90	94
MW-15D_050114	200-22155-13	101	90	103	93	100
FB-2_050114	200-22155-14	101	92	98	95	97
TRIP BLANK	200-22155-15	102	94	99	95	96
MW-12S_050114	200-22183-1	99	95	98	94	94
MW-12S_050114 DL	200-22183-1 DL	103 D	97 D	105 D	96 D	96 D
EB-4_050114	200-22183-2	100	95	99	94	96
MW-24S_050114	200-22183-3	101	101	106	97	95
MW-24S_050114 DL	200-22183-3 DL	102 D	99 D	105 D	96 D	95 D
MW-11S_050214	200-22183-5	102	100	103	96	94
MW-11S_050214 DL	200-22183-5 DL	105 D	103 D	107 D	100 D	99 D
MW-12D_050214	200-22183-6	103	95	105	99	97
MW-12D_050214 DL	200-22183-6 DL	109 D	99 D	109 D	98 D	100 D
MW-20D_050214	200-22183-7	97	92	97	91	91
MW-20D_050214 DL	200-22183-7 DL	104 D	98 D	106 D	99 D	98 D
MW-15S_050214	200-22183-8	104	100	104	97	95
MW-15S_050214 DL	200-22183-8 DL	101 D	102 D	103 D	97 D	92 D
MW-7S_050214	200-22183-9	98	94	97	89	90
MW-7S_050214 DL	200-22183-9 DL	107 D	101 D	107 D	100 D	97 D
MW-5S_050214	200-22183-10	105	103	106	100	100
MW-5S_050214 DL	200-22183-10 DL	104 D	98 D	96 D	93 D	97 D

	QC LIMITS
TOL = Toluene-d8	77-121
TDP = trans-1,3-Dichloropropene-d4	73-121
HEX = 2-Hexanone-d5	28-135
TCA = 1,1,2,2-Tetrachloroethane-d2	73-125
DCZ = 1,2-Dichlorobenzene-d4	80-131

Column to be used to flag recovery values

FORM II SOM01.2/VOA_Tr

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Matrix: Water Level: Trace

GC Column (1): DB-624 ID: 0.2 (mm)

Client Sample ID	Lab Sample ID	TOL #	TDP #	HEX #	TCA #	DCZ #
EB-6_050214	200-22183-11	99	96	102	95	92
FB-3_050214	200-22183-12	105	96	102	97	97
TB_050214	200-22183-13	103	99	103	98	98
	MB 200-71915/6	105	98	100	95	96
	MB 200-72030/9	101	101	105	100	97
	MB 200-72092/4	104	96	99	91	95
	MB 200-72110/14	104	101	111	96	102
MW-5D_050114 MS	200-22155-11 MS	99	88	98	94	95
MW-5D_050114 MSD	200-22155-11 MSD	99	85	96	90	96

	QC LIMITS
TOL = Toluene-d8	77-121
TDP = trans-1,3-Dichloropropene-d4	73-121
HEX = 2-Hexanone-d5	28-135
TCA = 1,1,2,2-Tetrachloroethane-d2	73-125
DCZ = 1,2-Dichlorobenzene-d4	80-131

Column to be used to flag recovery values

FORM II SOM01.2/VOA_Tr

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Matrix: Water Level: Trace Lab File ID: dlla20.d

Lab ID: 200-22155-11 MS Client ID: MW-5D_050114 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	5.00	0.99	6.10	102	61-145	
Benzene	5.00	0.50 U	5.17	103	76-127	
Trichloroethene	5.00	6.9	12.4	110	71-120	
Toluene	5.00	1.3	6.86	112	76-125	
Chlorobenzene	5.00	0.50 U	5.06	101	75-130	

Column to be used to flag recovery and RPD values

FORM III SOM01.2/VOA_Tr

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Matrix: Water Level: Trace Lab File ID: dlla21.d

Lab ID: 200-22155-11 MSD Client ID: MW-5D_050114 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	5.00	6.13	103	1	14	61-145	
Benzene	5.00	5.37	107	4	11	76-127	
Trichloroethene	5.00	12.5	112	2	14	71-120	
Toluene	5.00	7.10	117	4	13	76-125	
Chlorobenzene	5.00	5.15	103	2	13	75-130	

Column to be used to flag recovery and RPD values

FORM III SOM01.2/VOA_Tr

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Lab File ID: dlla06.d Lab Sample ID: MB 200-71915/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: D.i Date Analyzed: 05/08/2014 13:06

GC Column: DB-624 ID: 0.2(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
MW-18S_042914	200-22132-2	dlla07.d	05/08/2014 13:31
FB-1_042914	200-22132-3	dlla08.d	05/08/2014 13:56
EB-2_042914	200-22132-4	dlla09.d	05/08/2014 14:20
TRIP BLANK	200-22132-5	dlla10.d	05/08/2014 14:45
MW-19D_050114	200-22155-2	dlla11.d	05/08/2014 15:09
MW-16S_050114	200-22155-3	dlla12.d	05/08/2014 15:34
MW-17S_050114	200-22155-4	dlla13.d	05/08/2014 15:58
MW-17D_050114	200-22155-5	dlla14.d	05/08/2014 16:23
MW-21D_050114	200-22155-6	dlla15.d	05/08/2014 16:47
MW-21S_050114	200-22155-7	dlla16.d	05/08/2014 17:12
MW-20S_050114	200-22155-9	dlla17.d	05/08/2014 17:37
MW-11D_050114	200-22155-10	dlla18.d	05/08/2014 18:01
MW-5D_050114	200-22155-11	dlla19.d	05/08/2014 18:26
MW-5D_050114 MS	200-22155-11 MS	dlla20.d	05/08/2014 18:50
MW-5D_050114 MSD	200-22155-11 MSD	dlla21.d	05/08/2014 19:15
DUP_050114	200-22155-12	dlla22.d	05/08/2014 19:40
MW-15D_050114	200-22155-13	dlla23.d	05/08/2014 20:04
FB-2_050114	200-22155-14	dlla24.d	05/08/2014 20:29
TRIP BLANK	200-22155-15	dlla25.d	05/08/2014 20:54
MW-12S_050114	200-22183-1	dlla26.d	05/08/2014 21:18
EB-4_050114	200-22183-2	dlla27.d	05/08/2014 21:43

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Lab File ID: d11d09.d Lab Sample ID: MB 200-72030/9

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: D.i Date Analyzed: 05/12/2014 16:14

GC Column: DB-624 ID: 0.2(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
MW-5S_050214 DL	200-22183-10 DL	d11d10.d	05/12/2014 16:55
MW-20D_050214 DL	200-22183-7 DL	d11d12.d	05/12/2014 17:44
MW-11S_050214 DL	200-22183-5 DL	d11d13.d	05/12/2014 18:09
MW-15S_050214	200-22183-8	d11d14.d	05/12/2014 18:34
MW-12D_050214 DL	200-22183-6 DL	d11d16.d	05/12/2014 19:23
MW-12S_050114 DL	200-22183-1 DL	d11d17.d	05/12/2014 19:48
EB-6_050214	200-22183-11	d11d18.d	05/12/2014 20:12
FB-3_050214	200-22183-12	d11d19.d	05/12/2014 20:37
TB_050214	200-22183-13	d11d20.d	05/12/2014 21:01

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Lab File ID: dlle04.d Lab Sample ID: MB 200-72092/4

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: D.i Date Analyzed: 05/13/2014 11:18

GC Column: DB-624 ID: 0.2(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
MW-24S_050114	200-22183-3	dlle06.d	05/13/2014 12:07
	VIBLK 200-72092/7	dlle07.d	05/13/2014 12:32
MW-15S_050214 DL	200-22183-8 DL	dlle08.d	05/13/2014 12:56
MW-7S_050214 DL	200-22183-9 DL	dlle09.d	05/13/2014 13:21
MW-5S_050214	200-22183-10	dlle10.d	05/13/2014 13:46
	VIBLK 200-72092/11	dlle11.d	05/13/2014 14:10
MW-11S_050214	200-22183-5	dlle12.d	05/13/2014 14:35
	VIBLK 200-72092/13	dlle13.d	05/13/2014 14:59
MW-12D_050214	200-22183-6	dlle14.d	05/13/2014 15:24
	VIBLK 200-72092/15	dlle15.d	05/13/2014 15:49
MW-24S_050114 DL	200-22183-3 DL	dlle16.d	05/13/2014 16:13
MW-7S_050214	200-22183-9	dlle17.d	05/13/2014 16:38
	VIBLK 200-72092/18	dlle18.d	05/13/2014 17:02
MW-20D_050214	200-22183-7	dlle19.d	05/13/2014 17:27
	VIBLK 200-72092/20	dlle20.d	05/13/2014 17:51

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Lab File ID: dlm14.d Lab Sample ID: MB 200-72110/14

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: D.i Date Analyzed: 05/14/2014 12:47

GC Column: DB-624 ID: 0.2(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VHBLK01	200-22132-6	dlm15.d	05/14/2014 13:12

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Lab File ID: dl101.d BFB Injection Date: 05/08/2014

Instrument ID: D.i BFB Injection Time: 07:56

Analysis Batch No.: 71833

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	17.1	
75	30.0 - 80.0% of mass 95	47.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.5	(0.6)1
174	50.0 - 120% of mass 95	90.9	
175	5.0 - 9.0% of mass 174	6.1	(6.7)1
176	95.0 - 101% of mass 174	87.1	(95.8)1
177	5.0 - 9.0% of mass 176	5.7	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-71833/3	dl103.d	05/08/2014	08:41
	IC 200-71833/4	dl104.d	05/08/2014	09:05
	ICIS 200-71833/5	dl105.d	05/08/2014	09:30
	IC 200-71833/6	dl106.d	05/08/2014	09:54
	IC 200-71833/7	dl107.d	05/08/2014	10:19

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Lab File ID: dlla01.d BFB Injection Date: 05/08/2014

Instrument ID: D.i BFB Injection Time: 11:09

Analysis Batch No.: 71915

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	17.7	
75	30.0 - 80.0% of mass 95	47.2	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.6	(0.6)1
174	50.0 - 120% of mass 95	87.8	
175	5.0 - 9.0% of mass 174	6.3	(7.2)1
176	95.0 - 101% of mass 174	85.2	(97.1)1
177	5.0 - 9.0% of mass 176	5.8	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-71915/4	dlla04.d	05/08/2014	12:17
	MB 200-71915/6	dlla06.d	05/08/2014	13:06
MW-18S_042914	200-22132-2	dlla07.d	05/08/2014	13:31
FB-1_042914	200-22132-3	dlla08.d	05/08/2014	13:56
EB-2_042914	200-22132-4	dlla09.d	05/08/2014	14:20
TRIP BLANK	200-22132-5	dlla10.d	05/08/2014	14:45
MW-19D_050114	200-22155-2	dlla11.d	05/08/2014	15:09
MW-16S_050114	200-22155-3	dlla12.d	05/08/2014	15:34
MW-17S_050114	200-22155-4	dlla13.d	05/08/2014	15:58
MW-17D_050114	200-22155-5	dlla14.d	05/08/2014	16:23
MW-21D_050114	200-22155-6	dlla15.d	05/08/2014	16:47
MW-21S_050114	200-22155-7	dlla16.d	05/08/2014	17:12
MW-20S_050114	200-22155-9	dlla17.d	05/08/2014	17:37
MW-11D_050114	200-22155-10	dlla18.d	05/08/2014	18:01
MW-5D_050114	200-22155-11	dlla19.d	05/08/2014	18:26
MW-5D_050114 MS	200-22155-11 MS	dlla20.d	05/08/2014	18:50
MW-5D_050114 MSD	200-22155-11 MSD	dlla21.d	05/08/2014	19:15
DUP_050114	200-22155-12	dlla22.d	05/08/2014	19:40
MW-15D_050114	200-22155-13	dlla23.d	05/08/2014	20:04
FB-2_050114	200-22155-14	dlla24.d	05/08/2014	20:29
TRIP BLANK	200-22155-15	dlla25.d	05/08/2014	20:54
MW-12S_050114	200-22183-1	dlla26.d	05/08/2014	21:18
EB-4_050114	200-22183-2	dlla27.d	05/08/2014	21:43
	CCVC 200-71915/27	dlla28.d	05/08/2014	22:08

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Lab File ID: d11d01.d BFB Injection Date: 05/12/2014

Instrument ID: D.i BFB Injection Time: 12:59

Analysis Batch No.: 72030

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	19.7	
75	30.0 - 80.0% of mass 95	50.9	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.6	(0.7)1
174	50.0 - 120% of mass 95	88.6	
175	5.0 - 9.0% of mass 174	6.8	(7.7)1
176	95.0 - 101% of mass 174	84.5	(95.4)1
177	5.0 - 9.0% of mass 176	5.3	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-72030/8	d11d08.d	05/12/2014	15:50
	MB 200-72030/9	d11d09.d	05/12/2014	16:14
MW-5S_050214 DL	200-22183-10 DL	d11d10.d	05/12/2014	16:55
MW-20D_050214 DL	200-22183-7 DL	d11d12.d	05/12/2014	17:44
MW-11S_050214 DL	200-22183-5 DL	d11d13.d	05/12/2014	18:09
MW-15S_050214	200-22183-8	d11d14.d	05/12/2014	18:34
MW-12D_050214 DL	200-22183-6 DL	d11d16.d	05/12/2014	19:23
MW-12S_050114 DL	200-22183-1 DL	d11d17.d	05/12/2014	19:48
EB-6_050214	200-22183-11	d11d18.d	05/12/2014	20:12
FB-3_050214	200-22183-12	d11d19.d	05/12/2014	20:37
TB_050214	200-22183-13	d11d20.d	05/12/2014	21:01
	CCVC 200-72030/21	d11d21.d	05/12/2014	21:26

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Lab File ID: d11e01.d BFB Injection Date: 05/13/2014

Instrument ID: D.i BFB Injection Time: 09:59

Analysis Batch No.: 72092

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	20.7	
75	30.0 - 80.0% of mass 95	54.2	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.6	(0.8)1
174	50.0 - 120% of mass 95	84.7	
175	5.0 - 9.0% of mass 174	6.0	(7.1)1
176	95.0 - 101% of mass 174	82.5	(97.4)1
177	5.0 - 9.0% of mass 176	5.6	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-72092/3	d11e03.d	05/13/2014	10:54
	MB 200-72092/4	d11e04.d	05/13/2014	11:18
MW-24S_050114	200-22183-3	d11e06.d	05/13/2014	12:07
	VIBLK 200-72092/7	d11e07.d	05/13/2014	12:32
MW-15S_050214 DL	200-22183-8 DL	d11e08.d	05/13/2014	12:56
MW-7S_050214 DL	200-22183-9 DL	d11e09.d	05/13/2014	13:21
MW-5S_050214	200-22183-10	d11e10.d	05/13/2014	13:46
	VIBLK 200-72092/11	d11e11.d	05/13/2014	14:10
MW-11S_050214	200-22183-5	d11e12.d	05/13/2014	14:35
	VIBLK 200-72092/13	d11e13.d	05/13/2014	14:59
MW-12D_050214	200-22183-6	d11e14.d	05/13/2014	15:24
	VIBLK 200-72092/15	d11e15.d	05/13/2014	15:49
MW-24S_050114 DL	200-22183-3 DL	d11e16.d	05/13/2014	16:13
MW-7S_050214	200-22183-9	d11e17.d	05/13/2014	16:38
	VIBLK 200-72092/18	d11e18.d	05/13/2014	17:02
MW-20D_050214	200-22183-7	d11e19.d	05/13/2014	17:27
	VIBLK 200-72092/20	d11e20.d	05/13/2014	17:51
	CCVC 200-72092/25	d11e25.d	05/13/2014	19:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Lab File ID: dlm02.d BFB Injection Date: 05/14/2014

Instrument ID: D.i BFB Injection Time: 08:03

Analysis Batch No.: 72110

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	21.5	
75	30.0 - 80.0% of mass 95	55.8	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.8	(0.9)1
174	50.0 - 120% of mass 95	87.3	
175	5.0 - 9.0% of mass 174	6.1	(6.9)1
176	95.0 - 101% of mass 174	86.5	(99.2)1
177	5.0 - 9.0% of mass 176	5.3	(6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-72110/4	dlm04.d	05/14/2014	08:36
	IC 200-72110/5	dlm05.d	05/14/2014	09:01
	ICIS 200-72110/6	dlm06.d	05/14/2014	09:25
	IC 200-72110/7	dlm07.d	05/14/2014	09:50
	IC 200-72110/8	dlm08.d	05/14/2014	10:14
	MB 200-72110/14	dlm14.d	05/14/2014	12:47
VHBLK01	200-22132-6	dlm15.d	05/14/2014	13:12
	CCVC 200-72110/17	dlm17.d	05/14/2014	14:01

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Sample No.: CCVIS 200-71915/4 Date Analyzed: 05/08/2014 12:17

Instrument ID: D.i GC Column: DB-624 ID: 0.2(mm)

Lab File ID (Standard): dlla04.d Heated Purge: (Y/N) N

Calibration ID: 26693

		DFB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		417030	6.10	331698	9.48	167846	12.29
UPPER LIMIT		583842	6.43	464377	9.81	234984	12.62
LOWER LIMIT		250218	5.77	199019	9.15	100708	11.96
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-71915/6		416258	6.10	324318	9.48	159316	12.29
200-22132-2	MW-18S_042914	388321	6.10	304008	9.48	149897	12.29
200-22132-3	FB-1_042914	382764	6.10	304674	9.48	150220	12.29
200-22132-4	EB-2_042914	376780	6.10	296895	9.48	147601	12.29
200-22132-5	TRIP BLANK	367830	6.10	290856	9.48	146296	12.29
200-22155-2	MW-19D_050114	381619	6.10	305084	9.48	152959	12.29
200-22155-3	MW-16S_050114	360830	6.10	284130	9.48	143187	12.29
200-22155-4	MW-17S_050114	372271	6.11	293954	9.48	146239	12.29
200-22155-5	MW-17D_050114	350897	6.11	281506	9.48	141617	12.29
200-22155-6	MW-21D_050114	359840	6.11	288680	9.48	145264	12.29
200-22155-7	MW-21S_050114	351227	6.10	281108	9.48	140248	12.29
200-22155-9	MW-20S_050114	355617	6.11	282322	9.48	140870	12.29
200-22155-10	MW-11D_050114	346258	6.11	276574	9.48	136898	12.29
200-22155-11	MW-5D_050114	371260	6.11	295989	9.48	147183	12.29
200-22155-11 MS	MW-5D_050114 MS	345085	6.11	277659	9.48	137981	12.29
200-22155-11 MSD	MW-5D_050114 MSD	349977	6.11	275408	9.48	134943	12.29
200-22155-12	DUP_050114	358337	6.11	285180	9.48	137288	12.29
200-22155-13	MW-15D_050114	329644	6.11	264046	9.48	130555	12.29
200-22155-14	FB-2_050114	336278	6.10	268193	9.48	130409	12.29
200-22155-15	TRIP BLANK	336900	6.11	265561	9.48	129797	12.29
200-22183-1	MW-12S_050114	333911	6.11	263003	9.48	128839	12.29
200-22183-2	EB-4_050114	327971	6.11	263473	9.48	131362	12.29
CCVC 200-71915/27		338943	6.11	267068	9.48	133965	12.29

DFB = 1,4-Difluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII SOM01.2/VOA_TR

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Sample No.: CCVIS 200-72030/8 Date Analyzed: 05/12/2014 15:50

Instrument ID: D.i GC Column: DB-624 ID: 0.2(mm)

Lab File ID (Standard): dlld08.d Heated Purge: (Y/N) N

Calibration ID: 26693

		DFB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		279090	6.11	226563	9.48	116944	12.29
UPPER LIMIT		390726	6.44	317188	9.81	163722	12.62
LOWER LIMIT		167454	5.78	135938	9.15	70166	11.96
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-72030/9		278415	6.11	225441	9.48	111217	12.29
200-22183-10 DL	MW-5S_050214 DL	287321	6.11	226228	9.48	107874	12.29
200-22183-7 DL	MW-20D_050214 DL	306104	6.11	245057	9.48	119628	12.29
200-22183-5 DL	MW-11S_050214 DL	289232	6.11	233791	9.48	113733	12.29
200-22183-8	MW-15S_050214	291699	6.11	231625	9.48	113834	12.29
200-22183-6 DL	MW-12D_050214 DL	269472	6.11	214222	9.48	102597	12.29
200-22183-1 DL	MW-12S_050114 DL	264186	6.11	211875	9.48	102101	12.29
200-22183-11	EB-6_050214	245556	6.11	199013	9.48	99290	12.29
200-22183-12	FB-3_050214	243516	6.11	193286	9.48	94329	12.29
200-22183-13	TB_050214	254733	6.11	204346	9.48	97489	12.29
CCVC 200-72030/21		261556	6.11	209464	9.48	104400	12.29

DFB = 1,4-Difluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII SOM01.2/VOA_TR

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Sample No.: CCVIS 200-72092/3 Date Analyzed: 05/13/2014 10:54

Instrument ID: D.i GC Column: DB-624 ID: 0.2(mm)

Lab File ID (Standard): dlle03.d Heated Purge: (Y/N) N

Calibration ID: 26693

		DFB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		259679	6.10	210828	9.48	106188	12.29
UPPER LIMIT		363551	6.43	295159	9.81	148663	12.62
LOWER LIMIT		155807	5.77	126497	9.15	63713	11.96
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-72092/4		254899	6.11	199796	9.48	94403	12.29
200-22183-3	MW-24S_050114	239572	6.11	191712	9.48	92065	12.29
VIBLK 200-72092/7		234788	6.11	187415	9.48	89920	12.29
200-22183-8 DL	MW-15S_050214 DL	232527	6.11	189188	9.48	92075	12.29
200-22183-9 DL	MW-7S_050214 DL	247810	6.11	192914	9.48	93092	12.29
200-22183-10	MW-5S_050214	239193	6.11	190653	9.48	90615	12.29
VIBLK 200-72092/11		235272	6.11	190427	9.48	91269	12.29
200-22183-5	MW-11S_050214	231977	6.11	185493	9.48	89528	12.29
VIBLK 200-72092/13		227938	6.11	179992	9.48	85928	12.29
200-22183-6	MW-12D_050214	219239	6.11	178801	9.48	87714	12.29
VIBLK 200-72092/15		218583	6.11	176771	9.48	86910	12.29
200-22183-3 DL	MW-24S_050114 DL	220399	6.11	178628	9.48	87892	12.29
200-22183-9	MW-7S_050214	217424	6.11	173796	9.48	84683	12.29
VIBLK 200-72092/18		228626	6.11	183540	9.48	90289	12.29
200-22183-7	MW-20D_050214	214107	6.11	172026	9.48	83214	12.29
VIBLK 200-72092/20		222387	6.11	180295	9.48	85771	12.29
CCVC 200-72092/25		200933	6.11	166550	9.48	84397	12.29

DFB = 1,4-Difluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII SOM01.2/VOA_TR

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Sample No.: ICIS 200-72110/6 Date Analyzed: 05/14/2014 09:25

Instrument ID: D.i GC Column: DB-624 ID: 0.2(mm)

Lab File ID (Standard): dlm06.d Heated Purge: (Y/N) N

Calibration ID: 26840

		DFB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		198425	6.11	165806	9.48	84278	12.29
UPPER LIMIT		277795	6.44	232128	9.81	117989	12.62
LOWER LIMIT		119055	5.78	99484	9.15	50567	11.96
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-72110/14		219067	6.11	178012	9.48	84283	12.29
200-22132-6	VHBLK01	201255	6.11	163981	9.48	79817	12.29
CCVC 200-72110/17		215467	6.11	176591	9.48	88334	12.29

DFB = 1,4-Difluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII SOM01.2/VOA_TR

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington
Job No.: 200-22132-1
SDG No.: 200-22132
Client Sample ID: MW-18S_042914
Lab Sample ID: 200-22132-2
Matrix: Water
Lab File ID: d11a07.d
Analysis Method: SOM01.2/VOA_Tr
Date Collected: 04/29/2014 12:07
Sample wt/vol: 25(mL)
Date Analyzed: 05/08/2014 13:31
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.2(mm)
% Moisture:
Level: (low/med) Trace
Analysis Batch No.: 71915
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.074
74-87-3	Chloromethane	0.50	U	0.50	0.062
75-01-4	Vinyl chloride	0.50	U	0.50	0.067
74-83-9	Bromomethane	0.21	J B	0.50	0.069
75-00-3	Chloroethane	0.50	U	0.50	0.093
75-69-4	Trichlorofluoromethane	0.50	U	0.50	0.099
75-35-4	1,1-Dichloroethene	0.50	U	0.50	0.037
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	0.038
67-64-1	Acetone	5.0	U	5.0	0.92
75-15-0	Carbon disulfide	0.50	U	0.50	0.050
79-20-9	Methyl acetate	0.50	U	0.50	0.14
75-09-2	Methylene chloride	0.50	U	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.50	0.047
1634-04-4	Methyl tert-butyl ether	0.50	U	0.50	0.062
75-34-3	1,1-Dichloroethane	0.50	U	0.50	0.075
156-59-2	cis-1,2-Dichloroethene	0.50	U	0.50	0.053
78-93-3	2-Butanone	5.0	U	5.0	0.89
74-97-5	Bromochloromethane	0.50	U	0.50	0.073
67-66-3	Chloroform	0.50	U	0.50	0.081
71-55-6	1,1,1-Trichloroethane	0.50	U	0.50	0.078
110-82-7	Cyclohexane	0.50	U	0.50	0.066
56-23-5	Carbon tetrachloride	0.50	U	0.50	0.066
71-43-2	Benzene	0.50	U	0.50	0.064
107-06-2	1,2-Dichloroethane	0.50	U	0.50	0.089
79-01-6	Trichloroethene	0.50	U	0.50	0.080
108-87-2	Methylcyclohexane	0.50	U	0.50	0.077
78-87-5	1,2-Dichloropropane	0.50	U	0.50	0.070
75-27-4	Bromodichloromethane	0.50	U	0.50	0.061
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	0.060
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.82
108-88-3	Toluene	0.97		0.50	0.068
10061-02-6	trans-1,3-Dichloropropene	0.50	U	0.50	0.22
79-00-5	1,1,2-Trichloroethane	0.50	U	0.50	0.087
127-18-4	Tetrachloroethene	0.50	U	0.50	0.078
591-78-6	2-Hexanone	5.0	U	5.0	0.95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: MW-18S_042914 | Lab Sample ID: 200-22132-2

Matrix: Water | Lab File ID: d11a07.d

Analysis Method: SOM01.2/VOA_Tr | Date Collected: 04/29/2014 12:07

Sample wt/vol: 25(mL) | Date Analyzed: 05/08/2014 13:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.2(mm)

% Moisture: | Level: (low/med) Trace

Analysis Batch No.: 71915 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.50	U	0.50	0.067
106-93-4	1,2-Dibromoethane	0.50	U	0.50	0.058
108-90-7	Chlorobenzene	0.50	U	0.50	0.063
100-41-4	Ethylbenzene	0.50	U	0.50	0.059
95-47-6	o-Xylene	0.50	U	0.50	0.065
179601-23-1	m,p-Xylene	0.50	U	0.50	0.068
100-42-5	Styrene	0.50	U	0.50	0.061
75-25-2	Bromoform	0.50	U	0.50	0.083
98-82-8	Isopropylbenzene	0.50	U	0.50	0.058
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.50	0.091
541-73-1	1,3-Dichlorobenzene	0.50	U	0.50	0.064
106-46-7	1,4-Dichlorobenzene	0.50	U	0.50	0.059
95-50-1	1,2-Dichlorobenzene	0.50	U	0.50	0.072
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U	0.50	0.16
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.066
87-61-6	1,2,3-Trichlorobenzene	0.50	U	0.50	0.091

CAS NO.	SURROGATE	%REC	Q	LIMITS
6745-35-3	Vinyl chloride-d3	103		65-131
19199-91-8	Chloroethane-d5	101		71-131
22280-73-5	1,1-Dichloroethene-d2	79		55-104
24313-50-6	2-Butanone-d5	88		49-155
865-49-6	Chloroform-d	94		78-121
17060-07-0	1,2-Dichloroethane-d4	100		78-129
1076-43-3	Benzene-d6	101		77-124
93952-08-0	1,2-Dichloropropane-d6	84		79-124
2037-26-5	Toluene-d8	100		77-121
93951-86-1	trans-1,3-Dichloropropene-d4	96		73-121
4840-82-8	2-Hexanone-d5	96		28-135
33685-54-0	1,1,2,2-Tetrachloroethane-d2	92		73-125
2199-69-1	1,2-Dichlorobenzene-d4	94		80-131

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: MW-18S_042914 Lab Sample ID: 200-22132-2

Matrix: Water Lab File ID: dlla07.d

Analysis Method: SOM01.2/VOA_Tr Date Collected: 04/29/2014 12:07

Sample wt/vol: 25(mL) Date Analyzed: 05/08/2014 13:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.2(mm)

% Moisture: Level: (low/med) Trace

Analysis Batch No.: 71915 Units: ug/L

Number TICs Found: 4 TIC Result Total: 6.55

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	4.64	0.55	J
	Unknown	7.43	3.0	J B
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	1.1	J N
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	1.9	J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: MW-18S_042914 Lab Sample ID: 200-22132-2

Matrix: Water Lab File ID: d11a07.d

Analysis Method: SOM01.2/VOA_Tr Date Collected: 04/29/2014 12:07

Sample wt/vol: 25(mL) Date Analyzed: 05/08/2014 13:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.2(mm)

% Moisture: Level: (low/med) Trace

Analysis Batch No.: 71915 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes			

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 200-22132-1

SDG Number: 200-22132

Job Description: AMETEK - Sellersville

For:
Langan Engineering & Environmental Srvcs
2700 Kelly Road
Suite 200
Warrington, PA 18976

Attention: Valentina Beneski

Approved for release.
Kathryn A Kelly
Project Manager I
5/16/2014 5:00 PM

Kathryn A Kelly, Project Manager I
30 Community Drive, South Burlington, VT, 05403
kathryn.kelly@testamericainc.com
05/16/2014

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

Table of Contents

Cover Title Page 1

Data Summaries 4

Report Narrative 4

Manual Integration Summary 6

Sample Summary 23

Executive Summary 24

Method Summary 31

Method / Analyst Summary 32

Sample Datasheets 33

Surrogate Summary 168

QC Data Summary 173

Data Qualifiers 186

QC Association Summary 187

Lab Chronicle 191

Reagent Traceability 202

COAs 210

Certification Summary 234

Organic Sample Data 235

GC/MS VOA 235

Method SOM01.2 Vol Tr 235

Method SOM01.2 Vol Tr QC Summary 236

Method SOM01.2 Vol Tr Sample Data 255

Standards Data 949

Method SOM01.2 Vol Tr ICAL Data 949

Method SOM01.2 Vol Tr CCAL Data 1009

Raw QC Data 1051

TestAmerica Burlington

LOW CONCENTRATION VOLATILE QUANTITATION REPORT

Lab Sample Id: 200-22132-2
Client Smp ID: MW-18S_042914
Inj Date : 08-MAY-2014 13:31
Operator : MTP Inst ID: D.i
Smp Info : 200-22132-B-2
Misc Info : 1,5
Comment :
Method : /chem/D.i/Dsvr.p/dllasmtr.b/somtr5t.m
Meth Date : 09-May-2014 10:52 wilburj Quant Type: ISTD
Cal Date : 08-MAY-2014 10:19 Cal File: dll07.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOMTrace.sub
Target Version: 3.50
Processing Host: chemsvr6

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vo	25.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
	1 Dichlorodifluoromethane	85	Compound Not Detected.					
	2 Chloromethane	50	Compound Not Detected.					
$	3 Vinyl chloride-d3	65	1.771	1.771	(0.290)	115645	129.282	5.2
	4 Vinyl chloride	62	Compound Not Detected.					
	5 Bromomethane	94	2.070	2.070	(0.339)	1745	5.28720	0.21(aQ)
$	6 Chloroethane-d5	69	2.131	2.131	(0.349)	85214	125.841	5.0
	7 Chloroethane	64	Compound Not Detected.					
	8 Trichlorofluoromethane	101	Compound Not Detected.					
$	9 1,1-Dichloroethene-d2	63	2.838	2.838	(0.465)	181700	98.9030	4.0
	10 1,1-Dichloroethene	96	Compound Not Detected.					
	11 1,1,2-Trichloro-1,2,2-trifluo	101	Compound Not Detected.					
	12 Acetone	43	Compound Not Detected.					
	13 Carbon disulfide	76	Compound Not Detected.					
	14 Methyl acetate	43	Compound Not Detected.					
	15 Methylene chloride	84	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
	16 trans-1,2-Dichloroethene	96	Compound Not Detected.					
	17 Methyl tert-butyl ether	73	Compound Not Detected.					
	18 1,1-Dichloroethane	63	Compound Not Detected.					
$	19 2-Butanone-d5	46	4.679	4.703	(0.767)	111924	1103.18	44
	20 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	21 2-Butanone	43	Compound Not Detected.					
	22 Bromochloromethane	128	Compound Not Detected.					
$	23 Chloroform-d	84	5.026	5.026	(0.824)	181850	117.408	4.7
	24 Chloroform	83	Compound Not Detected.					
	25 1,1,1-Trichloroethane	97	Compound Not Detected.					
	26 Cyclohexane	56	Compound Not Detected.					
	27 Carbon tetrachloride	117	Compound Not Detected.					
$	28 1,2-Dichloroethane-d4	65	5.612	5.612	(0.920)	68154	124.410	5.0
$	29 Benzene-d6	84	5.630	5.630	(0.594)	447096	125.869	5.0
	30 Benzene	78	5.673	5.673	(0.599)	2373	0.64885	0.026(a)
	31 1,2-Dichloroethane	62	Compound Not Detected.					
*	32 1,4-Difluorobenzene	114	6.099	6.099	(1.000)	388321	125.000	
	33 Trichloroethene	95	6.392	6.392	(0.674)	1718	1.78806	0.072(a)
$	34 1,2-Dichloropropane-d6	67	6.550	6.550	(0.691)	104229	104.818	4.2
	35 Methylcyclohexane	55	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	38 cis-1,3-Dichloropropene	75	Compound Not Detected.					
	39 4-Methyl-2-pentanone	43	Compound Not Detected.					
$	40 Toluene-d8	98	7.782	7.782	(0.821)	437955	124.522	5.0
	41 Toluene	91	7.861	7.861	(0.830)	96752	24.2690	0.97
$	42 trans-1,3-Dichloropropene-d4	79	8.087	8.087	(0.853)	86889	119.549	4.8
	43 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	44 1,1,2-Trichloroethane	97	Compound Not Detected.					
	45 Tetrachloroethene	163	Compound Not Detected.					
$	46 2-Hexanone-d5	63	8.599	8.599	(0.907)	99210	1201.85	48
	47 2-Hexanone	43	Compound Not Detected.					
	48 Dibromochloromethane	129	Compound Not Detected.					
	49 1,2-Dibromoethane	107	Compound Not Detected.					
*	50 Chlorobenzene-d5	117	9.477	9.477	(1.000)	304008	125.000	
	51 Chlorobenzene	112	Compound Not Detected.					
	52 Ethylbenzene	91	Compound Not Detected.					
	53 m,p-Xylene	106	9.781	9.782	(1.032)	1028	0.53089	0.021(aQ)
	55 o-Xylene	106	Compound Not Detected.					
	54 Styrene	104	Compound Not Detected.					
	56 Bromoform	172	Compound Not Detected.					
	57 Isopropylbenzene	105	Compound Not Detected.					
$	58 1,1,2,2-Tetrachloroethane-d2	84	11.050	11.050	(1.166)	39288	114.753	4.6
	59 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	60 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	61 1,4-Dichlorobenzene-d4	152	12.293	12.293	(1.000)	149897	125.000	
	62 1,4-Dichlorobenzene	146	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
$ 63 1,2-Dichlorobenzene-d4	152	12.720	12.720	(1.035)	125482	116.939	4.7
64 1,2-Dichlorobenzene	146	Compound Not Detected.					
65 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.					
66 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
67 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

TestAmerica Burlington

LOW CONCENTRATION VOLATILE QUANTITATION REPORT

Lab Sample Id: 200-22132-2
Client Smp ID: MW-18S_042914
Inj Date : 08-MAY-2014 13:31
Operator : MTP Inst ID: D.i
Smp Info : 200-22132-B-2
Misc Info : 1,5
Comment :
Method : /chem/D.i/Dsvr.p/dllasmtr.b/somtr5t.m
Meth Date : 09-May-2014 10:52 wilburj Quant Type: ISTD
Cal Date : 08-MAY-2014 10:19 Cal File: dll07.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOMTrace.sub
Target Version: 3.50
Processing Host: chemsvr6

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vo	25.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 32 1,4-Difluorobenzene	6.099	845578	125.000
* 50 Chlorobenzene-d5	9.477	876300	125.000
* 61 1,4-Dichlorobenzene-d4	12.293	833603	125.000

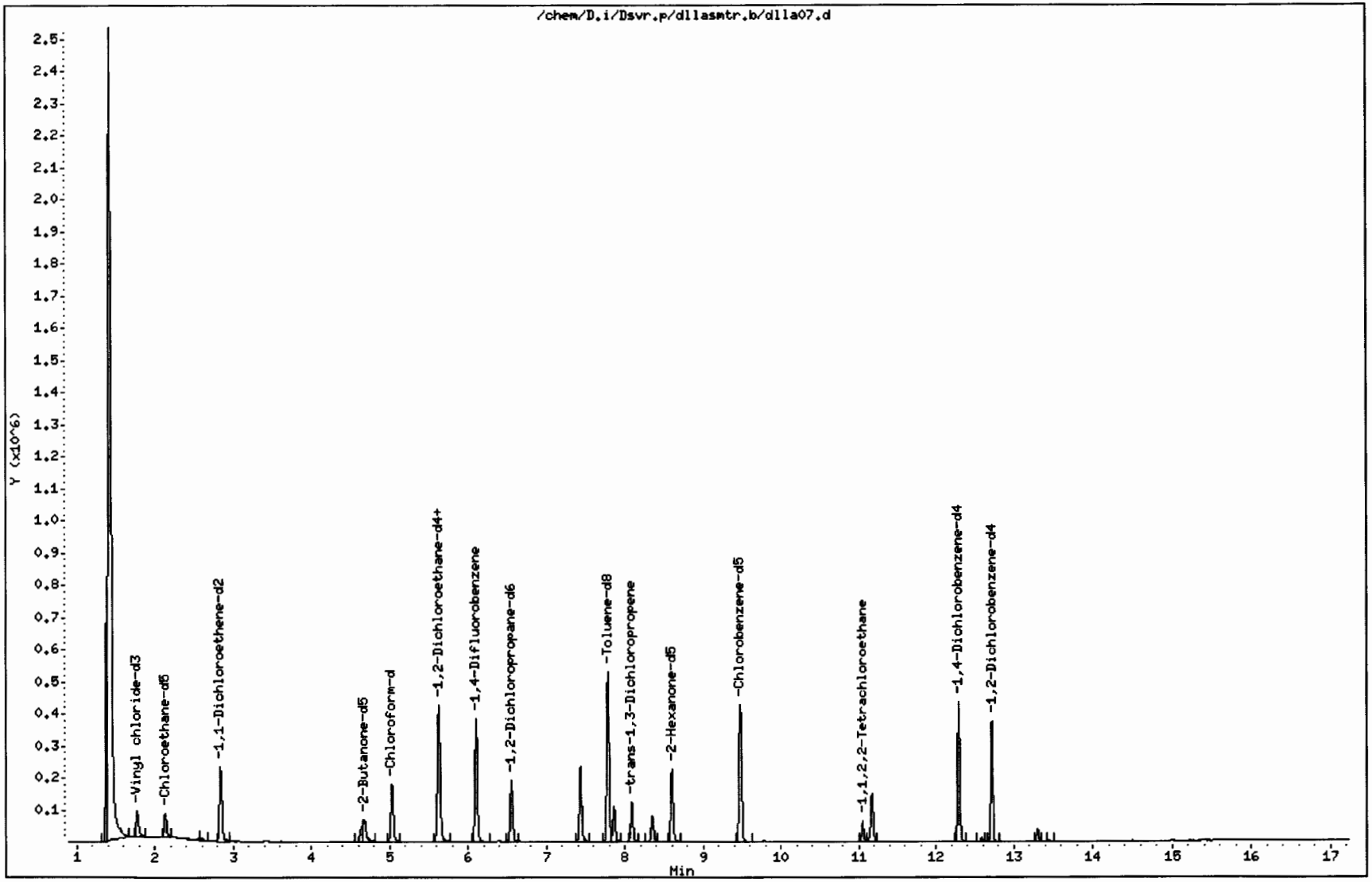
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
4.636	92920	13.7361830	0.55	0		0	32

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/L)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
7.434	510618	75.4835049	3.0	0		0	32
Cyclotrisiloxane, hexamethyl-				CAS #: 541-05-9			
8.349	190050	27.1096952	1.1	91	NIST05.1	73123	50
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
11.171	322523	48.3627020	1.9	91	NIST05.1	122480	61

Data File: /chem/D.i/Dsvr.p/dllasmtr.b/dlla07.d
Date : 08-MAY-2014 13:31
Client ID: MW-18S_042914
Sample Info: 200-22132-B-2
Purge Volume: 25.0
Column phase: DB-624

Instrument: D.i

Operator: HTP
Column diameter: 0.20



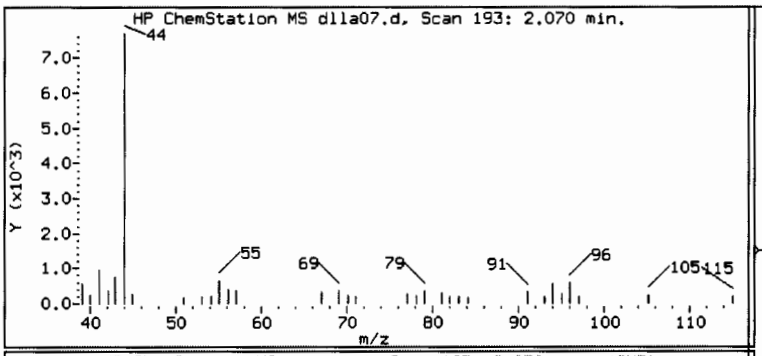
Data File: dlla07.d

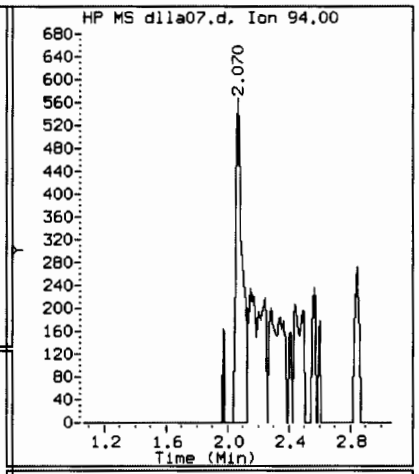
Lab Sample ID: 200-22132-2 Date: 08-MAY-2014 13:31

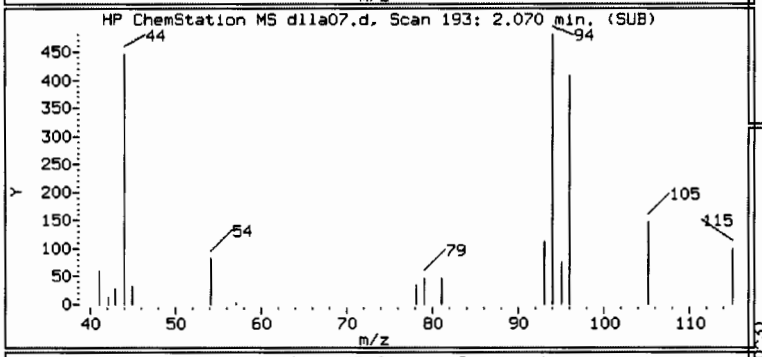
Client ID: MW-18S_042914 Instrument: D.i

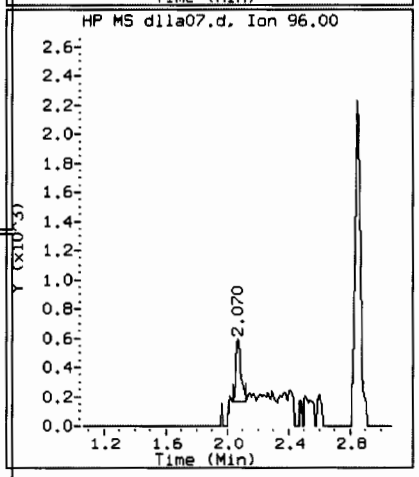
Sample Info: 200-22132-B-2 Operator: MTP

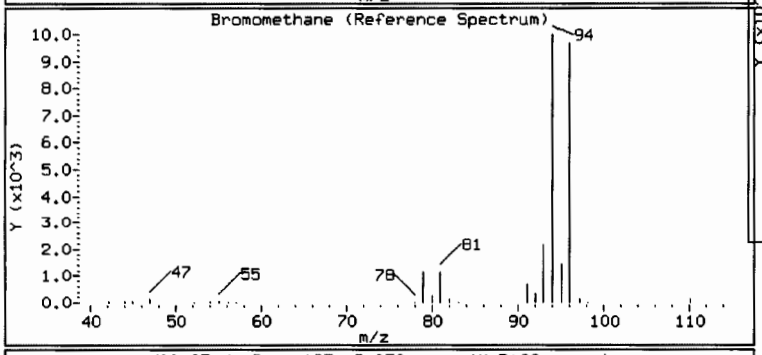
5 Bromomethane

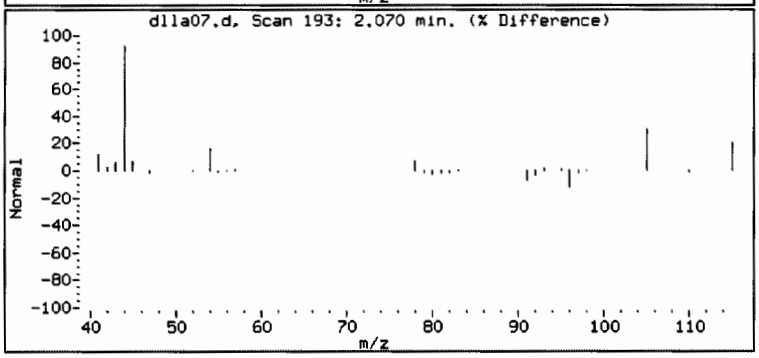












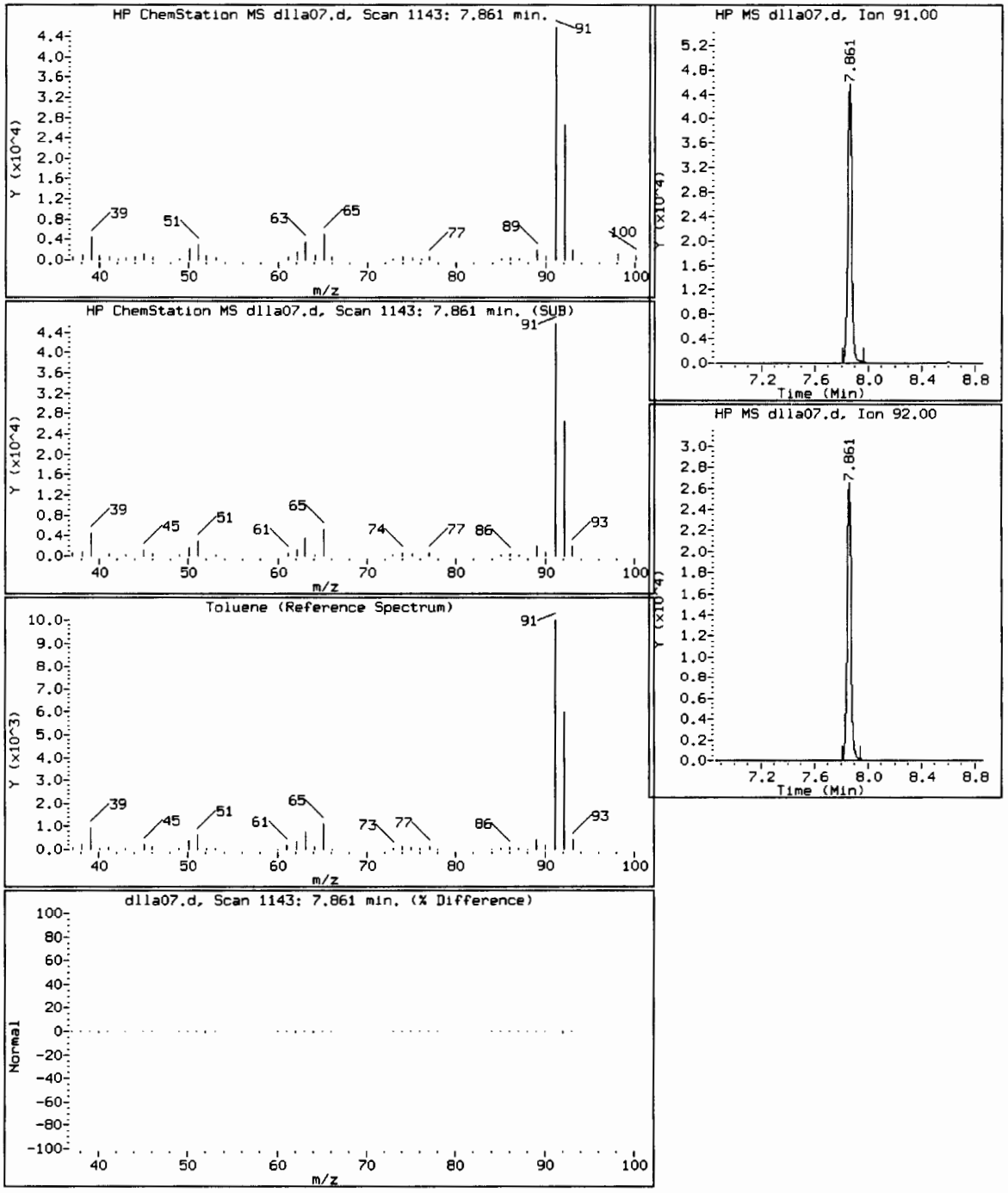
Data File: dlla07.d

Lab Sample ID: 200-22132-2 Date: 08-MAY-2014 13:31

Client ID: MW-18S_042914 Instrument: D.i

Sample Info: 200-22132-B-2 Operator: MTP

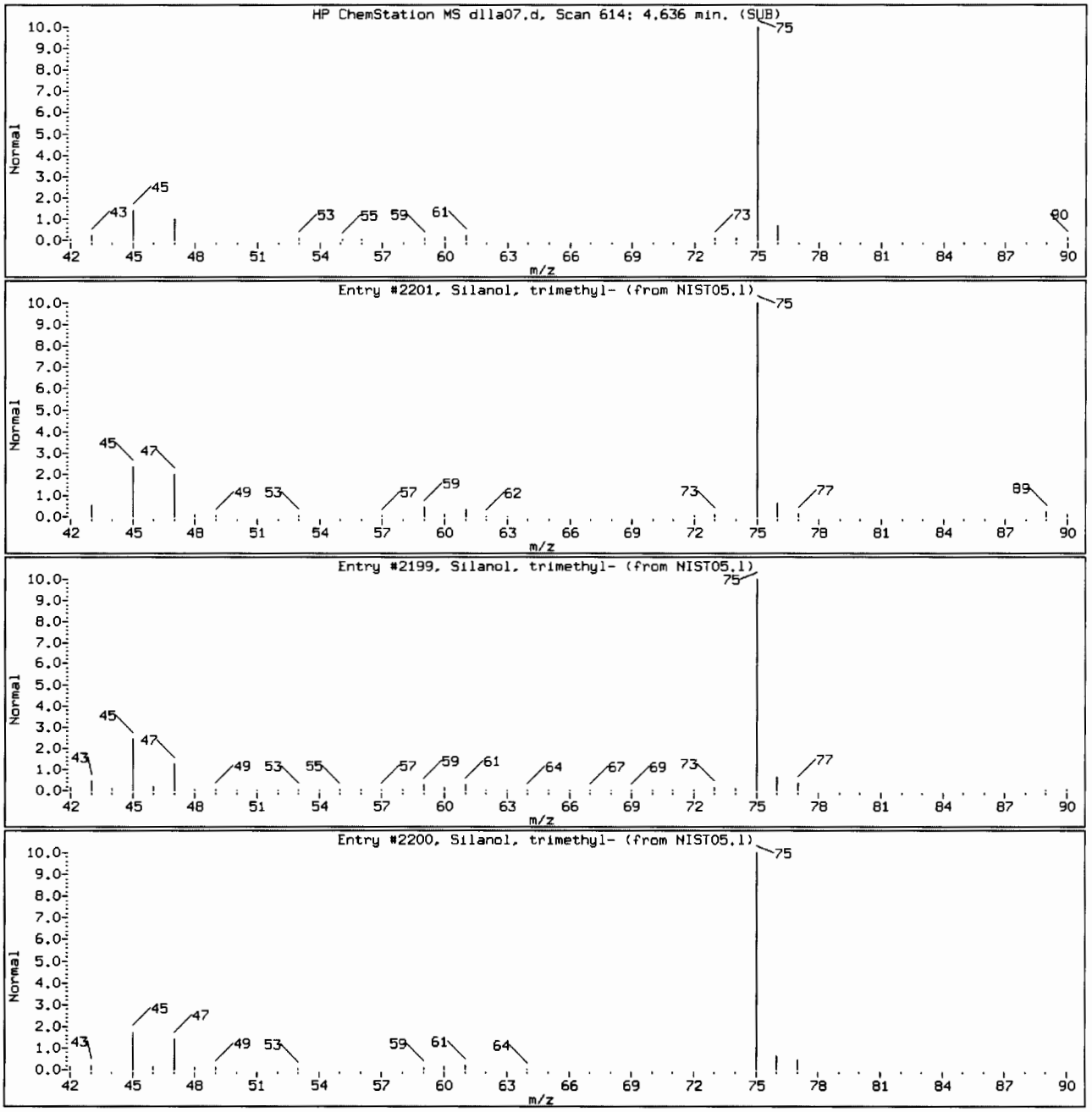
41 Toluene



Data File: d11a07.d
Lab Sample ID: 200-22132-2 Date: 08-MAY-2014 13:31
Client ID: MW-18S_042914 Instrument: D.i
Sample Info: 200-22132-B-2 Operator: MTP

Retention Time: 4.64

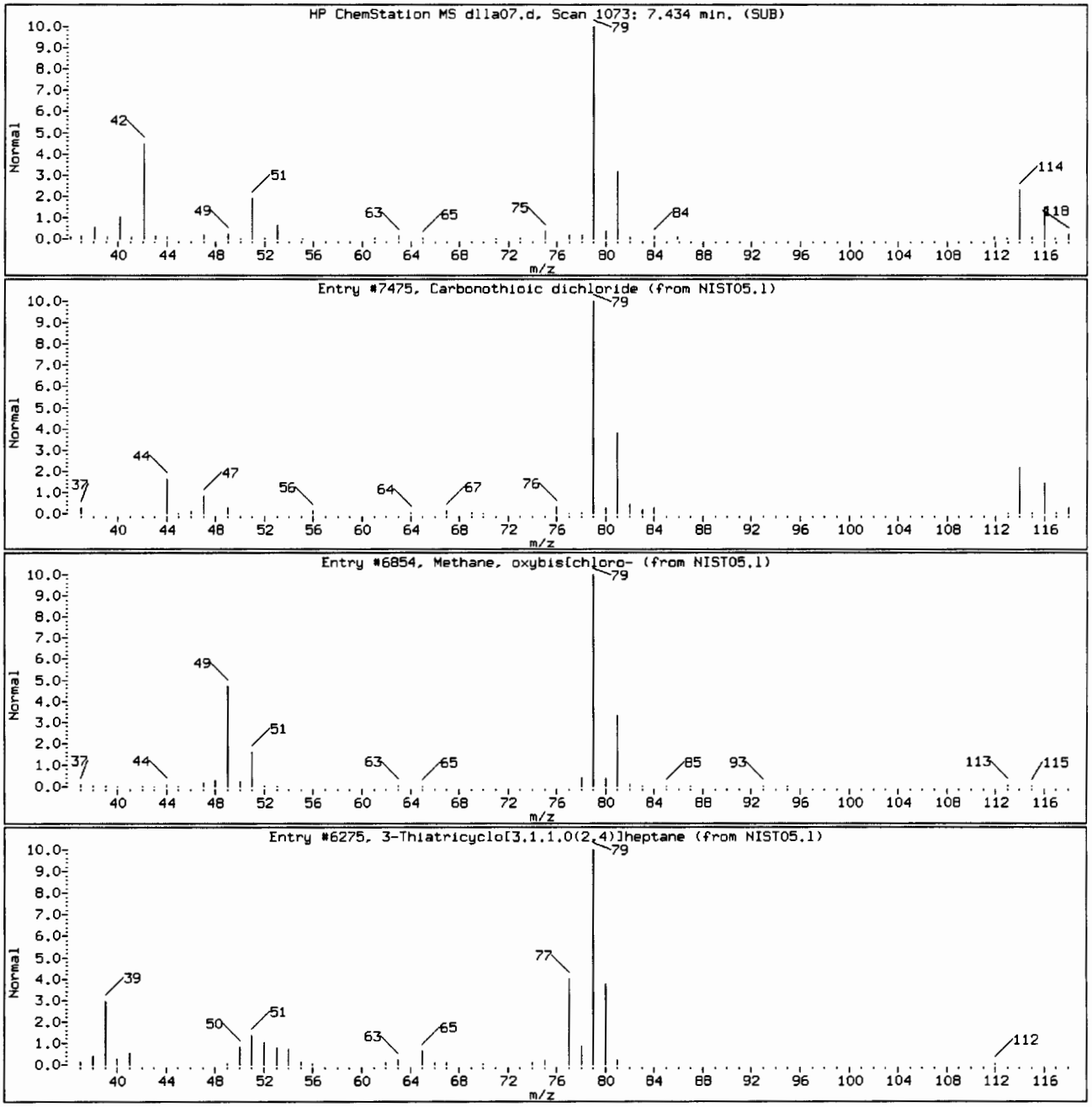
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silanol, trimethyl-	1066-40-6	NIST05.1	2201	83	C3H10OSi	90
Silanol, trimethyl-	1066-40-6	NIST05.1	2199	78	C3H10OSi	90
Silanol, trimethyl-	1066-40-6	NIST05.1	2200	78	C3H10OSi	90



Data File: d11a07.d
Lab Sample ID: 200-22132-2 Date: 08-MAY-2014 13:31
Client ID: MW-18S_042914 Instrument: D.i
Sample Info: 200-22132-B-2 Operator: MTP

Retention Time: 7.43

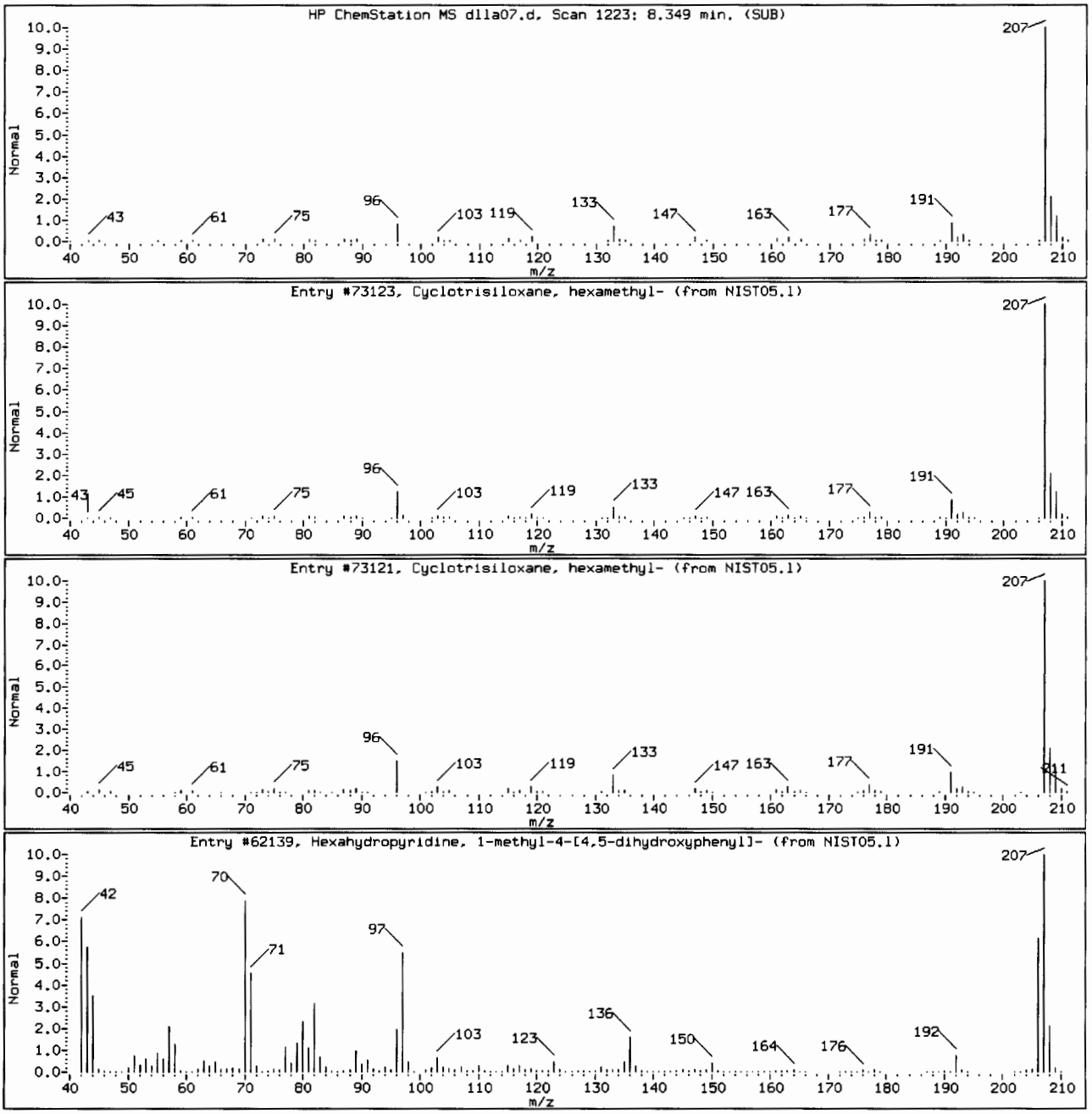
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Carbonothioic dichloride	463-71-8	NIST05.1	7475	52	CCl2S	114
Methane, oxybis[chloro-	542-88-1	NIST05.1	6854	37	C2H4Cl2O	114
3-Thiatricyclo[3.1.1.0(2,4)]heptan	1000221-37-0	NIST05.1	6275	25	C6H8S	112



Data File: dlla07.d
Lab Sample ID: 200-22132-2 Date: 08-MAY-2014 13:31
Client ID: MW-18S_042914 Instrument: D.i
Sample Info: 200-22132-B-2 Operator: MTP

Retention Time: 8.35

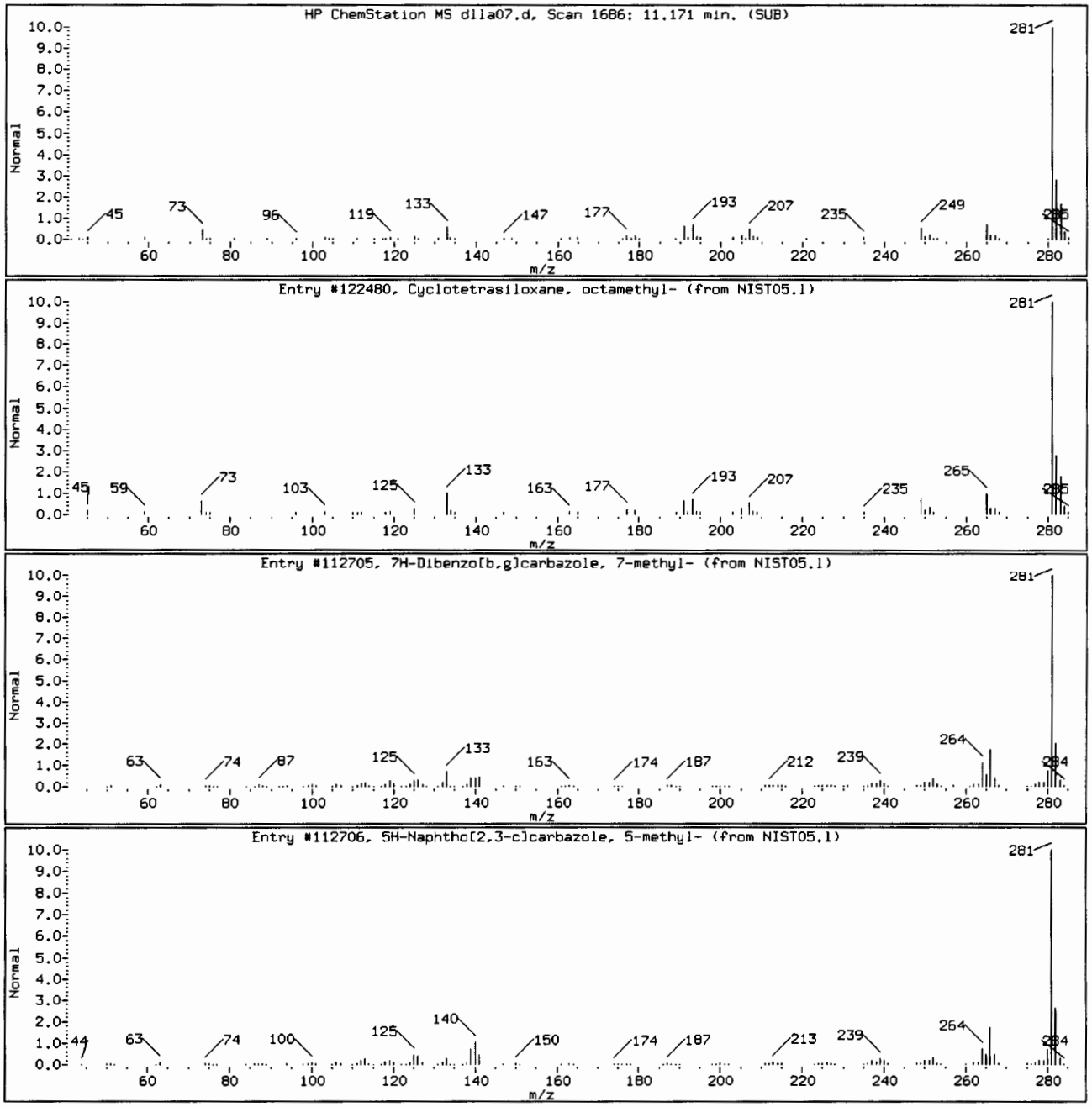
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.1	73123	91	C6H18O3Si3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.1	73121	90	C6H18O3Si3	222
Hexahydropyridine, 1-methyl-4-[4,5	94427-47-1	NIST05.1	62139	59	C12H17NO2	207



Data File: d11a07.d
Lab Sample ID: 200-22132-2 Date: 08-MAY-2014 13:31
Client ID: MW-18S_042914 Instrument: D.i
Sample Info: 200-22132-B-2 Operator: MTP

Retention Time: 11.17

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.1	122480	91	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl	3557-49-1	NIST05.1	112705	59	C21H15N	281
5H-Naphtho[2,3-c]carbazole, 5-meth	100025-44-3	NIST05.1	112706	50	C21H15N	281



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: FB-1_042914 | Lab Sample ID: 200-22132-3

Matrix: Water | Lab File ID: d11a08.d

Analysis Method: SOM01.2/VOA_Tr | Date Collected: 04/29/2014 16:00

Sample wt/vol: 25(mL) | Date Analyzed: 05/08/2014 13:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.2(mm)

% Moisture: | Level: (low/med) Trace

Analysis Batch No.: 71915 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.074
74-87-3	Chloromethane	0.50	U	0.50	0.062
75-01-4	Vinyl chloride	0.50	U	0.50	0.067
74-83-9	Bromomethane	0.21	J B	0.50	0.069
75-00-3	Chloroethane	0.50	U	0.50	0.093
75-69-4	Trichlorofluoromethane	0.50	U	0.50	0.099
75-35-4	1,1-Dichloroethene	0.50	U	0.50	0.037
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	0.038
67-64-1	Acetone	5.0	U	5.0	0.92
75-15-0	Carbon disulfide	0.50	U	0.50	0.050
79-20-9	Methyl acetate	0.50	U	0.50	0.14
75-09-2	Methylene chloride	0.36	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.50	0.047
1634-04-4	Methyl tert-butyl ether	0.50	U	0.50	0.062
75-34-3	1,1-Dichloroethane	0.50	U	0.50	0.075
156-59-2	cis-1,2-Dichloroethene	0.50	U	0.50	0.053
78-93-3	2-Butanone	5.0	U	5.0	0.89
74-97-5	Bromochloromethane	0.50	U	0.50	0.073
67-66-3	Chloroform	0.50	U	0.50	0.081
71-55-6	1,1,1-Trichloroethane	0.50	U	0.50	0.078
110-82-7	Cyclohexane	0.50	U	0.50	0.066
56-23-5	Carbon tetrachloride	0.50	U	0.50	0.066
71-43-2	Benzene	0.50	U	0.50	0.064
107-06-2	1,2-Dichloroethane	0.50	U	0.50	0.089
79-01-6	Trichloroethene	0.50	U	0.50	0.080
108-87-2	Methylcyclohexane	0.50	U	0.50	0.077
78-87-5	1,2-Dichloropropane	0.50	U	0.50	0.070
75-27-4	Bromodichloromethane	0.50	U	0.50	0.061
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	0.060
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.82
108-88-3	Toluene	0.50	U	0.50	0.068
10061-02-6	trans-1,3-Dichloropropene	0.50	U	0.50	0.22
79-00-5	1,1,2-Trichloroethane	0.50	U	0.50	0.087
127-18-4	Tetrachloroethene	0.50	U	0.50	0.078
591-78-6	2-Hexanone	5.0	U	5.0	0.95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: FB-1_042914 | Lab Sample ID: 200-22132-3

Matrix: Water | Lab File ID: d1la08.d

Analysis Method: SOM01.2/VOA_Tr | Date Collected: 04/29/2014 16:00

Sample wt/vol: 25(mL) | Date Analyzed: 05/08/2014 13:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.2(mm)

% Moisture: | Level: (low/med) Trace

Analysis Batch No.: 71915 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.50	U	0.50	0.067
106-93-4	1,2-Dibromoethane	0.50	U	0.50	0.058
108-90-7	Chlorobenzene	0.50	U	0.50	0.063
100-41-4	Ethylbenzene	0.50	U	0.50	0.059
95-47-6	o-Xylene	0.50	U	0.50	0.065
179601-23-1	m,p-Xylene	0.50	U	0.50	0.068
100-42-5	Styrene	0.50	U	0.50	0.061
75-25-2	Bromoform	0.50	U	0.50	0.083
98-82-8	Isopropylbenzene	0.50	U	0.50	0.058
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.50	0.091
541-73-1	1,3-Dichlorobenzene	0.50	U	0.50	0.064
106-46-7	1,4-Dichlorobenzene	0.50	U	0.50	0.059
95-50-1	1,2-Dichlorobenzene	0.50	U	0.50	0.072
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U	0.50	0.16
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.066
87-61-6	1,2,3-Trichlorobenzene	0.50	U	0.50	0.091

CAS NO.	SURROGATE	%REC	Q	LIMITS
6745-35-3	Vinyl chloride-d3	104		65-131
19199-91-8	Chloroethane-d5	101		71-131
22280-73-5	1,1-Dichloroethene-d2	80		55-104
24313-50-6	2-Butanone-d5	90		49-155
865-49-6	Chloroform-d	97		78-121
17060-07-0	1,2-Dichloroethane-d4	102		78-129
1076-43-3	Benzene-d6	100		77-124
93952-08-0	1,2-Dichloropropane-d6	85		79-124
2037-26-5	Toluene-d8	100		77-121
93951-86-1	trans-1,3-Dichloropropene-d4	95		73-121
4840-82-8	2-Hexanone-d5	95		28-135
33685-54-0	1,1,2,2-Tetrachloroethane-d2	91		73-125
2199-69-1	1,2-Dichlorobenzene-d4	95		80-131

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: FB-1_042914 Lab Sample ID: 200-22132-3

Matrix: Water Lab File ID: dlla08.d

Analysis Method: SOM01.2/VOA_Tr Date Collected: 04/29/2014 16:00

Sample wt/vol: 25(mL) Date Analyzed: 05/08/2014 13:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.2(mm)

% Moisture: Level: (low/med) Trace

Analysis Batch No.: 71915 Units: ug/L

Number TICs Found: 4 TIC Result Total: 7.29

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	4.64	0.79	J
	Unknown	7.43	3.0	J B
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	1.5	J N
	Unknown	11.17	2.0	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: FB-1_042914 Lab Sample ID: 200-22132-3

Matrix: Water Lab File ID: dlla08.d

Analysis Method: SOM01.2/VOA_Tr Date Collected: 04/29/2014 16:00

Sample wt/vol: 25(mL) Date Analyzed: 05/08/2014 13:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.2(mm)

% Moisture: Level: (low/med) Trace

Analysis Batch No.: 71915 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes			

TestAmerica Burlington

LOW CONCENTRATION VOLATILE QUANTITATION REPORT

Lab Sample Id: 200-22132-3
Client Smp ID: FB-1_042914
Inj Date : 08-MAY-2014 13:56
Operator : MTP Inst ID: D.i
Smp Info : 200-22132-C-3
Misc Info : 1,5
Comment :
Method : /chem/D.i/Dsvr.p/dllasmtr.b/somtr5t.m
Meth Date : 09-May-2014 10:52 wilburj Quant Type: ISTD
Cal Date : 08-MAY-2014 10:19 Cal File: dll07.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOMTrace.sub
Target Version: 3.50
Processing Host: chemsvr6

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vo	25.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
	1 Dichlorodifluoromethane	85	Compound Not Detected.					
	2 Chloromethane	50	Compound Not Detected.					
$	3 Vinyl chloride-d3	65	1.777	1.771	(0.291)	115085	130.523	5.2
	4 Vinyl chloride	62	Compound Not Detected.					
	5 Bromomethane	94	2.075	2.070	(0.340)	1738	5.34244	0.21(a)
$	6 Chloroethane-d5	69	2.130	2.131	(0.349)	84023	125.884	5.0
	7 Chloroethane	64	Compound Not Detected.					
	8 Trichlorofluoromethane	101	Compound Not Detected.					
$	9 1,1-Dichloroethene-d2	63	2.838	2.838	(0.465)	180465	99.6569	4.0
	10 1,1-Dichloroethene	96	Compound Not Detected.					
	11 1,1,2-Trichloro-1,2,2-trifluo	101	Compound Not Detected.					
	12 Acetone	43	Compound Not Detected.					
	13 Carbon disulfide	76	Compound Not Detected.					
	14 Methyl acetate	43	Compound Not Detected.					
	15 Methylene chloride	84	3.325	3.325	(0.545)	6234	9.03791	0.36(a)
	16 trans-1,2-Dichloroethene	96	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
	17 Methyl tert-butyl ether	73	Compound Not Detected.					
	18 1,1-Dichloroethane	63	Compound Not Detected.					
$	19 2-Butanone-d5	46	4.679	4.703	(0.767)	112469	1124.65	45
	20 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	21 2-Butanone	43	Compound Not Detected.					
	22 Bromochloromethane	128	Compound Not Detected.					
$	23 Chloroform-d	84	5.026	5.026	(0.824)	184603	120.915	4.8
	24 Chloroform	83	Compound Not Detected.					
	25 1,1,1-Trichloroethane	97	Compound Not Detected.					
	26 Cyclohexane	56	Compound Not Detected.					
	27 Carbon tetrachloride	117	Compound Not Detected.					
$	28 1,2-Dichloroethane-d4	65	5.611	5.612	(0.920)	69054	127.883	5.1
$	29 Benzene-d6	84	5.630	5.630	(0.594)	445961	125.275	5.0
	30 Benzene	78	Compound Not Detected.					
	31 1,2-Dichloroethane	62	Compound Not Detected.					
*	32 1,4-Difluorobenzene	114	6.099	6.099	(1.000)	382764	125.000	
	33 Trichloroethene	95	Compound Not Detected.					
$	34 1,2-Dichloropropane-d6	67	6.550	6.550	(0.691)	105362	105.725	4.2
	35 Methylcyclohexane	55	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	38 cis-1,3-Dichloropropene	75	Compound Not Detected.					
	39 4-Methyl-2-pentanone	43	Compound Not Detected.					
$	40 Toluene-d8	98	7.782	7.782	(0.821)	438572	124.425	5.0
	41 Toluene	91	Compound Not Detected.					
$	42 trans-1,3-Dichloropropene-d4	79	8.087	8.087	(0.853)	86193	118.332	4.7
	43 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	44 1,1,2-Trichloroethane	97	Compound Not Detected.					
	45 Tetrachloroethene	163	Compound Not Detected.					
$	46 2-Hexanone-d5	63	8.599	8.599	(0.907)	98101	1185.82	47
	47 2-Hexanone	43	Compound Not Detected.					
	48 Dibromochloromethane	129	Compound Not Detected.					
	49 1,2-Dibromoethane	107	Compound Not Detected.					
*	50 Chlorobenzene-d5	117	9.476	9.477	(1.000)	304674	125.000	
	51 Chlorobenzene	112	Compound Not Detected.					
	52 Ethylbenzene	91	Compound Not Detected.					
	53 m,p-Xylene	106	Compound Not Detected.					
	55 o-Xylene	106	Compound Not Detected.					
	54 Styrene	104	Compound Not Detected.					
	56 Bromoform	172	Compound Not Detected.					
	57 Isopropylbenzene	105	Compound Not Detected.					
$	58 1,1,2,2-Tetrachloroethane-d2	84	11.049	11.050	(1.166)	39067	113.859	4.6
	59 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	60 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	61 1,4-Dichlorobenzene-d4	152	12.293	12.293	(1.000)	150220	125.000	
	62 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	63 1,2-Dichlorobenzene-d4	152	12.720	12.720	(1.035)	127148	118.237	4.7
	64 1,2-Dichlorobenzene	146	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
65 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.					
66 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
67 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

TestAmerica Burlington

LOW CONCENTRATION VOLATILE QUANTITATION REPORT

Lab Sample Id: 200-22132-3
Client Smp ID: FB-1_042914
Inj Date : 08-MAY-2014 13:56
Operator : MTP Inst ID: D.i
Smp Info : 200-22132-C-3
Misc Info : 1,5
Comment :
Method : /chem/D.i/Dsvr.p/dllasmtr.b/somtr5t.m
Meth Date : 09-May-2014 10:52 wilburj Quant Type: ISTD
Cal Date : 08-MAY-2014 10:19 Cal File: dll07.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOMTrace.sub
Target Version: 3.50
Processing Host: chemsvr6

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vo	25.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 32 1,4-Difluorobenzene	6.099	834642	125.000
* 50 Chlorobenzene-d5	9.476	870360	125.000
* 61 1,4-Dichlorobenzene-d4	12.293	841192	125.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.636	132013	19.7709440	0.79	0		0	32

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/L)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
7.434	508434	76.1454145	3.0	0		0	32
Cyclotrisiloxane, hexamethyl-				CAS #: 541-05-9			
8.349	267514	38.4199226	1.5	91	NIST05.1	73123	50
Unknown				CAS #:			
11.171	335605	49.8704229	2.0	0		0	61

Data File: /chem/D.i/Dsvr.p/dllasmtr.b/dlla08.d

Date : 08-MAY-2014 13:56

Client ID: FB-1_042914

Sample Info: 200-22132-C-3

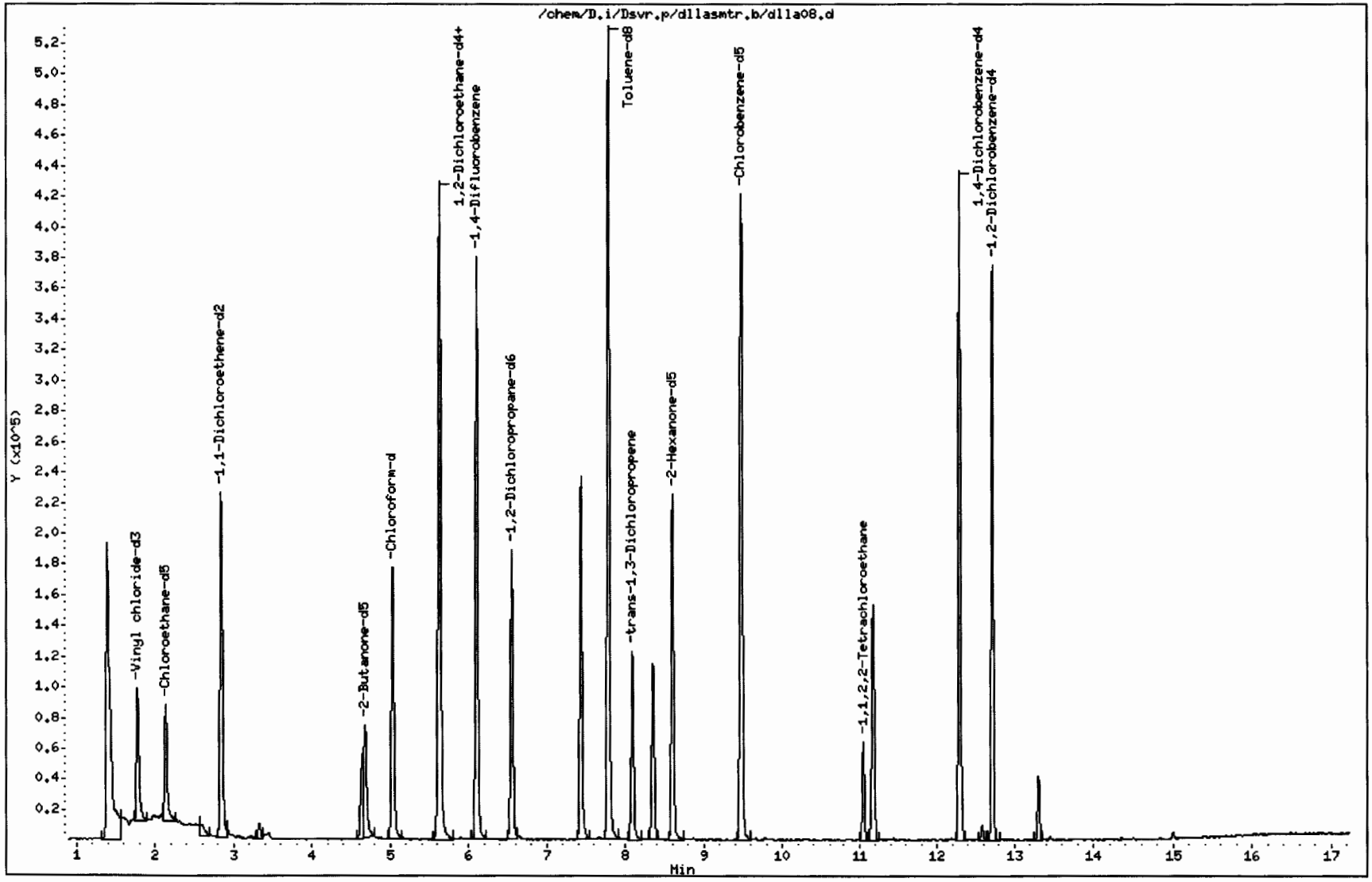
Purge Volume: 25.0

Column phase: DB-624

Instrument: D.i

Operator: MTP

Column diameter: 0.20



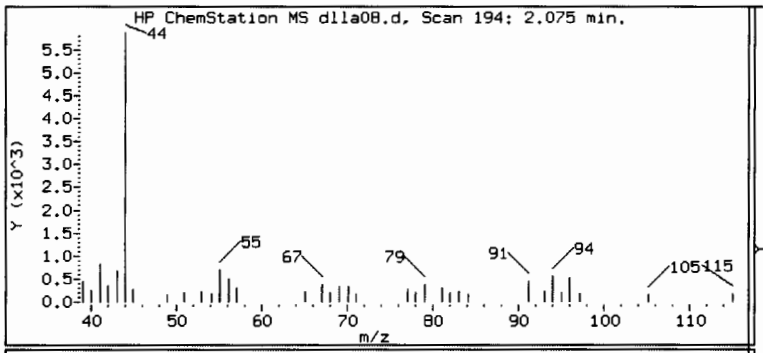
Data File: dlla08.d

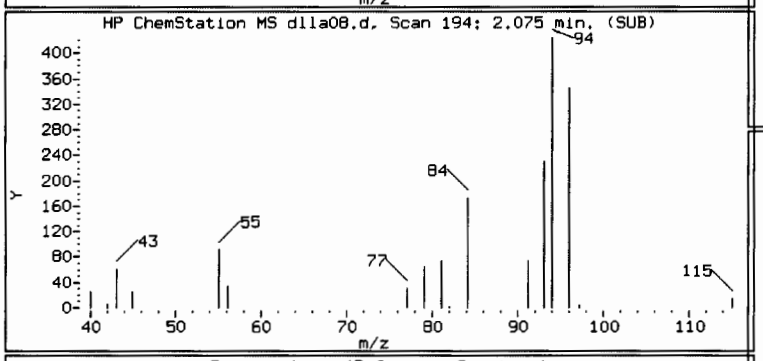
Lab Sample ID: 200-22132-3 Date: 08-MAY-2014 13:56

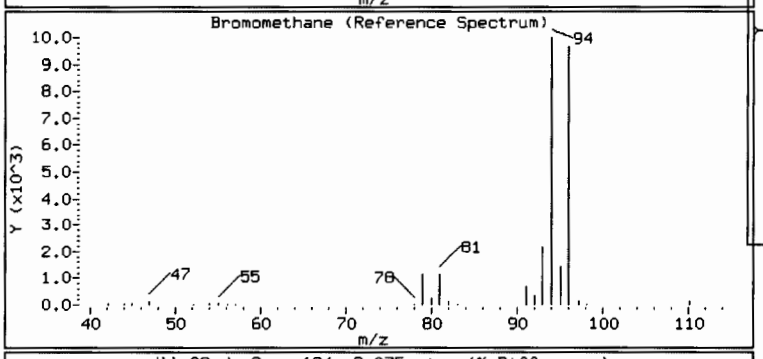
Client ID: FB-1_042914 Instrument: D.i

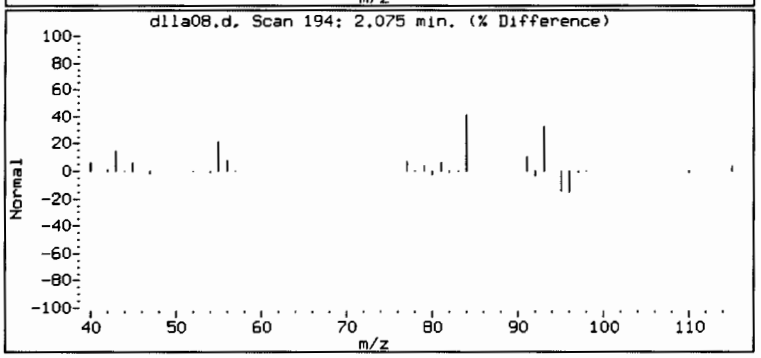
Sample Info: 200-22132-C-3 Operator: MTP

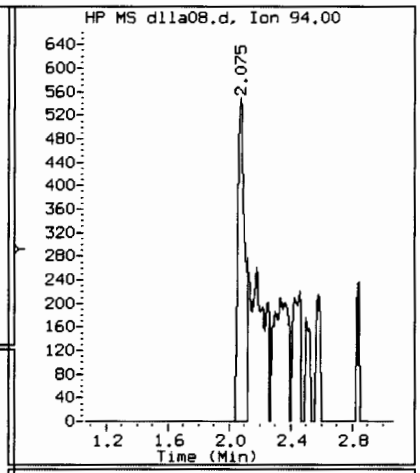
5 Bromomethane

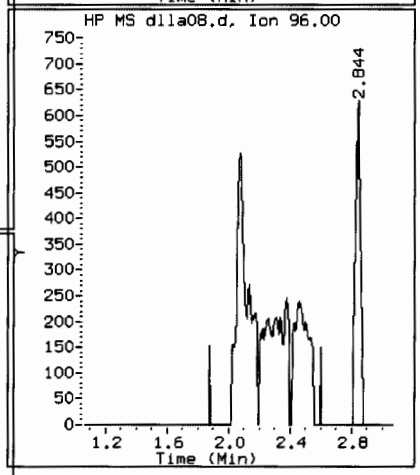












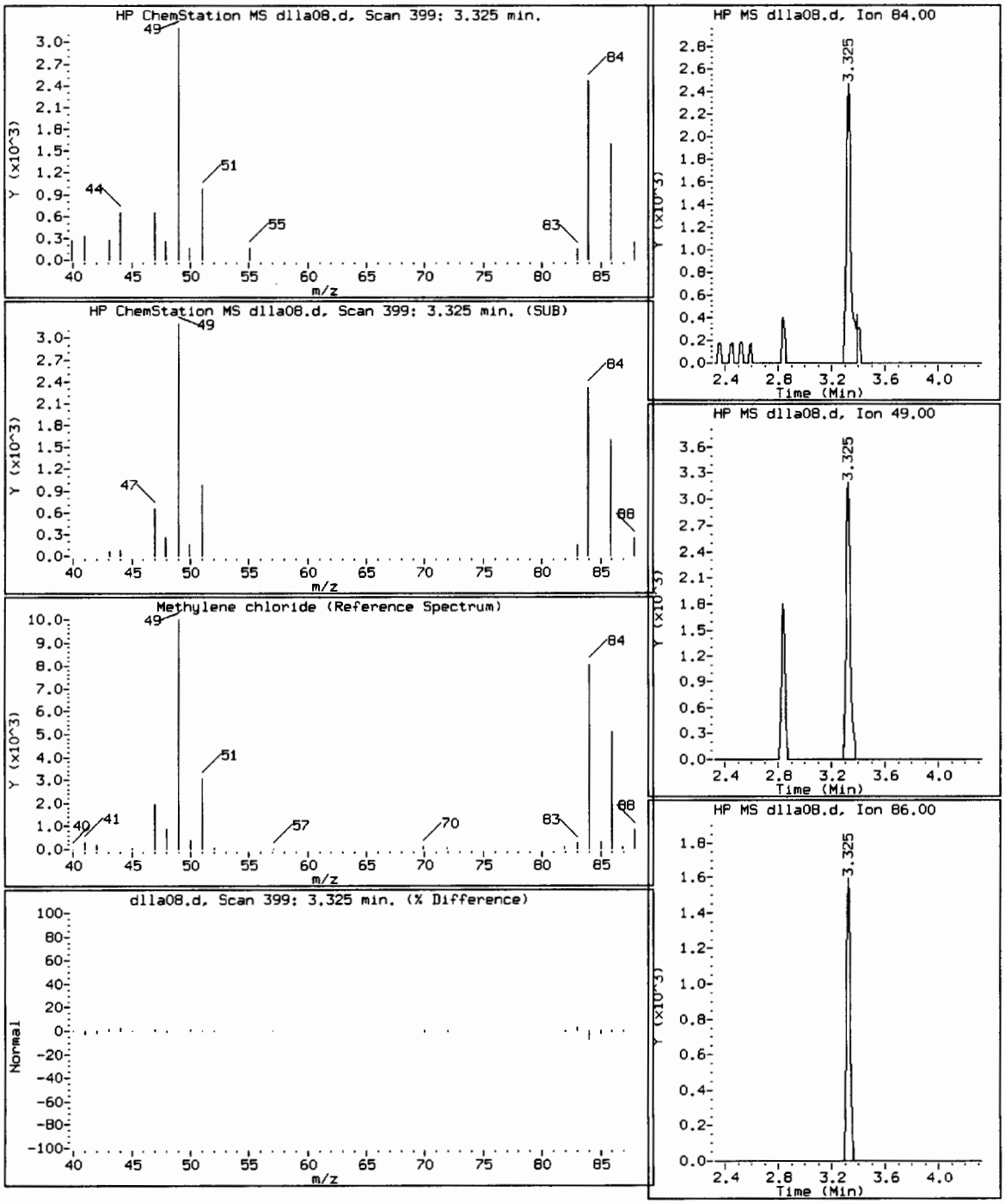
Data File: dlla08.d

Lab Sample ID: 200-22132-3 Date: 08-MAY-2014 13:56

Client ID: FB-1_042914 Instrument: D.i

Sample Info: 200-22132-C-3 Operator: MTP

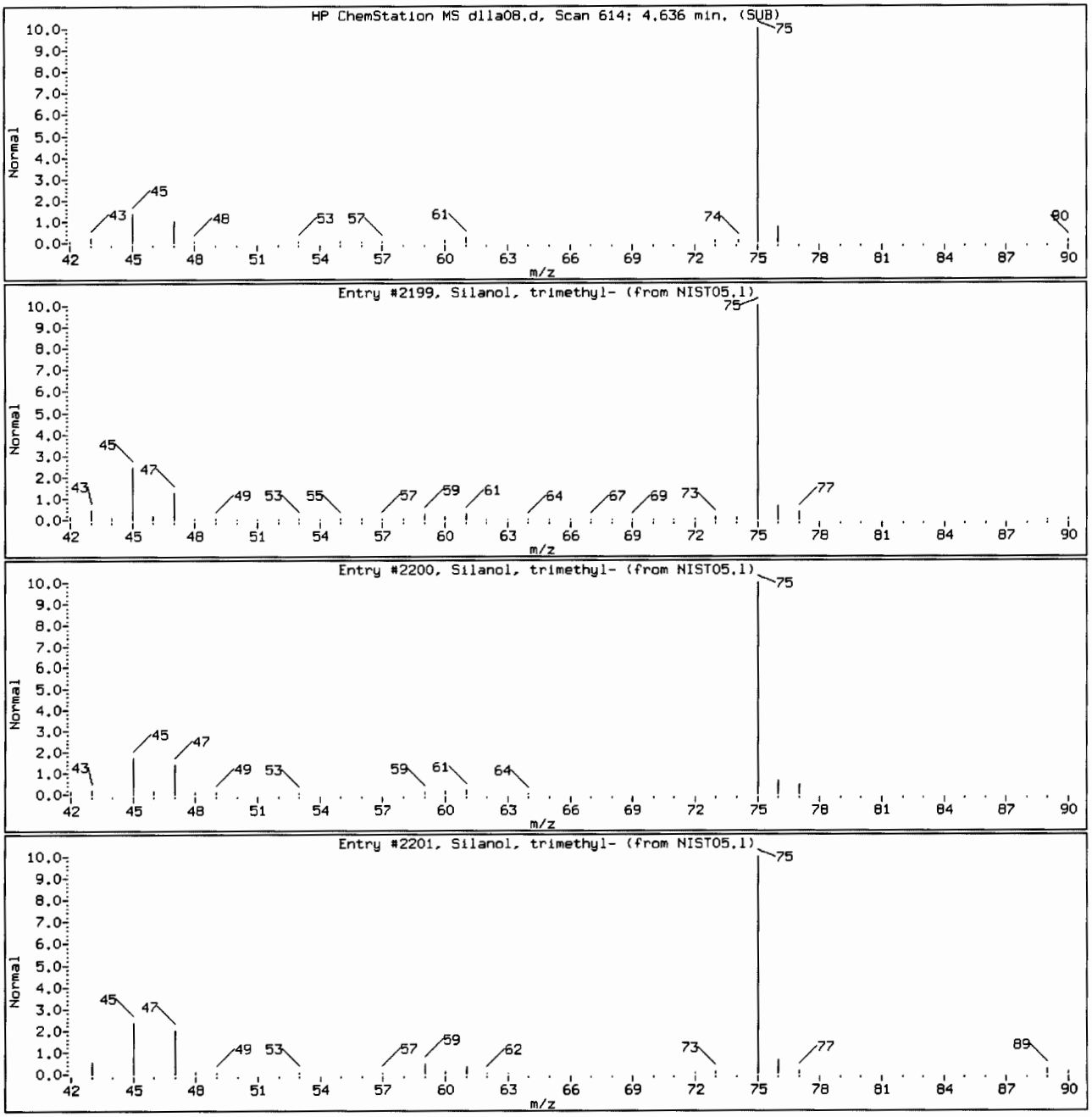
15 Methylene chloride



Data File: d11a08.d
Lab Sample ID: 200-22132-3 Date: 08-MAY-2014 13:56
Client ID: FB-1_042914 Instrument: D.i
Sample Info: 200-22132-C-3 Operator: MTP

Retention Time: 4.64

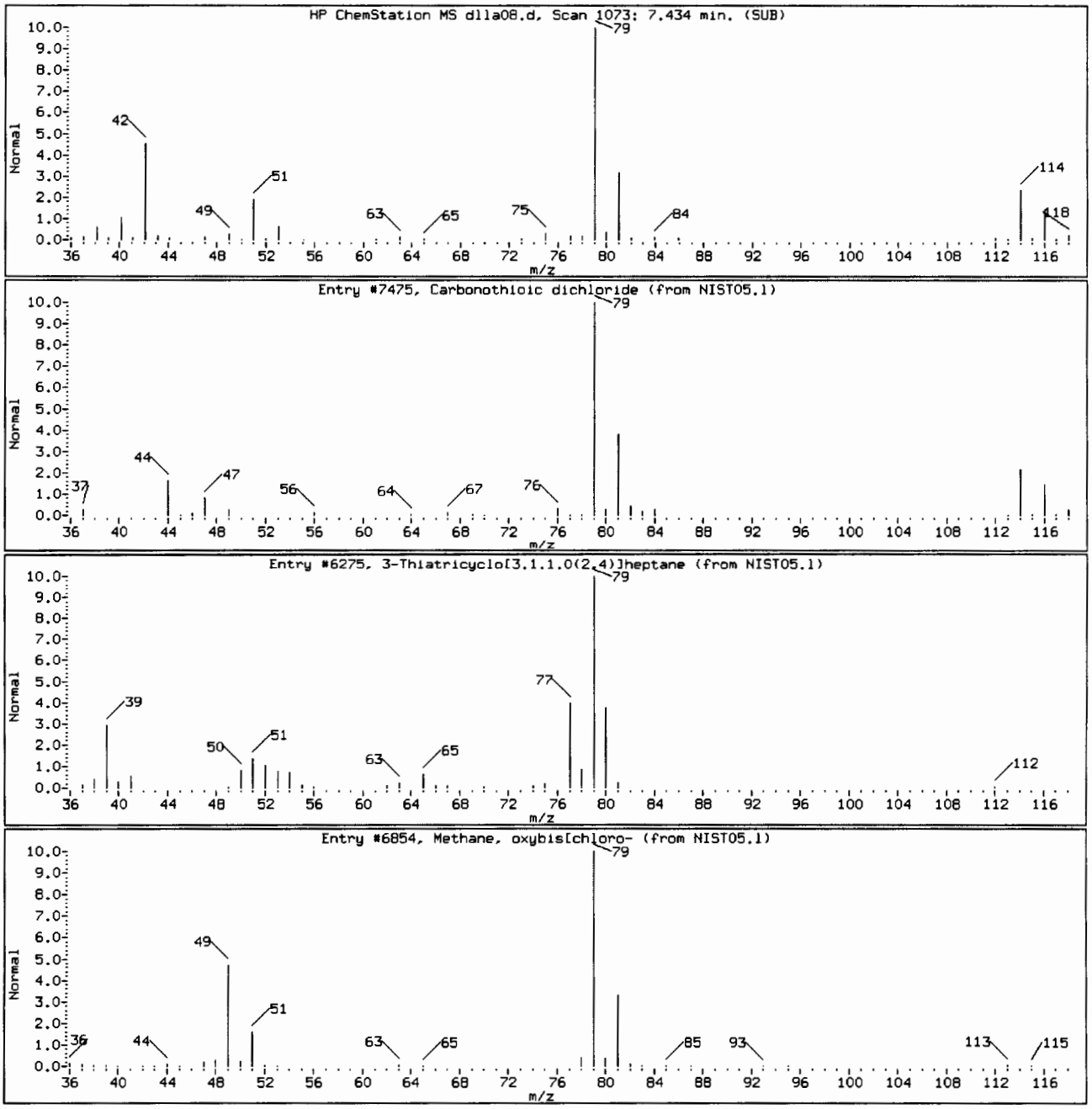
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silanol, trimethyl-	1066-40-6	NIST05.1	2199	83	C3H10OSi	90
Silanol, trimethyl-	1066-40-6	NIST05.1	2200	64	C3H10OSi	90
Silanol, trimethyl-	1066-40-6	NIST05.1	2201	47	C3H10OSi	90



Data File: d11a08.d
Lab Sample ID: 200-22132-3 Date: 08-MAY-2014 13:56
Client ID: FB-1_042914 Instrument: D.i
Sample Info: 200-22132-C-3 Operator: MTP

Retention Time: 7.43

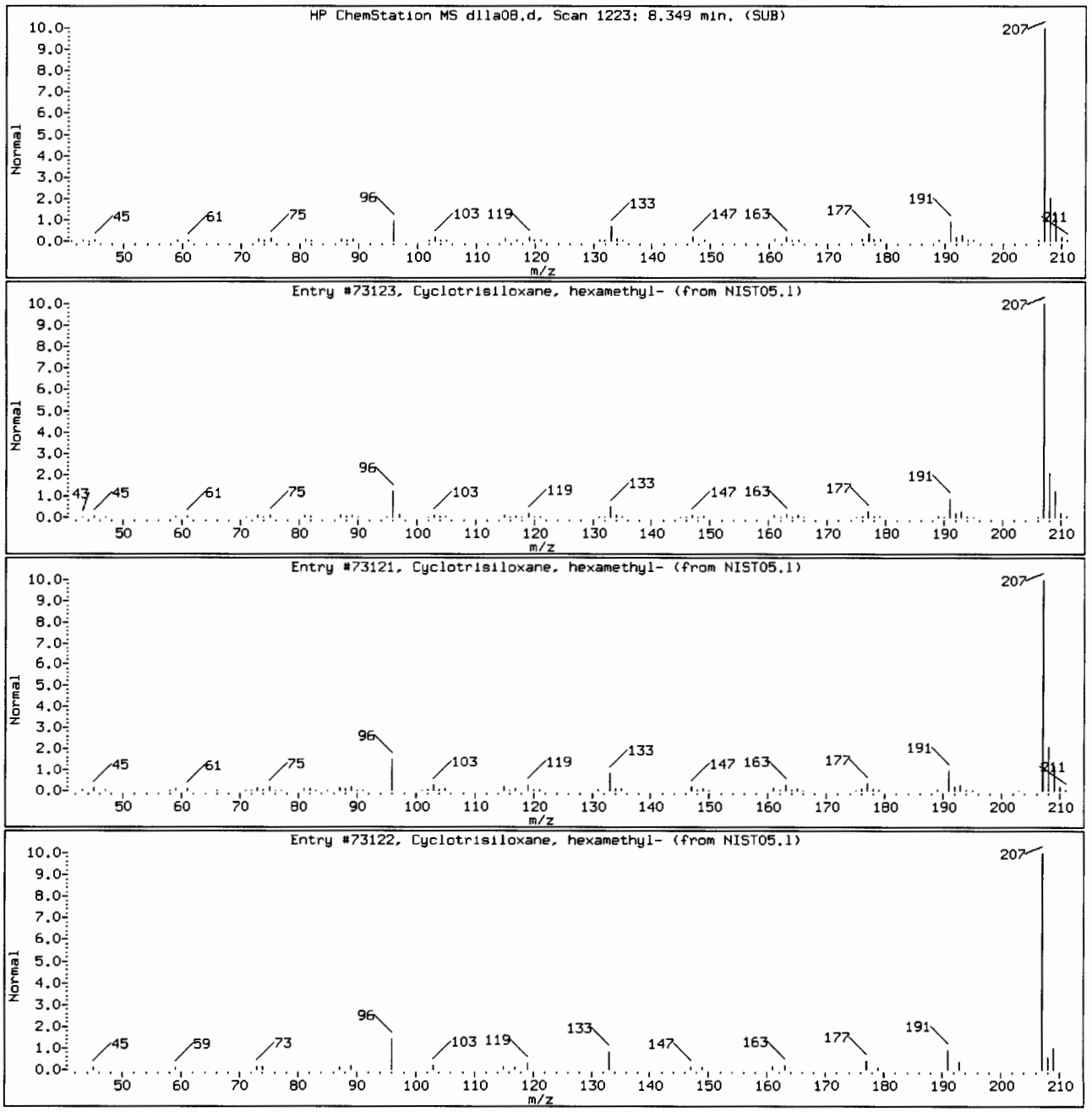
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Carbonothioic dichloride	463-71-8	NIST05.1	7475	52	CCl2S	114
3-Thiatricyclo[3.1.1.0(2,4)]heptan	1000221-37-0	NIST05.1	6275	43	C6H8S	112
Methane, oxybis[chloro-	542-88-1	NIST05.1	6854	25	C2H4Cl2O	114



Data File: dlla08.d
Lab Sample ID: 200-22132-3 Date: 08-MAY-2014 13:56
Client ID: FB-1_042914 Instrument: D.i
Sample Info: 200-22132-C-3 Operator: MTP

Retention Time: 8.35

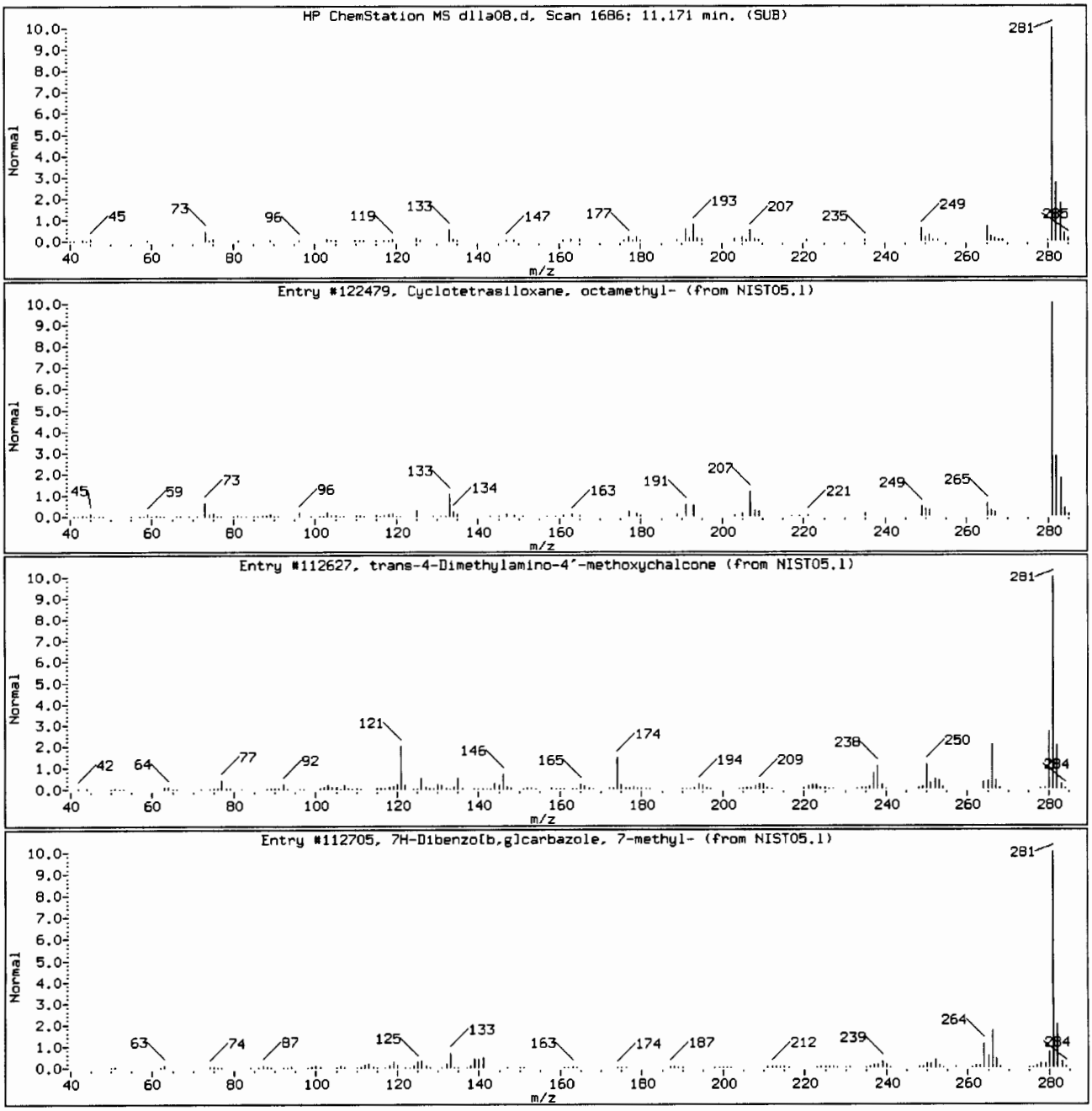
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.1	73123	91	C6H18O3Si3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.1	73121	49	C6H18O3Si3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.1	73122	46	C6H18O3Si3	222



Data File: d11a08.d
Lab Sample ID: 200-22132-3 Date: 08-MAY-2014 13:56
Client ID: FB-1_042914 Instrument: D.i
Sample Info: 200-22132-C-3 Operator: MTP

Retention Time: 11.17

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.1	122479	78	C8H24O4Si4	296
trans-4-Dimethylamino-4'-methoxych	52119-37-6	NIST05.1	112627	59	C18H19NO2	281
7H-Dibenzo[b,g]carbazole, 7-methyl	3557-49-1	NIST05.1	112705	59	C21H15N	281



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington
Job No.: 200-22132-1
SDG No.: 200-22132
Client Sample ID: EB-2_042914
Lab Sample ID: 200-22132-4
Matrix: Water
Lab File ID: dlla09.d
Analysis Method: SOM01.2/VOA_Tr
Date Collected: 04/29/2014 16:20
Sample wt/vol: 25(mL)
Date Analyzed: 05/08/2014 14:20
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.2(mm)
% Moisture:
Level: (low/med) Trace
Analysis Batch No.: 71915
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.074
74-87-3	Chloromethane	0.50	U	0.50	0.062
75-01-4	Vinyl chloride	0.50	U	0.50	0.067
74-83-9	Bromomethane	0.23	J B	0.50	0.069
75-00-3	Chloroethane	0.50	U	0.50	0.093
75-69-4	Trichlorofluoromethane	0.50	U	0.50	0.099
75-35-4	1,1-Dichloroethene	0.50	U	0.50	0.037
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethan e	0.50	U	0.50	0.038
67-64-1	Acetone	5.0	U	5.0	0.92
75-15-0	Carbon disulfide	0.50	U	0.50	0.050
79-20-9	Methyl acetate	0.50	U	0.50	0.14
75-09-2	Methylene chloride	0.37	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.50	0.047
1634-04-4	Methyl tert-butyl ether	0.50	U	0.50	0.062
75-34-3	1,1-Dichloroethane	0.50	U	0.50	0.075
156-59-2	cis-1,2-Dichloroethene	0.50	U	0.50	0.053
78-93-3	2-Butanone	5.0	U	5.0	0.89
74-97-5	Bromochloromethane	0.50	U	0.50	0.073
67-66-3	Chloroform	0.50	U	0.50	0.081
71-55-6	1,1,1-Trichloroethane	0.50	U	0.50	0.078
110-82-7	Cyclohexane	0.50	U	0.50	0.066
56-23-5	Carbon tetrachloride	0.50	U	0.50	0.066
71-43-2	Benzene	0.50	U	0.50	0.064
107-06-2	1,2-Dichloroethane	0.50	U	0.50	0.089
79-01-6	Trichloroethene	0.50	U	0.50	0.080
108-87-2	Methylcyclohexane	0.50	U	0.50	0.077
78-87-5	1,2-Dichloropropane	0.50	U	0.50	0.070
75-27-4	Bromodichloromethane	0.50	U	0.50	0.061
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	0.060
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.82
108-88-3	Toluene	0.50	U	0.50	0.068
10061-02-6	trans-1,3-Dichloropropene	0.50	U	0.50	0.22
79-00-5	1,1,2-Trichloroethane	0.50	U	0.50	0.087
127-18-4	Tetrachloroethene	0.50	U	0.50	0.078
591-78-6	2-Hexanone	5.0	U	5.0	0.95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington
Job No.: 200-22132-1
SDG No.: 200-22132
Client Sample ID: EB-2_042914
Lab Sample ID: 200-22132-4
Matrix: Water
Lab File ID: dlla09.d
Analysis Method: SOM01.2/VOA_Tr
Date Collected: 04/29/2014 16:20
Sample wt/vol: 25(mL)
Date Analyzed: 05/08/2014 14:20
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.2(mm)
% Moisture:
Level: (low/med) Trace
Analysis Batch No.: 71915
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.50	U	0.50	0.067
106-93-4	1,2-Dibromoethane	0.50	U	0.50	0.058
108-90-7	Chlorobenzene	0.50	U	0.50	0.063
100-41-4	Ethylbenzene	0.50	U	0.50	0.059
95-47-6	o-Xylene	0.50	U	0.50	0.065
179601-23-1	m,p-Xylene	0.50	U	0.50	0.068
100-42-5	Styrene	0.50	U	0.50	0.061
75-25-2	Bromoform	0.50	U	0.50	0.083
98-82-8	Isopropylbenzene	0.50	U	0.50	0.058
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.50	0.091
541-73-1	1,3-Dichlorobenzene	0.50	U	0.50	0.064
106-46-7	1,4-Dichlorobenzene	0.50	U	0.50	0.059
95-50-1	1,2-Dichlorobenzene	0.50	U	0.50	0.072
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U	0.50	0.16
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.066
87-61-6	1,2,3-Trichlorobenzene	0.50	U	0.50	0.091

CAS NO.	SURROGATE	%REC	Q	LIMITS
6745-35-3	Vinyl chloride-d3	105		65-131
19199-91-8	Chloroethane-d5	103		71-131
22280-73-5	1,1-Dichloroethene-d2	80		55-104
24313-50-6	2-Butanone-d5	91		49-155
865-49-6	Chloroform-d	97		78-121
17060-07-0	1,2-Dichloroethane-d4	102		78-129
1076-43-3	Benzene-d6	101		77-124
93952-08-0	1,2-Dichloropropane-d6	85		79-124
2037-26-5	Toluene-d8	101		77-121
93951-86-1	trans-1,3-Dichloropropene-d4	96		73-121
4840-82-8	2-Hexanone-d5	97		28-135
33685-54-0	1,1,2,2-Tetrachloroethane-d2	94		73-125
2199-69-1	1,2-Dichlorobenzene-d4	94		80-131

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: EB-2_042914 Lab Sample ID: 200-22132-4

Matrix: Water Lab File ID: dlla09.d

Analysis Method: SOM01.2/VOA_Tr Date Collected: 04/29/2014 16:20

Sample wt/vol: 25(mL) Date Analyzed: 05/08/2014 14:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.2(mm)

% Moisture: Level: (low/med) Trace

Analysis Batch No.: 71915 Units: ug/L

Number TICs Found: 3 TIC Result Total: 5.8

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	7.43	3.1	J B
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	1.2	J N
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	1.5	J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: EB-2_042914 Lab Sample ID: 200-22132-4

Matrix: Water Lab File ID: dlla09.d

Analysis Method: SOM01.2/VOA_Tr Date Collected: 04/29/2014 16:20

Sample wt/vol: 25(mL) Date Analyzed: 05/08/2014 14:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.2(mm)

% Moisture: Level: (low/med) Trace

Analysis Batch No.: 71915 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes			

TestAmerica Burlington

LOW CONCENTRATION VOLATILE QUANTITATION REPORT

Lab Sample Id: 200-22132-4
Client Smp ID: EB-2_042914
Inj Date : 08-MAY-2014 14:20
Operator : MTP Inst ID: D.i
Smp Info : 200-22132-B-4
Misc Info : 1,5
Comment :
Method : /chem/D.i/Dsvr.p/dllasmtr.b/somtr5t.m
Meth Date : 09-May-2014 10:52 wilburj Quant Type: ISTD
Cal Date : 08-MAY-2014 10:19 Cal File: dll07.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOMTrace.sub
Target Version: 3.50
Processing Host: chemsvr6

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vo	25.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
	1 Dichlorodifluoromethane	85	Compound Not Detected.					
	2 Chloromethane	50	Compound Not Detected.					
$	3 Vinyl chloride-d3	65	1.777	1.771	(0.291)	114234	131.616	5.3
	4 Vinyl chloride	62	Compound Not Detected.					
	5 Bromomethane	94	2.069	2.070	(0.339)	1855	5.79265	0.23(a)
$	6 Chloroethane-d5	69	2.130	2.131	(0.349)	84557	128.696	5.1
	7 Chloroethane	64	Compound Not Detected.					
	8 Trichlorofluoromethane	101	Compound Not Detected.					
$	9 1,1-Dichloroethene-d2	63	2.838	2.838	(0.465)	179003	100.419	4.0
	10 1,1-Dichloroethene	96	Compound Not Detected.					
	11 1,1,2-Trichloro-1,2,2-trifluo	101	Compound Not Detected.					
	12 Acetone	43	Compound Not Detected.					
	13 Carbon disulfide	76	Compound Not Detected.					
	14 Methyl acetate	43	Compound Not Detected.					
	15 Methylene chloride	84	3.325	3.325	(0.545)	6229	9.17409	0.37(a)
	16 trans-1,2-Dichloroethene	96	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
	17 Methyl tert-butyl ether	73	Compound Not Detected.					
	18 1,1-Dichloroethane	63	Compound Not Detected.					
$	19 2-Butanone-d5	46	4.679	4.703	(0.767)	112450	1142.31	46
	20 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	21 2-Butanone	43	Compound Not Detected.					
	22 Bromochloromethane	128	Compound Not Detected.					
$	23 Chloroform-d	84	5.026	5.026	(0.824)	182351	121.337	4.9
	24 Chloroform	83	Compound Not Detected.					
	25 1,1,1-Trichloroethane	97	Compound Not Detected.					
	26 Cyclohexane	56	Compound Not Detected.					
	27 Carbon tetrachloride	117	Compound Not Detected.					
$	28 1,2-Dichloroethane-d4	65	5.611	5.612	(0.920)	68004	127.939	5.1
$	29 Benzene-d6	84	5.630	5.630	(0.594)	439878	126.804	5.1
	30 Benzene	78	5.672	5.673	(0.599)	2099	0.58768	0.024(a)
	31 1,2-Dichloroethane	62	Compound Not Detected.					
*	32 1,4-Difluorobenzene	114	6.099	6.099	(1.000)	376780	125.000	
	33 Trichloroethene	95	Compound Not Detected.					
$	34 1,2-Dichloropropane-d6	67	6.550	6.550	(0.691)	103620	106.702	4.3
	35 Methylcyclohexane	55	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	38 cis-1,3-Dichloropropene	75	Compound Not Detected.					
	39 4-Methyl-2-pentanone	43	Compound Not Detected.					
$	40 Toluene-d8	98	7.782	7.782	(0.821)	434406	126.472	5.1
	41 Toluene	91	Compound Not Detected.					
$	42 trans-1,3-Dichloropropene-d4	79	8.087	8.087	(0.853)	84895	119.604	4.8
	43 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	44 1,1,2-Trichloroethane	97	Compound Not Detected.					
	45 Tetrachloroethene	163	Compound Not Detected.					
$	46 2-Hexanone-d5	63	8.599	8.599	(0.907)	98035	1216.07	49
	47 2-Hexanone	43	Compound Not Detected.					
	48 Dibromochloromethane	129	Compound Not Detected.					
	49 1,2-Dibromoethane	107	Compound Not Detected.					
*	50 Chlorobenzene-d5	117	9.477	9.477	(1.000)	296895	125.000	
	51 Chlorobenzene	112	Compound Not Detected.					
	52 Ethylbenzene	91	Compound Not Detected.					
	53 m,p-Xylene	106	Compound Not Detected.					
	55 o-Xylene	106	Compound Not Detected.					
	54 Styrene	104	Compound Not Detected.					
	56 Bromoform	172	Compound Not Detected.					
	57 Isopropylbenzene	105	Compound Not Detected.					
$	58 1,1,2,2-Tetrachloroethane-d2	84	11.049	11.050	(1.166)	39461	118.020	4.7
	59 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	60 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	61 1,4-Dichlorobenzene-d4	152	12.293	12.293	(1.000)	147601	125.000	
	62 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	63 1,2-Dichlorobenzene-d4	152	12.720	12.720	(1.035)	124647	117.968	4.7
	64 1,2-Dichlorobenzene	146	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
65 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.					
66 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
67 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

TestAmerica Burlington

LOW CONCENTRATION VOLATILE QUANTITATION REPORT

Lab Sample Id: 200-22132-4
Client Smp ID: EB-2_042914
Inj Date : 08-MAY-2014 14:20
Operator : MTP Inst ID: D.i
Smp Info : 200-22132-B-4
Misc Info : 1,5
Comment :
Method : /chem/D.i/Dsvr.p/dllasmtr.b/somtr5t.m
Meth Date : 09-May-2014 10:52 wilburj Quant Type: ISTD
Cal Date : 08-MAY-2014 10:19 Cal File: dll07.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOMTrace.sub
Target Version: 3.50
Processing Host: chemsvr6

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vo	25.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 32 1,4-Difluorobenzene	6.099	818655	125.000
* 50 Chlorobenzene-d5	9.477	854541	125.000
* 61 1,4-Dichlorobenzene-d4	12.293	810606	125.000

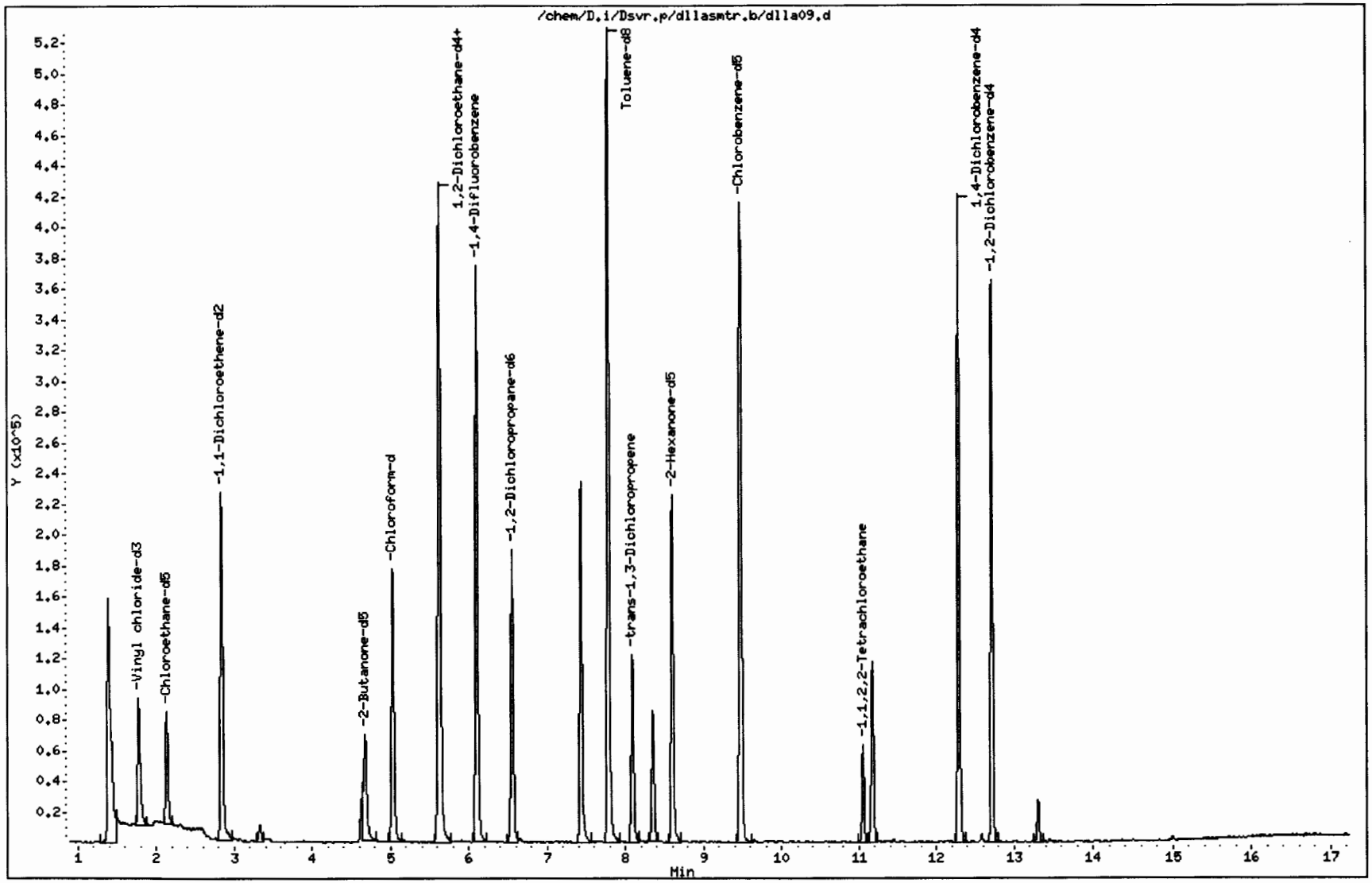
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
7.434	509617	77.8131114	3.1	0		0	32

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/L)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Cyclotrisiloxane, hexamethyl-				CAS #: 541-05-9			
8.349	198480	29.0331257	1.2	90	NIST05.1	73121	50
Cyclotetrasiloxane, octamethyl-				CAS #: 556-67-2			
11.171	249956	38.5445640	1.5	91	NIST05.1	122480	61

Data File: /chem/D.i/Dsvr.p/dllasmtr.b/dlla09.d
Date : 08-MAY-2014 14:20
Client ID: EB-2_042914
Sample Info: 200-22132-B-4
Purge Volume: 25.0
Column phase: DB-624

Instrument: D.i

Operator: MTP
Column diameter: 0.20



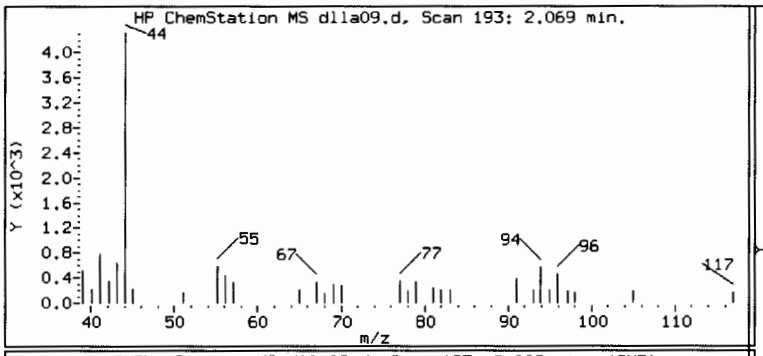
Data File: dlla09.d

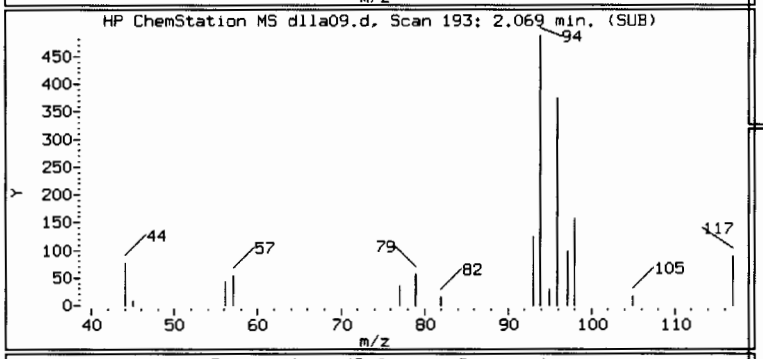
Lab Sample ID: 200-22132-4 Date: 08-MAY-2014 14:20

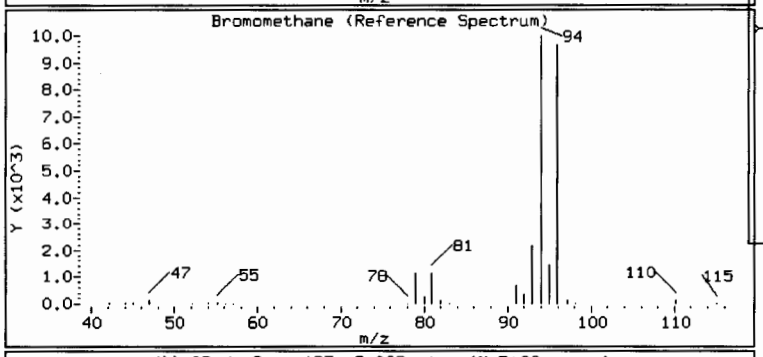
Client ID: EB-2_042914 Instrument: D.i

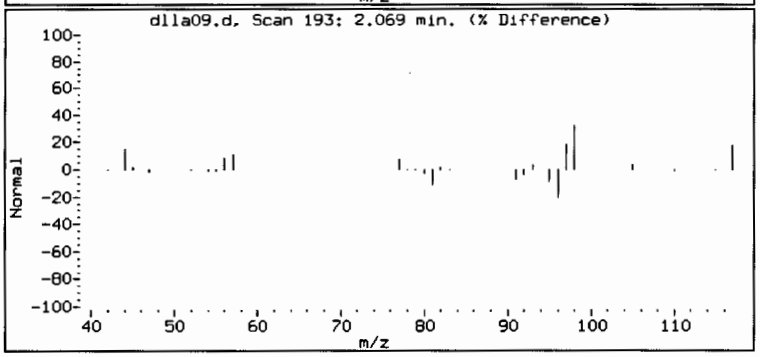
Sample Info: 200-22132-B-4 Operator: MTP

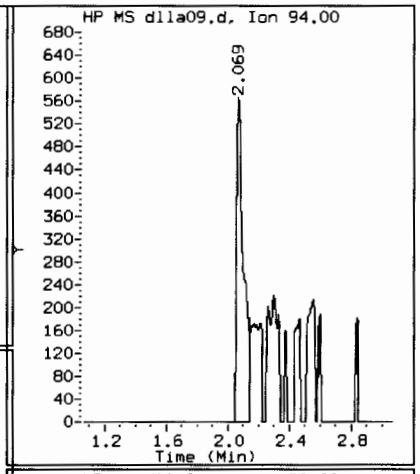
5 Bromomethane

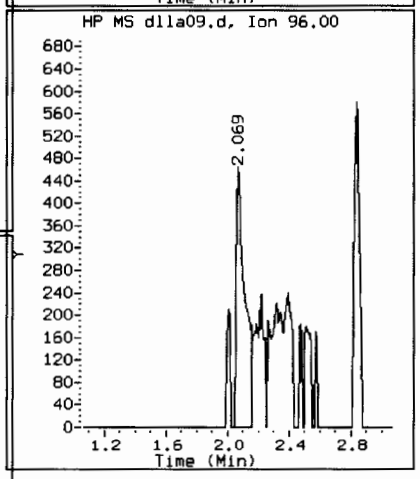












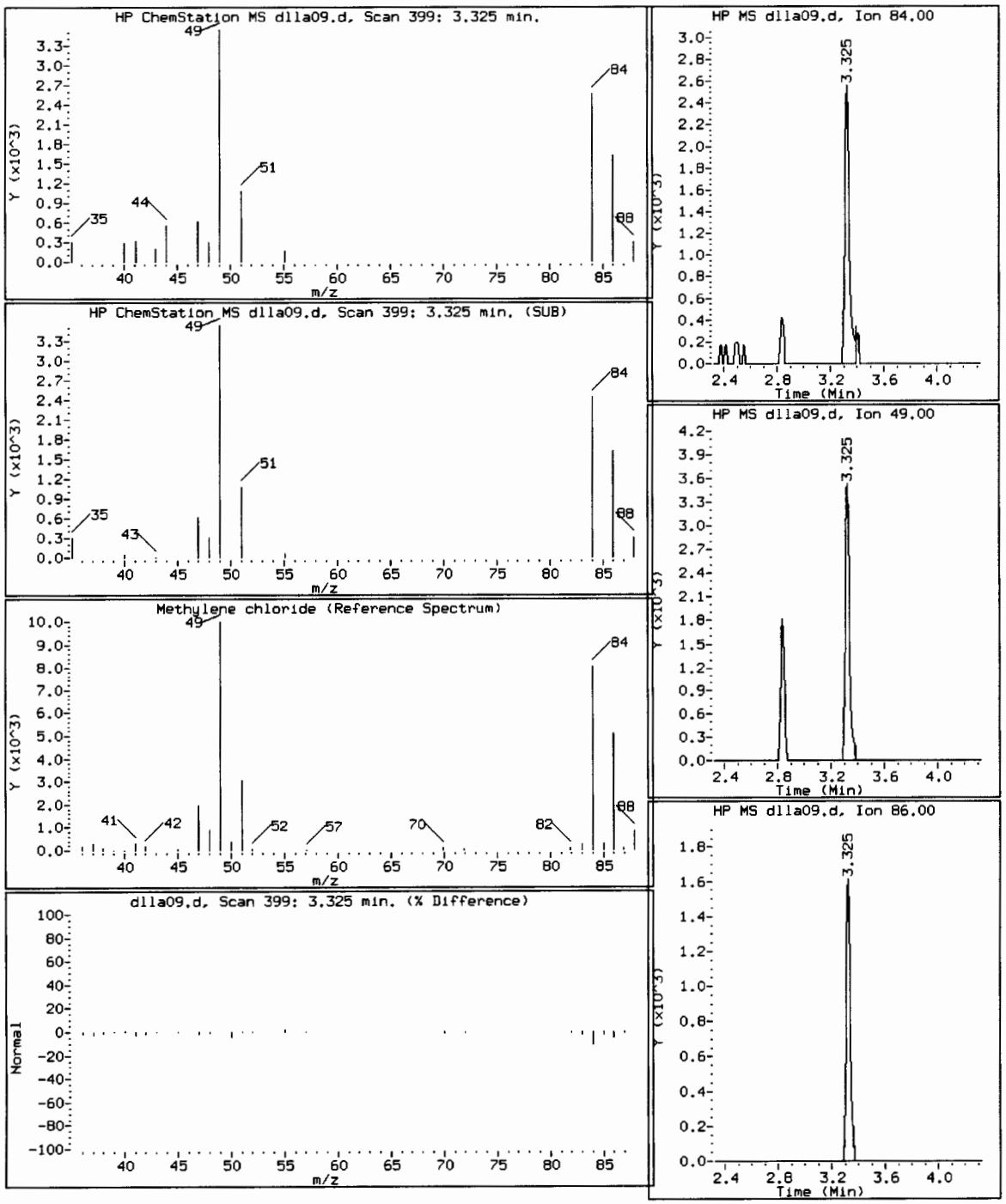
Data File: dlla09.d

Lab Sample ID: 200-22132-4 Date: 08-MAY-2014 14:20

Client ID: EB-2_042914 Instrument: D.i

Sample Info: 200-22132-B-4 Operator: MTP

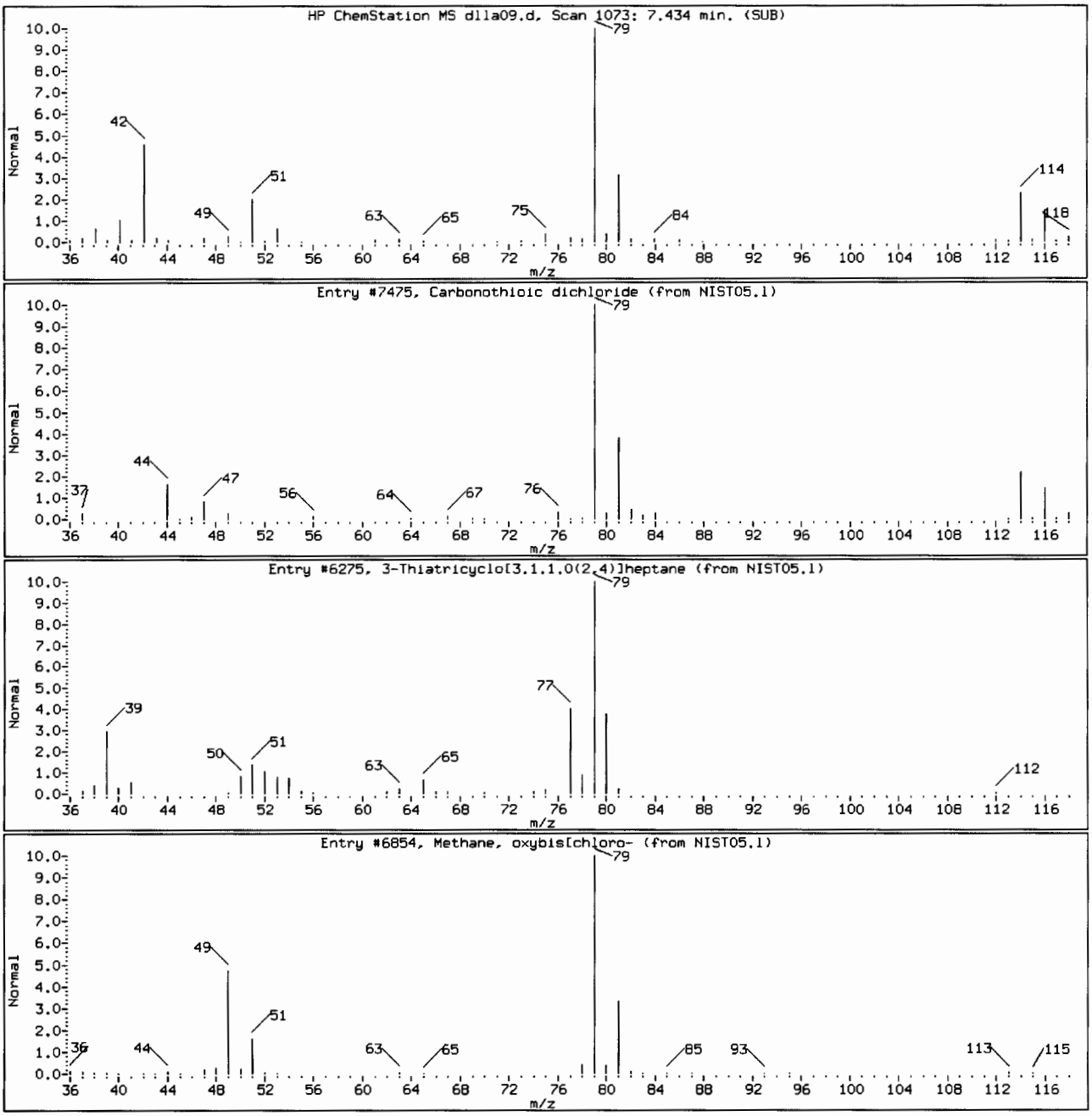
15 Methylene chloride



Data File: dlla09.d
Lab Sample ID: 200-22132-4 Date: 08-MAY-2014 14:20
Client ID: EB-2_042914 Instrument: D.i
Sample Info: 200-22132-B-4 Operator: MTP

Retention Time: 7.43

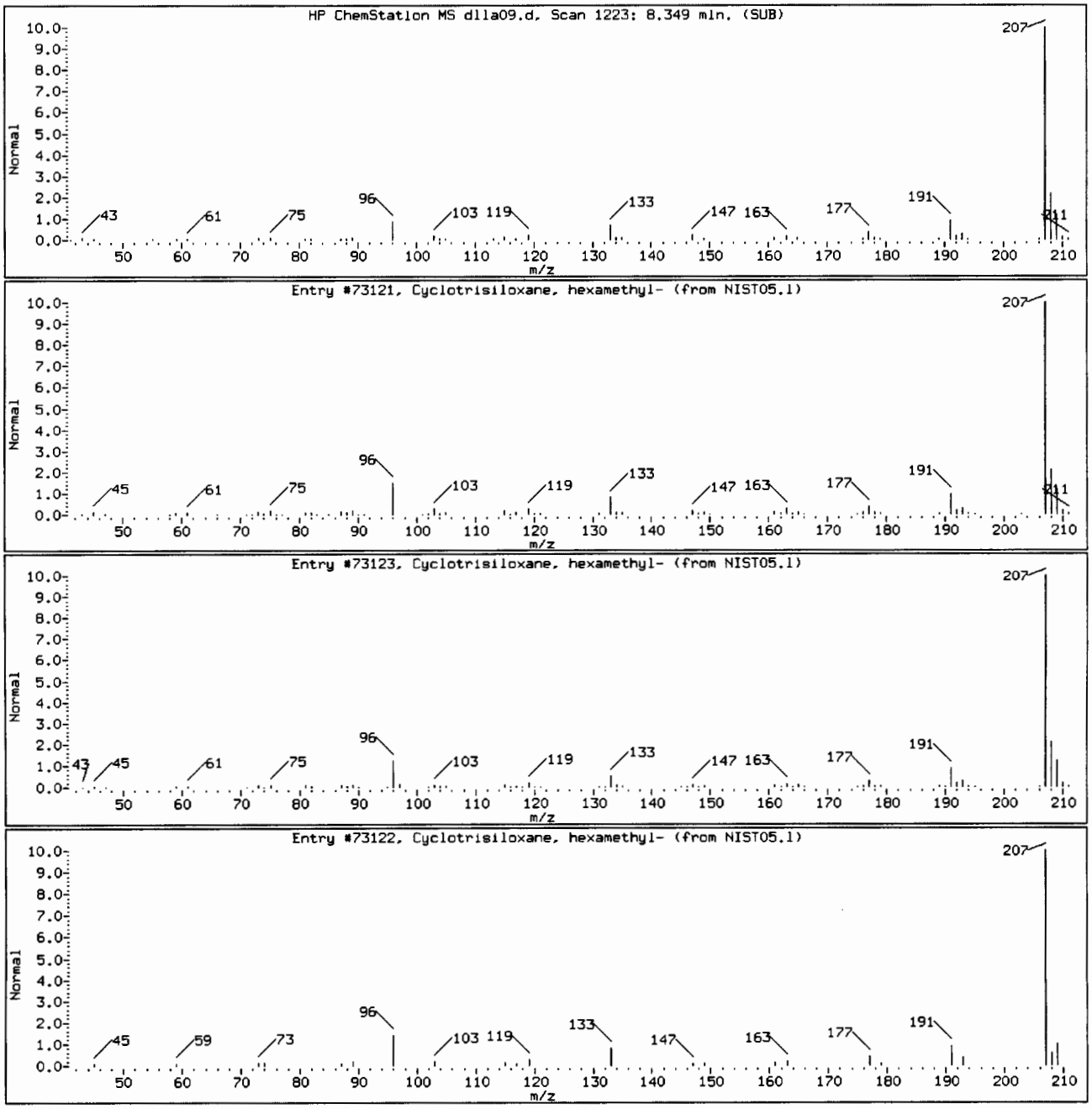
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Carbonothioic dichloride	463-71-8	NIST05.1	7475	47	CCl2S	114
3-Thiatricyclo[3.1.1.0(2,4)]heptan	1000221-37-0	NIST05.1	6275	43	C6H8S	112
Methane, oxybis[chloro-	542-88-1	NIST05.1	6854	25	C2H4Cl2O	114



Data File: d11a09.d
Lab Sample ID: 200-22132-4 Date: 08-MAY-2014 14:20
Client ID: EB-2_042914 Instrument: D.i
Sample Info: 200-22132-B-4 Operator: MTP

Retention Time: 8.35

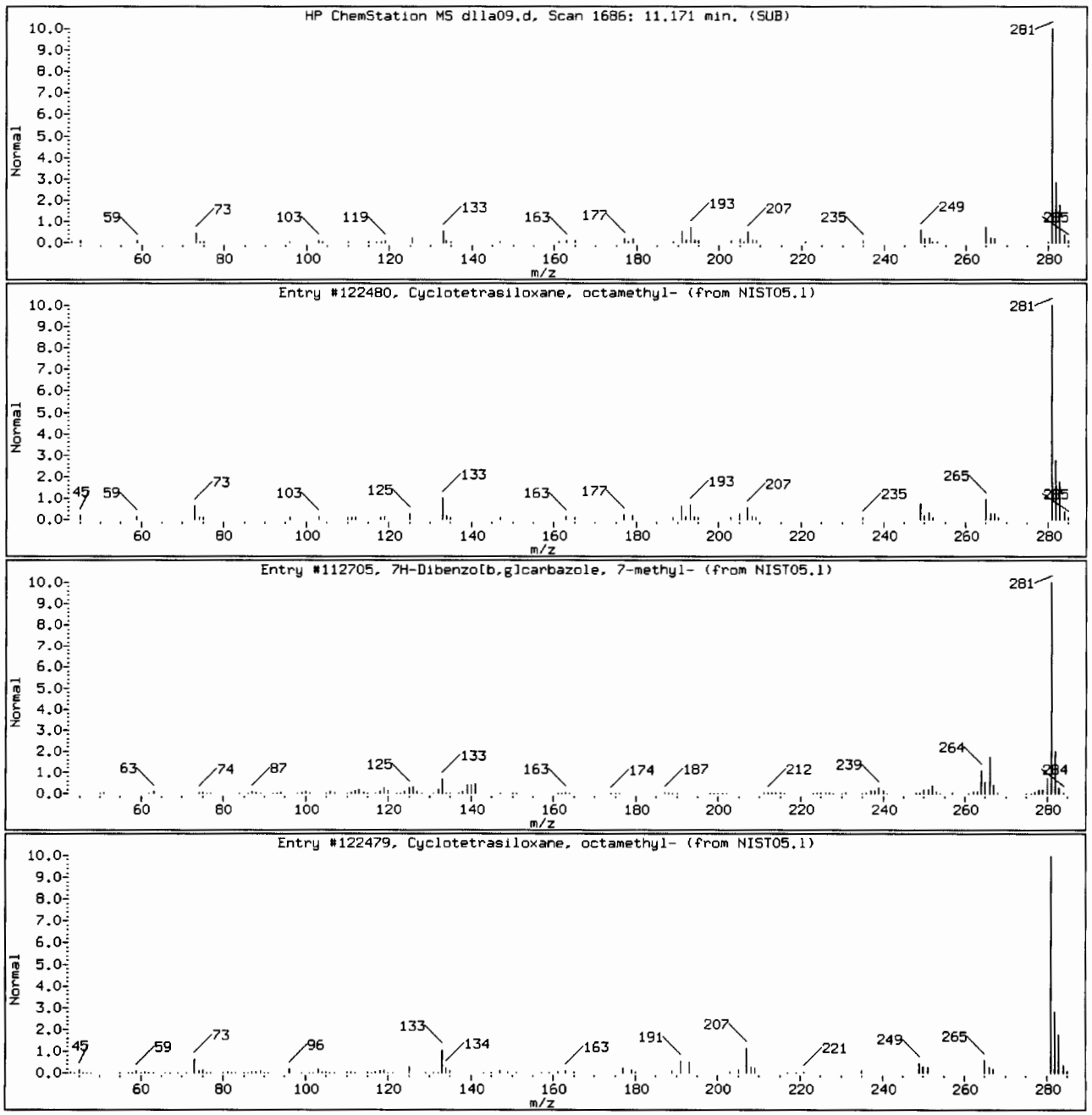
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.1	73121	90	C6H18O3Si3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.1	73123	87	C6H18O3Si3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.1	73122	72	C6H18O3Si3	222



Data File: d11a09.d
Lab Sample ID: 200-22132-4 Date: 08-MAY-2014 14:20
Client ID: EB-2_042914 Instrument: D.i
Sample Info: 200-22132-B-4 Operator: MTP

Retention Time: 11.17

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.1	122480	91	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl	3557-49-1	NIST05.1	112705	59	C21H15N	281
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.1	122479	56	C8H24O4Si4	296



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington
Job No.: 200-22132-1
SDG No.: 200-22132
Client Sample ID: TRIP BLANK
Lab Sample ID: 200-22132-5
Matrix: Water
Lab File ID: d11a10.d
Analysis Method: SOM01.2/VOA_Tr
Date Collected: 04/29/2014 00:00
Sample wt/vol: 25(mL)
Date Analyzed: 05/08/2014 14:45
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.2(mm)
% Moisture:
Level: (low/med) Trace
Analysis Batch No.: 71915
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.074
74-87-3	Chloromethane	0.50	U	0.50	0.062
75-01-4	Vinyl chloride	0.50	U	0.50	0.067
74-83-9	Bromomethane	0.13	J B	0.50	0.069
75-00-3	Chloroethane	0.50	U	0.50	0.093
75-69-4	Trichlorofluoromethane	0.50	U	0.50	0.099
75-35-4	1,1-Dichloroethene	0.50	U	0.50	0.037
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	0.038
67-64-1	Acetone	2.8	J	5.0	0.92
75-15-0	Carbon disulfide	0.50	U	0.50	0.050
79-20-9	Methyl acetate	0.50	U	0.50	0.14
75-09-2	Methylene chloride	0.50	U	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.50	0.047
1634-04-4	Methyl tert-butyl ether	0.50	U	0.50	0.062
75-34-3	1,1-Dichloroethane	0.50	U	0.50	0.075
156-59-2	cis-1,2-Dichloroethene	0.50	U	0.50	0.053
78-93-3	2-Butanone	5.0	U	5.0	0.89
74-97-5	Bromochloromethane	0.50	U	0.50	0.073
67-66-3	Chloroform	0.50	U	0.50	0.081
71-55-6	1,1,1-Trichloroethane	0.50	U	0.50	0.078
110-82-7	Cyclohexane	0.50	U	0.50	0.066
56-23-5	Carbon tetrachloride	0.50	U	0.50	0.066
71-43-2	Benzene	0.50	U	0.50	0.064
107-06-2	1,2-Dichloroethane	0.50	U	0.50	0.089
79-01-6	Trichloroethene	0.50	U	0.50	0.080
108-87-2	Methylcyclohexane	0.50	U	0.50	0.077
78-87-5	1,2-Dichloropropane	0.50	U	0.50	0.070
75-27-4	Bromodichloromethane	0.50	U	0.50	0.061
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	0.060
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.82
108-88-3	Toluene	0.50	U	0.50	0.068
10061-02-6	trans-1,3-Dichloropropene	0.50	U	0.50	0.22
79-00-5	1,1,2-Trichloroethane	0.50	U	0.50	0.087
127-18-4	Tetrachloroethene	0.50	U	0.50	0.078
591-78-6	2-Hexanone	5.0	U	5.0	0.95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: TRIP BLANK | Lab Sample ID: 200-22132-5

Matrix: Water | Lab File ID: dlla10.d

Analysis Method: SOM01.2/VOA_Tr | Date Collected: 04/29/2014 00:00

Sample wt/vol: 25(mL) | Date Analyzed: 05/08/2014 14:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.2(mm)

% Moisture: | Level: (low/med) Trace

Analysis Batch No.: 71915 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.50	U	0.50	0.067
106-93-4	1,2-Dibromoethane	0.50	U	0.50	0.058
108-90-7	Chlorobenzene	0.50	U	0.50	0.063
100-41-4	Ethylbenzene	0.50	U	0.50	0.059
95-47-6	o-Xylene	0.50	U	0.50	0.065
179601-23-1	m,p-Xylene	0.50	U	0.50	0.068
100-42-5	Styrene	0.50	U	0.50	0.061
75-25-2	Bromoform	0.50	U	0.50	0.083
98-82-8	Isopropylbenzene	0.50	U	0.50	0.058
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.50	0.091
541-73-1	1,3-Dichlorobenzene	0.50	U	0.50	0.064
106-46-7	1,4-Dichlorobenzene	0.50	U	0.50	0.059
95-50-1	1,2-Dichlorobenzene	0.50	U	0.50	0.072
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U	0.50	0.16
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.066
87-61-6	1,2,3-Trichlorobenzene	0.50	U	0.50	0.091

CAS NO.	SURROGATE	%REC	Q	LIMITS
6745-35-3	Vinyl chloride-d3	107		65-131
19199-91-8	Chloroethane-d5	105		71-131
22280-73-5	1,1-Dichloroethene-d2	82		55-104
24313-50-6	2-Butanone-d5	95		49-155
865-49-6	Chloroform-d	100		78-121
17060-07-0	1,2-Dichloroethane-d4	106		78-129
1076-43-3	Benzene-d6	103		77-124
93952-08-0	1,2-Dichloropropane-d6	87		79-124
2037-26-5	Toluene-d8	102		77-121
93951-86-1	trans-1,3-Dichloropropene-d4	98		73-121
4840-82-8	2-Hexanone-d5	99		28-135
33685-54-0	1,1,2,2-Tetrachloroethane-d2	95		73-125
2199-69-1	1,2-Dichlorobenzene-d4	95		80-131

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: TRIP BLANK Lab Sample ID: 200-22132-5

Matrix: Water Lab File ID: dlla10.d

Analysis Method: SOM01.2/VOA_Tr Date Collected: 04/29/2014 00:00

Sample wt/vol: 25(mL) Date Analyzed: 05/08/2014 14:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.2(mm)

% Moisture: Level: (low/med) Trace

Analysis Batch No.: 71915 Units: ug/L

Number TICs Found: 3 TIC Result Total: 5.39

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	7.43	3.1	B J
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	0.99	J N
	Unknown	11.17	1.3	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: TRIP BLANK Lab Sample ID: 200-22132-5

Matrix: Water Lab File ID: dlla10.d

Analysis Method: SOM01.2/VOA_Tr Date Collected: 04/29/2014 00:00

Sample wt/vol: 25(mL) Date Analyzed: 05/08/2014 14:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.2(mm)

% Moisture: Level: (low/med) Trace

Analysis Batch No.: 71915 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes			

TestAmerica Burlington

LOW CONCENTRATION VOLATILE QUANTITATION REPORT

Lab Sample Id: 200-22132-5
Client Smp ID: TRIP BLANK
Inj Date : 08-MAY-2014 14:45
Operator : MTP Inst ID: D.i
Smp Info : 200-22132-B-5
Misc Info : 1,5
Comment :
Method : /chem/D.i/Dsvr.p/dllasmtr.b/somtr5t.m
Meth Date : 09-May-2014 11:22 wilburj Quant Type: ISTD
Cal Date : 08-MAY-2014 10:19 Cal File: dll07.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOMTrace.sub
Target Version: 3.50
Processing Host: chemsvr6

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vo	25.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
	1 Dichlorodifluoromethane	85	Compound Not Detected.					
	2 Chloromethane	50	Compound Not Detected.					
$	3 Vinyl chloride-d3	65	1.777	1.771	(0.291)	113049	133.420	5.3
	4 Vinyl chloride	62	Compound Not Detected.					
	5 Bromomethane	94	2.070	2.070	(0.339)	1050	3.35864	0.13(aQ)
$	6 Chloroethane-d5	69	2.131	2.131	(0.349)	83910	130.819	5.2
	7 Chloroethane	64	Compound Not Detected.					
	8 Trichlorofluoromethane	101	Compound Not Detected.					
$	9 1,1-Dichloroethene-d2	63	2.838	2.838	(0.465)	177457	101.974	4.1
	10 1,1-Dichloroethene	96	Compound Not Detected.					
	11 1,1,2-Trichloro-1,2,2-trifluo	101	Compound Not Detected.					
	12 Acetone	43	2.923	2.972	(0.479)	4399	70.8381	2.8(a)
	13 Carbon disulfide	76	Compound Not Detected.					
	14 Methyl acetate	43	Compound Not Detected.					
	15 Methylene chloride	84	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
	16 trans-1,2-Dichloroethene	96	Compound Not Detected.					
	17 Methyl tert-butyl ether	73	Compound Not Detected.					
	18 1,1-Dichloroethane	63	Compound Not Detected.					
$	19 2-Butanone-d5	46	4.679	4.703	(0.767)	113786	1184.01	47
	20 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	21 2-Butanone	43	Compound Not Detected.					
	22 Bromochloromethane	128	Compound Not Detected.					
$	23 Chloroform-d	84	5.026	5.026	(0.824)	182518	124.403	5.0
	24 Chloroform	83	Compound Not Detected.					
	25 1,1,1-Trichloroethane	97	Compound Not Detected.					
	26 Cyclohexane	56	Compound Not Detected.					
	27 Carbon tetrachloride	117	Compound Not Detected.					
$	28 1,2-Dichloroethane-d4	65	5.612	5.612	(0.920)	68729	132.449	5.3
$	29 Benzene-d6	84	5.630	5.630	(0.594)	437416	128.712	5.1
	30 Benzene	78	Compound Not Detected.					
	31 1,2-Dichloroethane	62	Compound Not Detected.					
*	32 1,4-Difluorobenzene	114	6.099	6.099	(1.000)	367830	125.000	
	33 Trichloroethene	95	Compound Not Detected.					
$	34 1,2-Dichloropropane-d6	67	6.550	6.550	(0.691)	103069	108.338	4.3
	35 Methylcyclohexane	55	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	38 cis-1,3-Dichloropropene	75	Compound Not Detected.					
	39 4-Methyl-2-pentanone	43	Compound Not Detected.					
$	40 Toluene-d8	98	7.782	7.782	(0.821)	430067	127.809	5.1
	41 Toluene	91	Compound Not Detected.					
$	42 trans-1,3-Dichloropropene-d4	79	8.087	8.087	(0.853)	85458	122.897	4.9
	43 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	44 1,1,2-Trichloroethane	97	Compound Not Detected.					
	45 Tetrachloroethene	163	Compound Not Detected.					
$	46 2-Hexanone-d5	63	8.599	8.599	(0.907)	97405	1233.34	49
	47 2-Hexanone	43	Compound Not Detected.					
	48 Dibromochloromethane	129	Compound Not Detected.					
	49 1,2-Dibromoethane	107	Compound Not Detected.					
*	50 Chlorobenzene-d5	117	9.477	9.477	(1.000)	290856	125.000	
	51 Chlorobenzene	112	Compound Not Detected.					
	52 Ethylbenzene	91	Compound Not Detected.					
	53 m,p-Xylene	106	Compound Not Detected.					
	55 o-Xylene	106	Compound Not Detected.					
	54 Styrene	104	Compound Not Detected.					
	56 Bromoform	172	Compound Not Detected.					
	57 Isopropylbenzene	105	Compound Not Detected.					
$	58 1,1,2,2-Tetrachloroethane-d2	84	11.050	11.050	(1.166)	38756	118.318	4.7
	59 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	60 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	61 1,4-Dichlorobenzene-d4	152	12.293	12.293	(1.000)	146296	125.000	
	62 1,4-Dichlorobenzene	146	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
$ 63 1,2-Dichlorobenzene-d4	152	12.720	12.720	(1.035)	124671	119.043	4.8
64 1,2-Dichlorobenzene	146	Compound Not Detected.					
65 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.					
66 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
67 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

TestAmerica Burlington

LOW CONCENTRATION VOLATILE QUANTITATION REPORT

Lab Sample Id: 200-22132-5
Client Smp ID: TRIP BLANK
Inj Date : 08-MAY-2014 14:45
Operator : MTP Inst ID: D.i
Smp Info : 200-22132-B-5
Misc Info : 1,5
Comment :
Method : /chem/D.i/Dsvr.p/dllasmtr.b/somtr5t.m
Meth Date : 09-May-2014 11:22 wilburj Quant Type: ISTD
Cal Date : 08-MAY-2014 10:19 Cal File: dll07.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOMTrace.sub
Target Version: 3.50
Processing Host: chemsvr6

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vo	25.00000	Sample Volume purged (mL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 32 1,4-Difluorobenzene	6.099	800353	125.000
* 50 Chlorobenzene-d5	9.477	841236	125.000
* 61 1,4-Dichlorobenzene-d4	12.293	810109	125.000

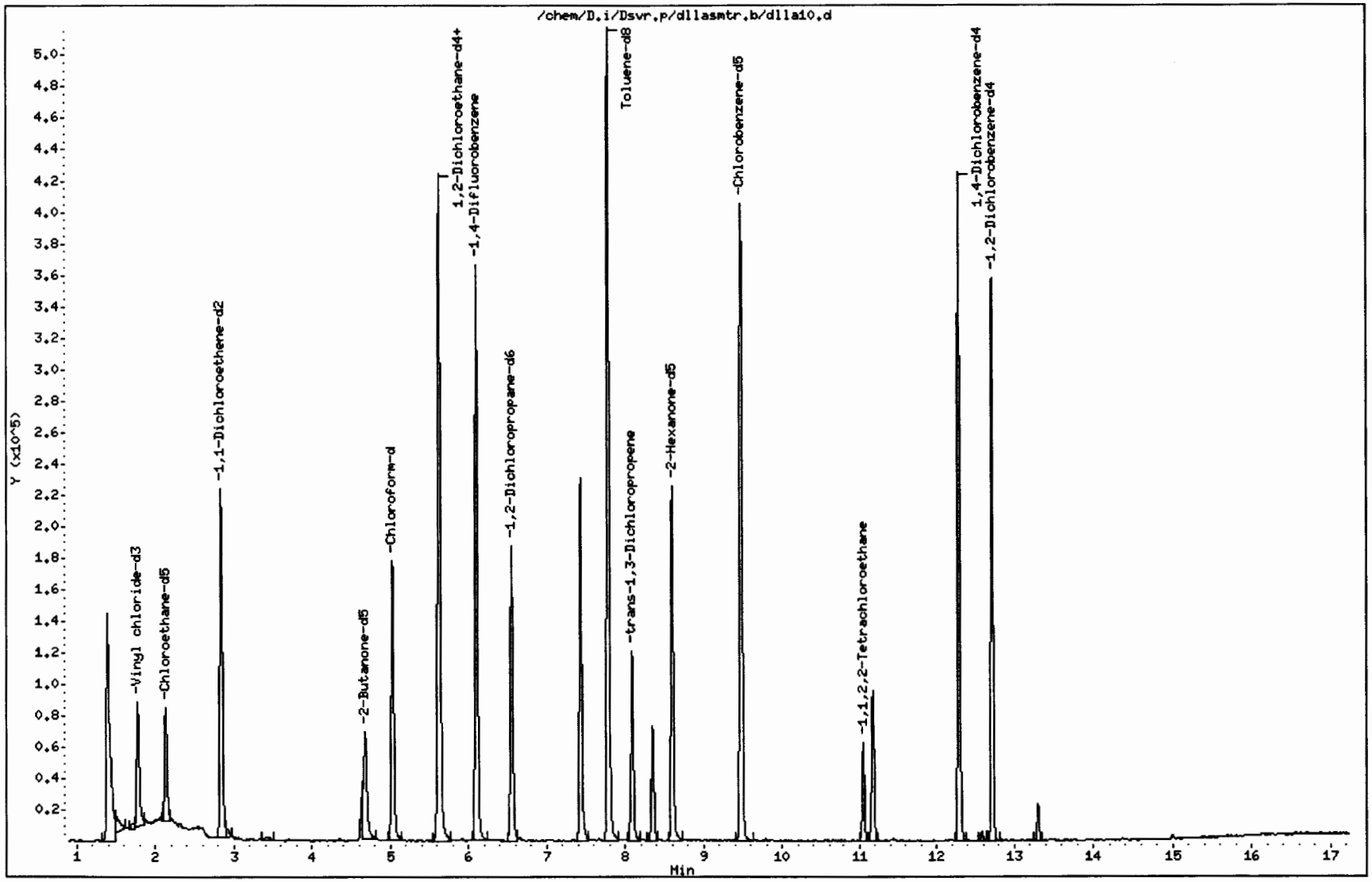
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
7.434	497907	77.7636321	3.1	0		0	32

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/L)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Cyclotrisiloxane, hexamethyl-				CAS #: 541-05-9			
8.349	166715	24.7722503	0.99	91	NIST05.1	73123	50
Unknown				CAS #:			
11.172	207619	32.0356914	1.3	0		0	61

Data File: /chem/D.i/Dsvr.p/dllasmtr.b/dlla10.d
Date : 08-MAY-2014 14:45
Client ID: TRIP BLANK
Sample Info: 200-22132-B-5
Purge Volume: 25.0
Column phase: DB-624

Instrument: D.i

Operator: MTP
Column diameter: 0.20



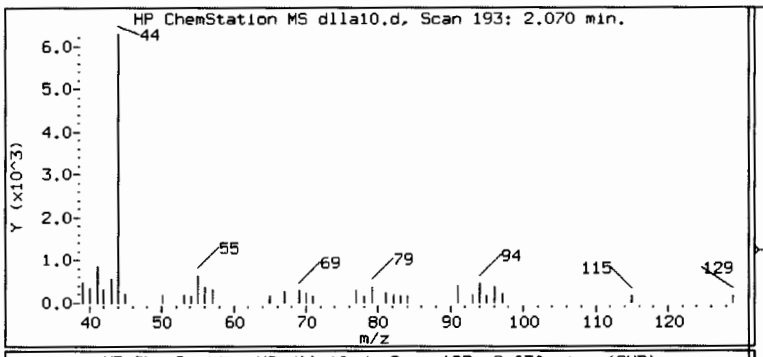
Data File: dlla10.d

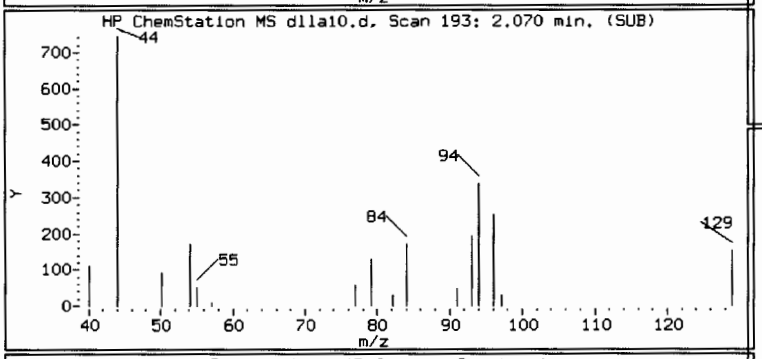
Lab Sample ID: 200-22132-5 Date: 08-MAY-2014 14:45

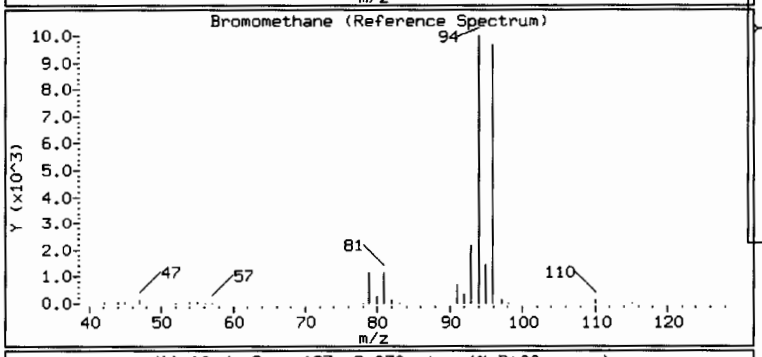
Client ID: TRIP BLANK Instrument: D.i

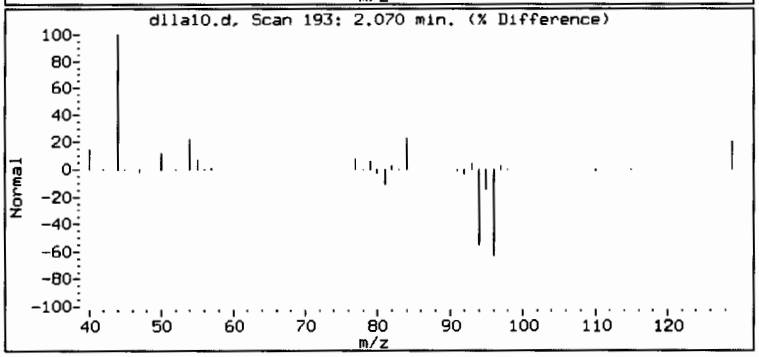
Sample Info: 200-22132-B-5 Operator: MTP

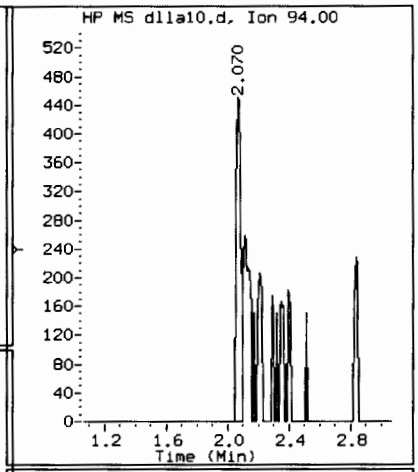
5 Bromomethane

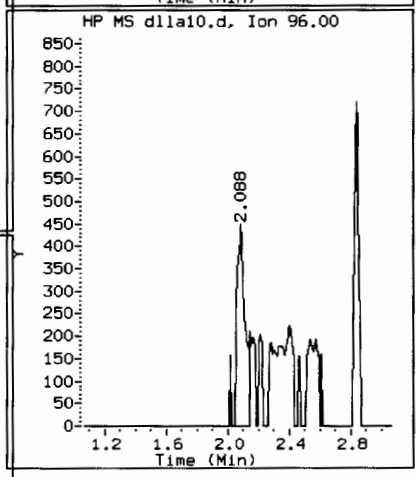












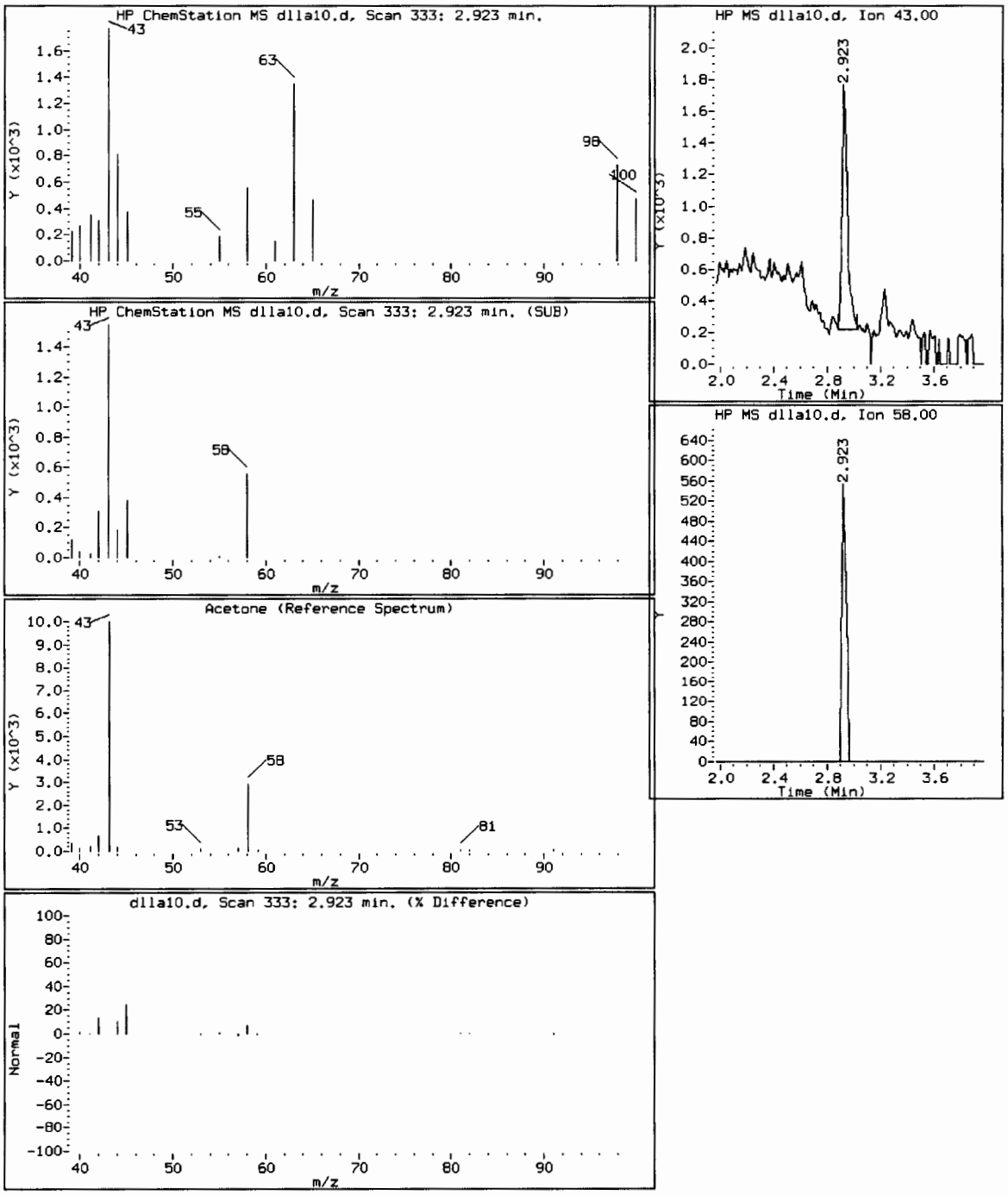
Data File: dlla10.d

Lab Sample ID: 200-22132-5 Date: 08-MAY-2014 14:45

Client ID: TRIP BLANK Instrument: D.i

Sample Info: 200-22132-B-5 Operator: MTP

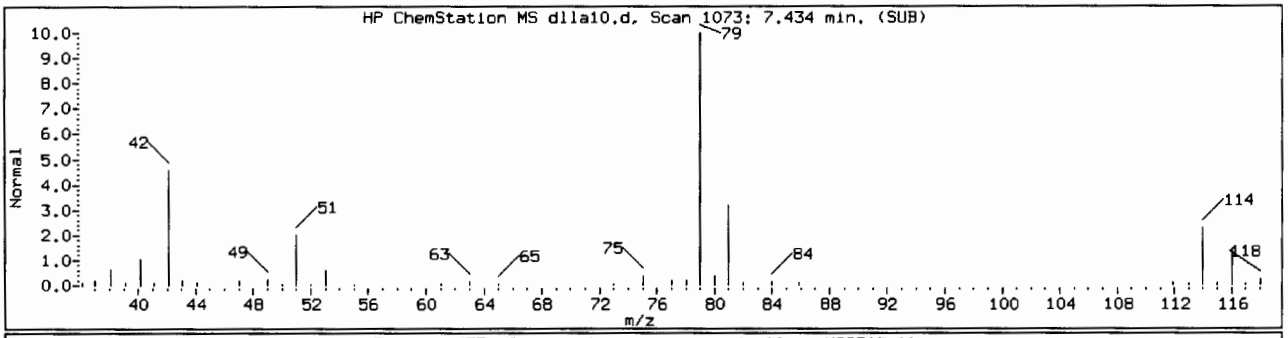
12 Acetone

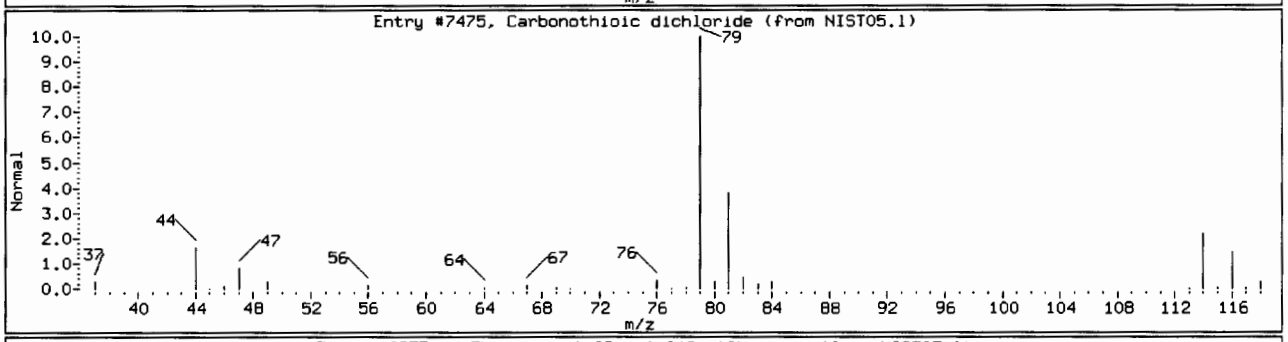


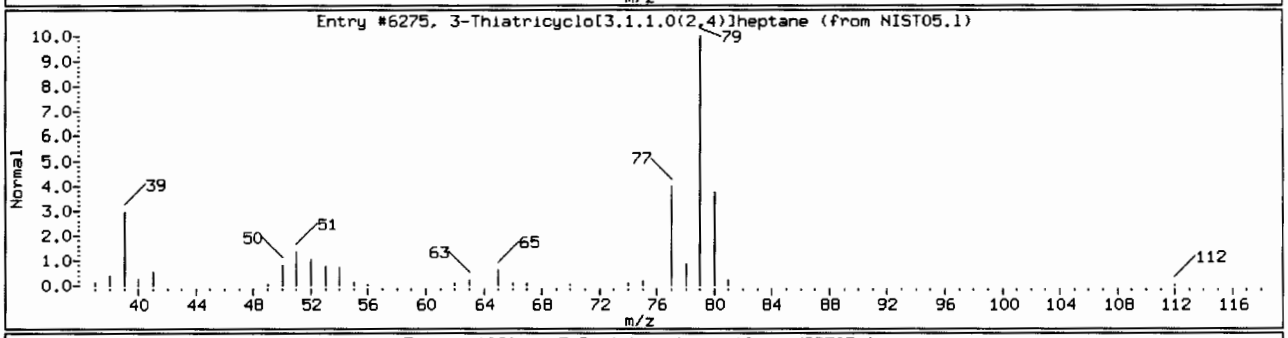
Data File: d11a10.d
Lab Sample ID: 200-22132-5 Date: 08-MAY-2014 14:45
Client ID: TRIP BLANK Instrument: D.i
Sample Info: 200-22132-B-5 Operator: MTP

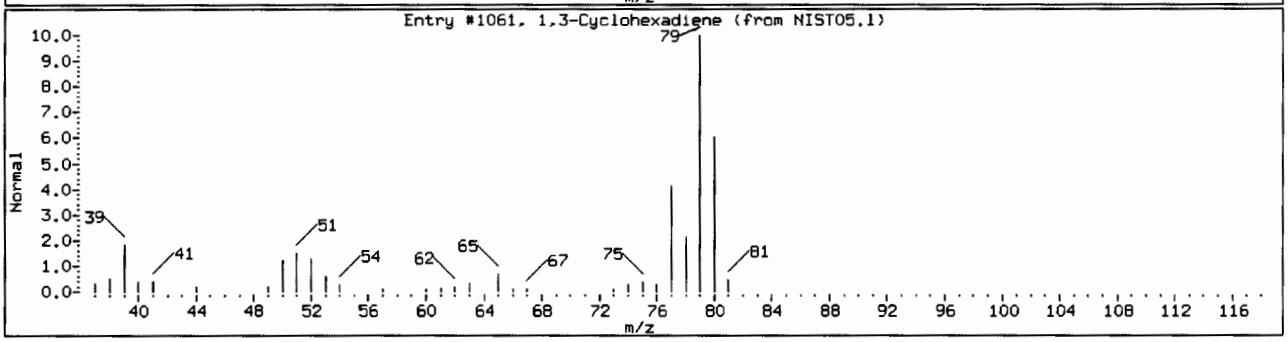
Retention Time: 7.43

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Carbonothioic dichloride	463-71-8	NIST05.1	7475	52	CCl2S	114
3-Thiatricyclo[3.1.1.0(2,4)]heptan	1000221-37-0	NIST05.1	6275	43	C6H8S	112
1,3-Cyclohexadiene	592-57-4	NIST05.1	1061	25	C6H8	80





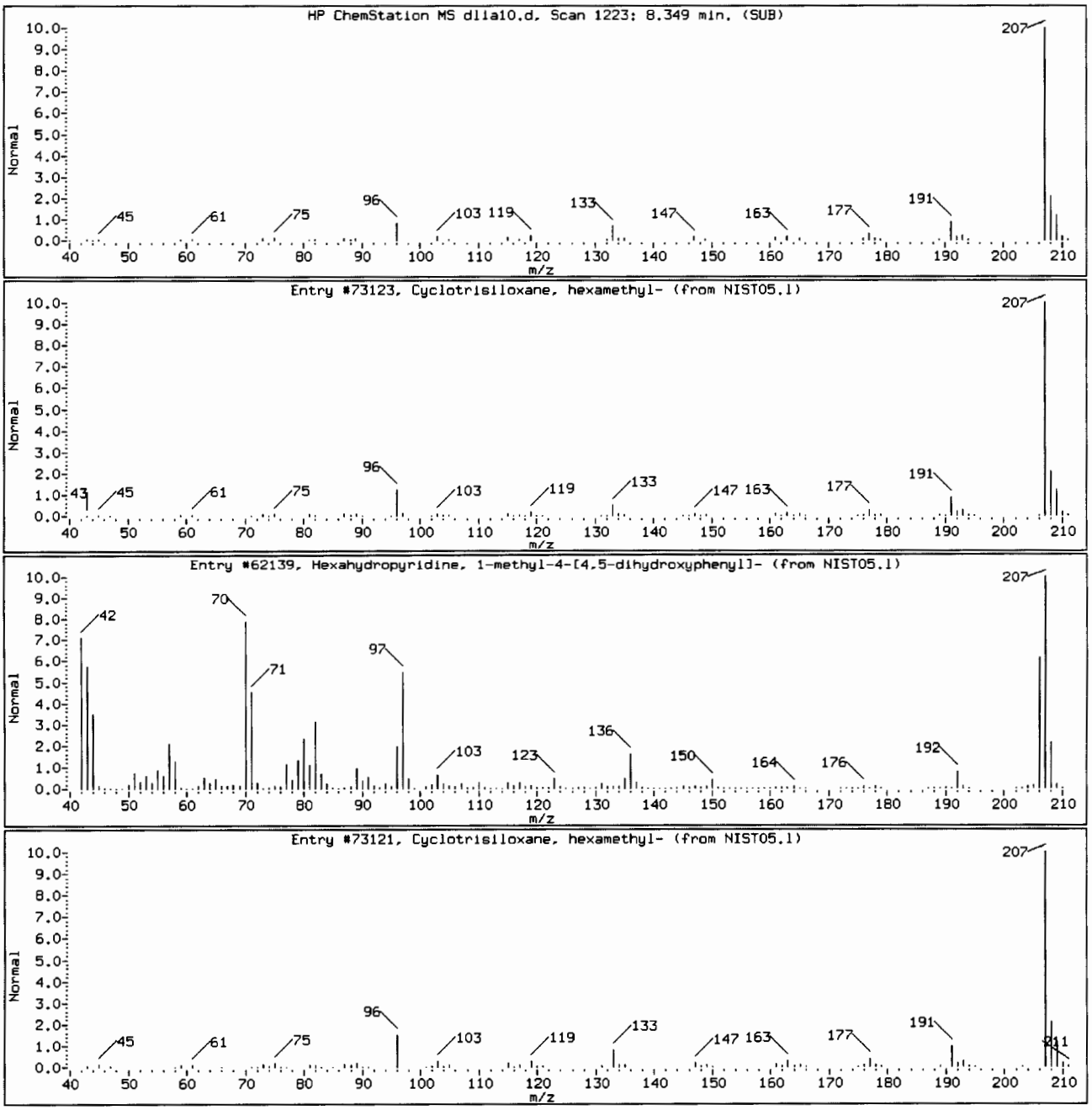




Data File: dlla10.d
Lab Sample ID: 200-22132-5 Date: 08-MAY-2014 14:45
Client ID: TRIP BLANK Instrument: D.i
Sample Info: 200-22132-B-5 Operator: MTP

Retention Time: 8.35

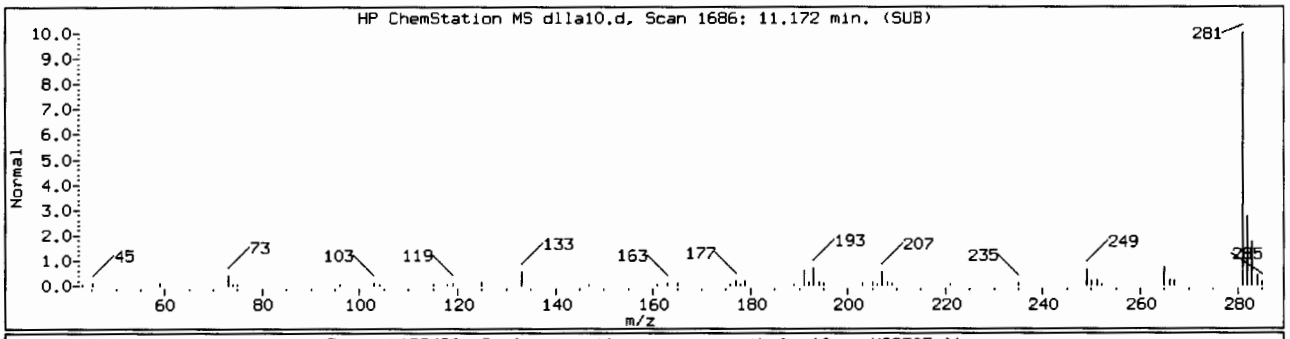
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.1	73123	91	C6H18O3Si3	222
Hexahydropyridine, 1-methyl-4-[4,5	94427-47-1	NIST05.1	62139	59	C12H17NO2	207
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.1	73121	49	C6H18O3Si3	222

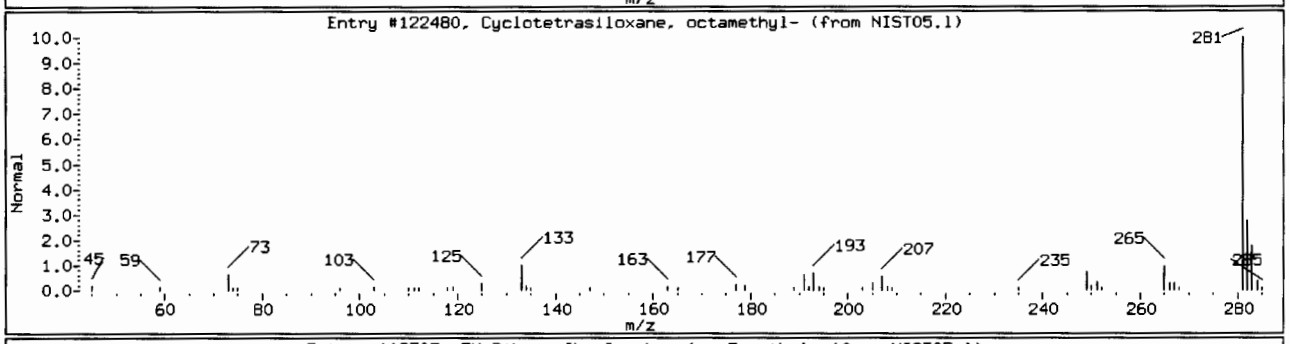


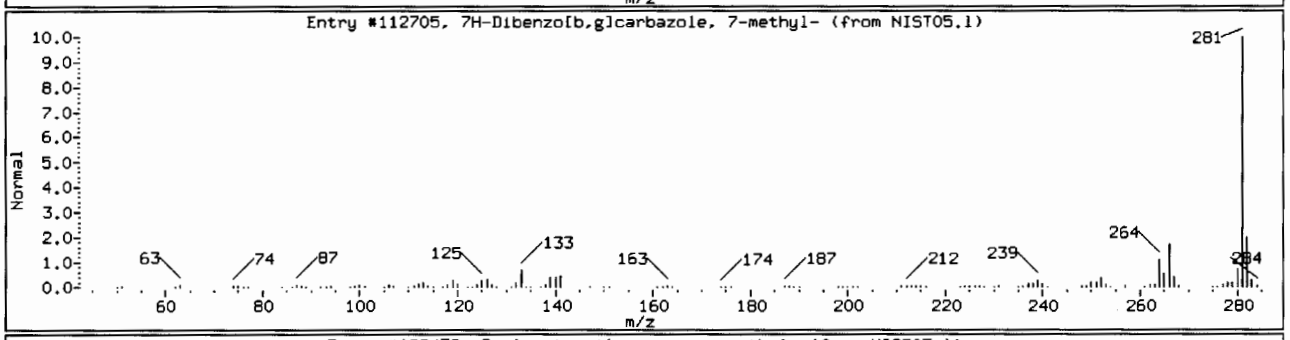
Data File: dlla10.d
Lab Sample ID: 200-22132-5 Date: 08-MAY-2014 14:45
Client ID: TRIP BLANK Instrument: D.i
Sample Info: 200-22132-B-5 Operator: MTP

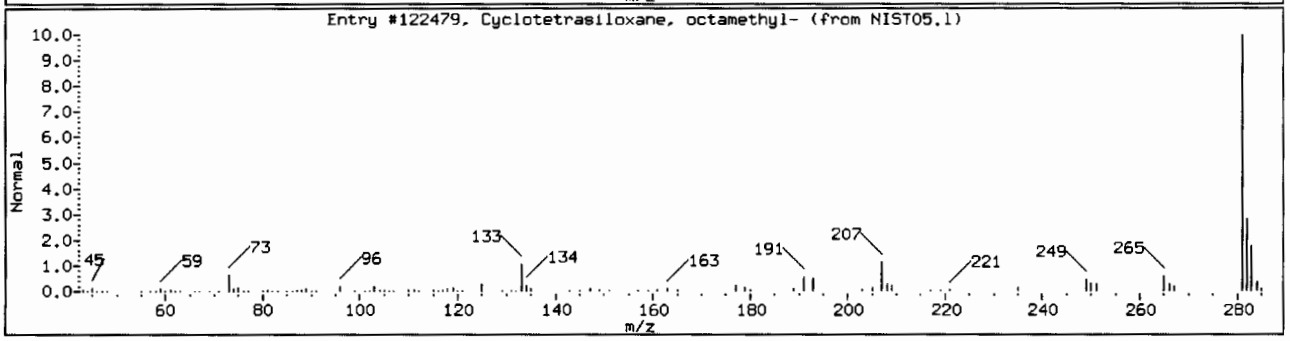
Retention Time: 11.17

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.1	122480	60	C8H24O4Si4	296
7H-Dibenzo[b,g]carbazole, 7-methyl	3557-49-1	NIST05.1	112705	59	C21H15N	281
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.1	122479	56	C8H24O4Si4	296









FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington
Job No.: 200-22132-1
SDG No.: 200-22132
Client Sample ID: VHBLK01
Lab Sample ID: 200-22132-6
Matrix: Water
Lab File ID: dlm15.d
Analysis Method: SOM01.2/VOA_Tr
Date Collected: 05/01/2014 12:20
Sample wt/vol: 25(mL)
Date Analyzed: 05/14/2014 13:12
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.2(mm)
% Moisture:
Level: (low/med) Trace
Analysis Batch No.: 72110
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	0.074
74-87-3	Chloromethane	0.50	U	0.50	0.062
75-01-4	Vinyl chloride	0.50	U	0.50	0.067
74-83-9	Bromomethane	0.50	U	0.50	0.069
75-00-3	Chloroethane	0.50	U	0.50	0.093
75-69-4	Trichlorofluoromethane	0.50	U	0.50	0.099
75-35-4	1,1-Dichloroethene	0.50	U	0.50	0.037
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	0.038
67-64-1	Acetone	5.0	U	5.0	0.92
75-15-0	Carbon disulfide	0.50	U	0.50	0.050
79-20-9	Methyl acetate	0.50	U	0.50	0.14
75-09-2	Methylene chloride	0.50	U	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.50	0.047
1634-04-4	Methyl tert-butyl ether	0.50	U	0.50	0.062
75-34-3	1,1-Dichloroethane	0.50	U	0.50	0.075
156-59-2	cis-1,2-Dichloroethene	0.50	U	0.50	0.053
78-93-3	2-Butanone	5.0	U	5.0	0.89
74-97-5	Bromochloromethane	0.50	U	0.50	0.073
67-66-3	Chloroform	0.50	U	0.50	0.081
71-55-6	1,1,1-Trichloroethane	0.50	U	0.50	0.078
110-82-7	Cyclohexane	0.50	U	0.50	0.066
56-23-5	Carbon tetrachloride	0.50	U	0.50	0.066
71-43-2	Benzene	0.50	U	0.50	0.064
107-06-2	1,2-Dichloroethane	0.50	U	0.50	0.089
79-01-6	Trichloroethene	0.50	U	0.50	0.080
108-87-2	Methylcyclohexane	0.50	U	0.50	0.077
78-87-5	1,2-Dichloropropane	0.50	U	0.50	0.070
75-27-4	Bromodichloromethane	0.50	U	0.50	0.061
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	0.060
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.82
108-88-3	Toluene	0.50	U	0.50	0.068
10061-02-6	trans-1,3-Dichloropropene	0.50	U	0.50	0.22
79-00-5	1,1,2-Trichloroethane	0.50	U	0.50	0.087
127-18-4	Tetrachloroethene	0.50	U	0.50	0.078
591-78-6	2-Hexanone	5.0	U	5.0	0.95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: VHBLK01 | Lab Sample ID: 200-22132-6

Matrix: Water | Lab File ID: dlm15.d

Analysis Method: SOM01.2/VOA_Tr | Date Collected: 05/01/2014 12:20

Sample wt/vol: 25(mL) | Date Analyzed: 05/14/2014 13:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.2(mm)

% Moisture: | Level: (low/med) Trace

Analysis Batch No.: 72110 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	0.50	U	0.50	0.067
106-93-4	1,2-Dibromoethane	0.50	U	0.50	0.058
108-90-7	Chlorobenzene	0.50	U	0.50	0.063
100-41-4	Ethylbenzene	0.50	U	0.50	0.059
95-47-6	o-Xylene	0.50	U	0.50	0.065
179601-23-1	m,p-Xylene	0.50	U	0.50	0.068
100-42-5	Styrene	0.50	U	0.50	0.061
75-25-2	Bromoform	0.50	U	0.50	0.083
98-82-8	Isopropylbenzene	0.50	U	0.50	0.058
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.50	0.091
541-73-1	1,3-Dichlorobenzene	0.50	U	0.50	0.064
106-46-7	1,4-Dichlorobenzene	0.50	U	0.50	0.059
95-50-1	1,2-Dichlorobenzene	0.50	U	0.50	0.072
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U	0.50	0.16
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	0.066
87-61-6	1,2,3-Trichlorobenzene	0.50	U	0.50	0.091

CAS NO.	SURROGATE	%REC	Q	LIMITS
6745-35-3	Vinyl chloride-d3	111		65-131
19199-91-8	Chloroethane-d5	104		71-131
22280-73-5	1,1-Dichloroethene-d2	78		55-104
24313-50-6	2-Butanone-d5	104		49-155
865-49-6	Chloroform-d	98		78-121
17060-07-0	1,2-Dichloroethane-d4	103		78-129
1076-43-3	Benzene-d6	104		77-124
93952-08-0	1,2-Dichloropropane-d6	87		79-124
2037-26-5	Toluene-d8	104		77-121
93951-86-1	trans-1,3-Dichloropropene-d4	102		73-121
4840-82-8	2-Hexanone-d5	108		28-135
33685-54-0	1,1,2,2-Tetrachloroethane-d2	95		73-125
2199-69-1	1,2-Dichlorobenzene-d4	98		80-131

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: VHBLK01 Lab Sample ID: 200-22132-6

Matrix: Water Lab File ID: dlm15.d

Analysis Method: SOM01.2/VOA_Tr Date Collected: 05/01/2014 12:20

Sample wt/vol: 25(mL) Date Analyzed: 05/14/2014 13:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.2(mm)

% Moisture: Level: (low/med) Trace

Analysis Batch No.: 72110 Units: ug/L

Number TICs Found: 4 TIC Result Total: 5.33

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	4.64	0.65	H J
	Unknown	7.43	3.1	B H J
	Unknown	8.35	0.62	H J
	Unknown	11.17	0.96	H J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Burlington Job No.: 200-22132-1

SDG No.: 200-22132

Client Sample ID: VHBLK01 Lab Sample ID: 200-22132-6

Matrix: Water Lab File ID: dlm15.d

Analysis Method: SOM01.2/VOA_Tr Date Collected: 05/01/2014 12:20

Sample wt/vol: 25(mL) Date Analyzed: 05/14/2014 13:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.2(mm)

% Moisture: Level: (low/med) Trace

Analysis Batch No.: 72110 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Total Alkanes			